

PUBLIC VERSION

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of)
)
)
DETERMINATION OF RATES AND TERMS) Docket No. 2011-1
FOR PREEXISTING SUBSCRIPTION AND) CRB PSS/Satellite II
SATELLITE DIGITAL AUDIO RADIO)
SERVICES)
)

WRITTEN DIRECT STATEMENT OF SIRIUS XM RADIO INC.

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**INTRODUCTORY MEMORANDUM TO THE
WRITTEN DIRECT STATEMENT OF
SIRIUS XM RADIO INC.**

Sirius XM Radio Inc. (“Sirius XM” or “the Company”) hereby submits its written direct statement, pursuant to 37 C.F.R. § 351.4. Sirius XM is a preexisting satellite digital audio radio service (“SDARS”) as defined in 17 U.S.C. § 114(j)(10).

ROYALTY RATE REQUEST FOR 2013-2017 LICENSE PERIOD

Sirius XM requests that the Copyright Royalty Judges set the SDARS monthly royalty rate for the public performance of sound recordings pursuant to 17 U.S.C. § 114(d)(2), and the making of any number of ephemeral phonorecords to facilitate such performances pursuant to 17 U.S.C. § 112(e), in the range of 5% to 7% of Sirius XM’s monthly U.S. Gross Revenues as currently defined in 37 C.F.R. § 382.11. The fee for ephemeral phonorecords shall be included within, and constitute 5% of, such royalty payments. Sirius XM proposes that, other than the royalty rate, the terms currently applicable to SDARS, as codified at 37 C.F.R. § 382.10–17, be retained in their current form.

SUMMARY OF TESTIMONY

In 2007, the Copyright Royalty Judges set the statutory royalty rate for Sirius Satellite Radio Inc. (“Sirius”) and XM Satellite Radio Holdings, Inc. (“XM”) at a rate beginning at 6% in

2007 and increasing to 8% by 2012 (herein “*Satellite I*” proceeding). This royalty rate tripled the preexisting Sirius and XM royalty obligations to SoundExchange and its members that had been reached by private agreement. The *Satellite I* rate was determined based on a combination of benchmarking from the rates then being paid for similar, but non-identical, rights by quite distinct audio and video entertainment services and application of the statutory § 801(b)(1) factors (17 U.S.C. § 801(b)(1)) governing SDARS rate-setting.

In July 2008, shortly after the *Satellite I* proceeding closed, Sirius and XM merged and the resultant corporation changed its name to Sirius XM. The period following the merger has featured the near-collapse of the newly combined Company as a result of the catastrophic events of 2008-2009; a painstaking rebuilding effort, marked by aggressive cost-cutting and continued strategic investments in programming and supporting technology designed to distinguish the Company from the competition; and a rapidly evolving technological and competitive landscape that increasingly erodes the unique selling attributes of satellite radio – seamless nationwide reception of diverse music and non-music audio programming in one’s vehicle. While the Company recently experienced its first year of positive net income, it is still digging out from 20 years of losses amounting to billions of dollars in negative free cash flow and EBITDA. And while the Company is optimistic about its short-term prospects, the persistently depressed global economy, the Company’s intimate ties to the automobile industry, and the emergence of viable Internet-based competitors like Pandora that operate free of the costly infrastructure on which the Company relies combine to create a precarious environment and uncertain longer-term prospects for the Company’s success over the 2013-2017 license term.

The Company will present testimony from its senior executives as well as distinguished experts in the fields of economics, finance, and digital content technology that will bring the

Judges current as to the Company's finances, operations, and strategic vision, as well as the broader economic, technology, and competitive climate in which it operates. That portrait (wholly apart from the evidence the Company will present as to competitive market valuation of the rights in issue) counsels extreme caution in moving the current royalty rate structure above its 2012 level of 8%. As this testimony will elucidate, since the record on which the current royalty structure is founded was developed in the prior proceeding:

- The Company's subscriber growth, revenues, and free cash flows all have been substantially below forecasted levels.
- Total new car sales (to which Sirius XM's fortunes are directly tied) have plummeted beginning in late 2008 and auto sales for the four years from 2009 through 2012 will be at their lowest level since the period 1980 to 1983.
- Installations of satellite radios in cars dropped by two-thirds as of January 2009 from their 2007 peak.
- The Company narrowly averted bankruptcy and paid dearly to the one rescuer to come forward, with severely dilutive consequences to existing equity holders.
- The Company carries loans of nearly \$2.4 billion coming due between 2013 and 2015, has an accumulated negative free cash flow of \$5.5 billion, an accumulated EBITDA of negative \$3.7 billion, and accumulated net operating losses of \$8 billion.
- Since January 2007 alone, the Company has experienced cumulative cash-flow losses of \$437 million.
- Sirius XM's stock price fell from \$4 a share in January 2007 to just over \$.05 a share in February 2009, and still has not remotely recovered – trading today at around \$1.75 per share.

At the same time, the Company will have paid SoundExchange approximately [REDACTED] in music royalties over the 2007–2012 period – representing a disproportionately large percentage of the Company's earnings over the last license term. Over the current license term, as the Company's revenues have grown, so too have SoundExchange's revenue-based royalties. If the Company meets its 2012 budgeted revenue, fees payable to SoundExchange will reach

some [REDACTED], representing a doubling of 2007 fees of some [REDACTED] and a 28% increase over 2010 fees of some [REDACTED].

A “reasonable” fee for the upcoming license period must take account of the policy factors found in § 801(b)(1) of the Copyright Act. Among these is to enable Sirius XM to earn a fair return on its investment – something that has not happened to date and that, as Professor Stowell’s testimony demonstrates, would only be further frustrated were SoundExchange awarded an increase in the prevailing royalty rate. As it is, a high percentage of Sirius XM’s earnings are consumed by such royalty payments; there is no sound reason to increase the reward earned by the record industry at the further expense of reasonable returns on Sirius XM’s investment. In addition, as Professor Stowell also discusses, a ratcheting up of the music royalty rate would, against the turbulent financial history of the Company, as well as the volatility of the current economic environment, risk another period of financial distress for Sirius XM, which (along with its predecessors) has already narrowly averted bankruptcy twice in its existence. Such an undue consequence of rate-setting is precisely the form of risk Section 801(b)’s disruption factor is designed to avert. Finally, as Mr. Blatter, the Company’s head of music programming, testifies, there is more than ample evidence of the promotional benefits afforded to record labels and artists from the far broader array of songs – especially in niche genres and of lesser known artists – given airplay by Sirius XM than occurs on terrestrial radio. This testimony is directly relevant to both the “relative contributions” and “availability” prongs of § 801(b).

The analytic path to the setting of an appropriate fee here is far more straightforward than was the case in the *Satellite I* proceeding. Driven in significant part by the need to manage its costs aggressively, Sirius XM has reached out to record companies directly to negotiate (among

other rights) the very rights at issue in this proceeding. To date, Sirius XM has successfully negotiated more than 60 such licenses with record companies whose fees otherwise would be determined by the outcome of this proceeding. These licenses convey rights to the works of more than 7,000 artists and more than 9,000 albums – more than 110,000 sound recordings in total. As elucidated in the testimony of Professor Roger Noll, these licenses present the best possible evidence of how a competitive market values the rights covered by the statutory license – involving as they do transactions including the very same rights between the very same buyer and sellers as are involved in this proceeding. Accordingly, these licenses require none of the adjustments needed to account for the distinguishing characteristics (including interactivity, different buyers and sellers, and different rights) of other, less directly pertinent, benchmarks, such as those examined in the *Satellite I* proceeding. No comparable evidence to the direct license evidence was available to the Judges during the last proceeding. There can be no better example of voluntary license agreements of the type statutorily recognized to be of probative value than these direct licenses.¹

The evidence will make clear that the market rate for sound recording performance rights reflected in the more than 60 direct licenses so far entered into is actually *below* the current statutory rate. Record labels have agreed to royalty payments at rates between 5 and 7% of Sirius XM’s gross revenue. Notably, these rates convey broader – hence arguably more valuable – rights than those governed by the statutory license, suggesting that this rate range, if anything, overstates the value solely of the statutory rates to be set by the Judges.

¹ 17 U.S.C. 114(f)(1)(B) prescribes that “[i]n establishing rates and terms for . . . preexisting satellite digital audio radio services, in addition to the objectives set forth in section 801 (b)(1), the Copyright Royalty Judges may consider the rates and terms for comparable types of subscription digital audio transmission services and comparable circumstances under voluntary license agreements.”

This compelling direct-license evidence is corroborated by marketplace agreements signed by noninteractive music services that offer programming comparable to that of Sirius XM's music channels and that now, with the advent of mobile streaming to smartphones, are available in the vehicle in direct competition with Sirius XM. As Mr. Rosenblatt and Professor Noll explain, these services are much closer (and thus the rates they pay require less adjustment) than the rates of the interactive services the Judges analyzed and to some degree relied on in the past. Properly adjusted, this benchmark suggests reasonable SDARS rates falling in the same 5-7% range as the direct licenses.

Professor Noll's analysis of both the direct license evidence and the noninteractive service benchmark demonstrates that, even were the governing inquiry in this proceeding confined to a determination as to the fees that willing buyers and willing sellers would agree to in a competitive marketplace for the rights at issue, a reasonable fee for Sirius XM lies in a rate range between 5 and 7% of Sirius XM's revenue. Insofar as the governing inquiry here implicates a "reasonable" rate informed not only by marketplace evidence, but also by application of § 801(b)'s policy factors, for the reasons mentioned above and further testified to by the remainder of Sirius XM's fact and expert witnesses, the rates implied by the foregoing marketplace evidence are, if anything, conservative measures of the proper fee outcome in this proceeding.

The following section summarizes the testimony that is offered in support of Sirius XM's Rate Request.

Fact Witnesses

In support of its royalty rate request, Sirius XM will present in its Direct Case the testimony of the following fact witnesses:

Mel Karmazin

Mel Karmazin is Chief Executive Officer of Sirius XM and has held that position (previously with Sirius) since 2004. Mr. Karmazin's testimony describes the ways in which Sirius XM's cost constraints – including having invented and continually invested in maintaining, upgrading and innovating its technological infrastructure and developing its unique and often exclusive content – vary widely from those of its new Internet-based competitors, which are not saddled with similar costs. Mr. Karmazin's testimony also describes Sirius XM's efforts, in an effort to control the Company's music-related costs, to obtain licenses for sound recording performance rights directly from record companies, and how such direct licenses should bear on the royalty rate set in this proceeding. Mr. Karmazin also explains that, although music content continues to be an area of focus for Sirius XM and has numerous advantages to the record companies themselves, the Company's unparalleled non-music (news, talk, entertainment and sports) programming – especially its exclusive content – remains the central aspect that sets it apart from its closest competitors.

Mr. Karmazin's testimony also describes Sirius XM's near-bankruptcy even following its aggressive post-merger cost-cutting measures, as well as numerous challenges facing the Company – including risks arising from its satellites and technology, the fragile economy, the Company's increasingly close ties to the volatile OEM market, and increasing competition. Although he is encouraged by the Company's recent profitability and remains optimistic about the Company's prospects in the near-term future, Mr. Karmazin explains that Sirius XM's future is far from clear and it is a long way from recouping the decades of losses it has incurred since its inception. For this reason, Mr. Karmazin believes that Sirius XM's royalty rate should not be increased from its current levels; to do so would be to take unfair advantage of Sirius XM's new-

found profitability (and would fail to take into account any of the serious risks and challenges facing the Company) and would provide an unwarranted windfall to SoundExchange and the record companies it represents. Mr. Karmazin concludes that, based on the far better information available today regarding marketplace benchmarks than existed when Sirius XM's current royalty rate was determined, the rate set during this proceeding should not exceed 5 to 7%.

James E. Meyer

James E. Meyer is President, Operations and Sales, of Sirius XM, and has held that position (previously with Sirius) since 2004. Mr. Meyer's testimony provides an overview of Sirius XM's business, the competitive landscape in which the Company operates, its distribution channels and the importance of the OEM market, and its continuing investments and innovations in its technological infrastructure. Mr. Meyer testifies how Sirius XM has become increasingly dependent on the fragile and volatile OEM market, and how this dependence, combined with the weak economy and numerous other challenges, makes Sirius XM's projected financial health during the 2013-2017 licensing period far from certain. One such serious risk factor, Mr. Meyer explains, is the increasingly robust technology in the market today, which has fostered the development of strong competition from new Internet-based audio content providers. Mr. Meyer describes the way in which these competitors, whose services are free or cheaper than Sirius XM's subscription rate and whose cost structure diverge widely from the Company's, have developed since the *Satellite I* proceeding and will be Sirius XM's primary challenge – including in the vehicle, the Company's primary distribution channel – during the 2013-2017 licensing period. Sirius XM strives to compete with these new Internet-based entrants by continually maintaining, upgrading and innovating its technological infrastructure, including its satellite and terrestrial repeater networks, chipsets and receiver products, broadcast facilities and data services

offerings, which will continue to be a major focus for investment and costs during the 2013-2017 period.

David J. Frear

David J. Frear is Executive Vice President and Chief Financial Officer of Sirius XM, and has held that position (previously with Sirius) since 2003. Mr. Frear's testimony describes various developments that have occurred since the *Satellite I* proceeding, including the merger of Sirius and XM and the combined Company's near-bankruptcy only a few months after the merger was consummated, which Sirius XM narrowly averted only by last-minute loans from Liberty Media Corporation. Mr. Frear also explains that, although after nearly two decades of losses the Company's financial performance has improved, it will take time to recoup its cumulative losses, particularly in light of the various challenges and uncertainties that Sirius XM faces in today's economy. To that end, Mr. Frear's testimony describes the various and substantial costs that Sirius XM faces in maintaining its business that are unique to the Company and not borne by any of its close competitors, such as satellite and transmission costs, engineering design and development costs, revenue share and royalty costs, among others. Mr. Frear testifies that while he is optimistic about Sirius XM's near-term prospects, it is difficult to forecast the Company's long-term results, as illustrated by the various overly-optimistic projections that were made, including by the Company, during the *Satellite I* proceeding.

Mr. Frear's testimony also explains how, in an effort to contain its royalty-related costs, Sirius XM in 2009 began its initiative to obtain licenses directly from music labels; this effort has been successful, notwithstanding overt interference from SoundExchange and other record industry trade groups, with more than 60 direct licenses signed to date that roll all of the rights Sirius XM needs for its services into a single license. Mr. Frear explains that, given the various

challenges and uncertainties facing the Company, any increase in the royalty rate would be economically unfounded and would pose the risk of disruptive hardship to the Company, and that the first-ever evidence of a competitive royalty rate from the Company's direct licenses counsels against any increase in the royalty rate in this proceeding.

Steven Blatter

Steven Blatter is Senior Vice President and General Manager of Music Programming at Sirius XM. Mr. Blatter, who testified on behalf of Sirius in the *Satellite I* proceeding, describes any material changes to Sirius XM that differ from his 2006 testimony and also discusses the range and coverage of the Sirius XM music channels, how each music channel is developed and programmed and Sirius XM's creative contribution to that process, the differences between satellite radio and terrestrial radio, and the promotional benefits of satellite radio. Mr. Blatter also describes how the direct impact of airplay on Sirius XM on the sale of recorded music is substantially greater than it was when he testified in the last proceeding, and how the promotional benefits of Sirius XM are valued by recording artists, artist managers, and recording companies.

Ronald H. Gertz

Ronald H. Gertz, Chairman of Music Reports, Inc. ("MRI"), and a 35-year veteran of the music licensing and rights administration business, offers testimony regarding Sirius XM's ongoing effort to secure direct licenses from record companies at competitive rates in lieu of the statutory license administered by SoundExchange. Mr. Gertz describes MRI's experience in licensing rights directly from rightsholders and administering direct licenses on behalf of digital music services; the reasons for the Sirius XM direct license initiative; the development by Sirius XM and MRI of the direct license offer and its key terms; the reaction to the license offer in the

market; the success of the offer, including the more than 60 labels that have to date accepted the offer and their key artists; and the coordinated interference of SoundExchange, the American Association of Independent Music and other industry groups and its detrimental effect on labels considering the offer.

Expert Witnesses

In addition, Sirius XM will present the testimony of the following expert witnesses:

Roger G. Noll

Dr. Roger G. Noll, Emeritus Professor of Economics at Stanford University, presents testimony establishing the economic basis for the Sirius XM rate proposal. Professor Noll's primary benchmarks are the 60-plus direct licenses signed by Sirius XM with various record companies to date – competitive market transactions for the precise rights at issue in this proceeding. Those licenses establish a competitive market rate of 5 to 7% of revenue, cover the same Sirius XM SDARS service (plus more), and need no adjustments for interactivity or otherwise. The direct-license benchmark is corroborated by voluntary marketplace agreements between Warner Music and certain popular noninteractive streaming music services, including Last.fm, which are available to users on mobile smartphones, and thus compete directly with Sirius XM in the vehicle. When properly adjusted to account for differences in the services, the negotiated rates between Warner and Last.fm suggest a rate for Sirius XM that falls squarely in the range established by the direct licenses.

William R. Rosenblatt

William R. Rosenblatt, President of GiantSteps Media Technology Strategies, is a technology industry veteran and expert in the market for digital music services, the development of those services including over mobile phones, their product/service features and competitive

advantages, and the technology behind their delivery. Mr. Rosenblatt's report identifies four important trends in the digital audio entertainment marketplace that were largely unforeseen at the time of the *Satellite I* proceeding and that will dramatically increase the range and scope of competitors to Sirius XM (especially in the vehicle) during the license term: (1) the introduction and massive uptake of smartphones capable of running mobile music applications (“apps”); (2) the development of high-speed mobile broadband networks capable of transmitting high-quality audio and video content to smartphones, including in the vehicle, in nearly every area of the U.S.; (3) the increased ability to connect those smartphones to the audio systems of vehicles, including in ways that integrate mobile music services directly into the dashboard and allow drivers to operate the apps directly through the displays and controls of vehicle audio systems; and (4) a wide variety of free streaming music services offering content comparable to (if not better than) Sirius XM music channels, as well as an increasing number of online outlets for non-music content, all of which can be accessed via mobile apps in the vehicle in direct competition with Sirius XM.

Mr. Rosenblatt’s testimony is offered in conjunction with, and supports, the testimony of Professor David P. Stowell, who analyzes the potential disruptive impact of this competitive environment (among other factors) on Sirius XM’s business and financial prospects during the upcoming license term. It also supports and illuminates the testimony of Professor Roger Noll, who identifies certain noninteractive digital music services available in the vehicle through mobile smartphones as presenting the closest analogues to Sirius XM music channels for benchmarking purposes in this proceeding.

David P. Stowell

David P. Stowell, professor of finance at Northwestern University's Kellogg School of Management, presents testimony evaluating the business and financial prospects of Sirius XM over the 2013-2017 license period and opines on the likely impact of any increase in the current royalty rate. Professor Stowell opines that, based on various considerations including the Company's tumultuous history and recent brush with bankruptcy, the ongoing uncertain economic climate, increased dependence on the volatile automobile industry, and an increasingly robust competitive landscape (which is likely to continue to gain momentum throughout the next licensing period, including in the all-important OEM distribution channel), Sirius XM faces a threat of disruption that is equal to or even greater than that which it faced during the *Satellite I* proceeding. Professor Stowell's testimony explains that the royalty that Sirius XM is required to pay SoundExchange has a large impact on its bottom line finances, and any increase to the royalty rate would substantially increase the likelihood of such a disruptive impact on the Company.

John R. Hauser, SC.D

Dr. John R. Hauser is the Kirin Professor of Marketing at the MIT Sloan School of Management at the Massachusetts Institute of Technology. Under the direction of Dr. Hauser, an Internet survey was conducted in September 2011 to measure the value consumers place on the various features of satellite radio, including music, non-music entertainment, talk, comedy shows, news, and commercial-free programming. The survey was carefully designed and executed, adhering to scientific principles of survey research to ensure reliability and validity of the results. A representative sample of 348 satellite radio subscribers was obtained and their responses were analyzed. The survey results demonstrate that respondents place a value of \$3.24

for music currently played on the XM and Sirius services. Moreover, Dr. Hauser found that 34.9% of the \$3.24 in willingness to pay for all types of music is attributed to music released before 1970. Accordingly, with respect to music limited to music from 1970 through today, Dr. Hauser concluded that respondents' willingness to pay is reduced to \$2.11. In the prior proceeding before the Copyright Royalty Board to set rates for the 2007-2012 period, Dr. Hauser conducted a similar survey during the rebuttal phase of the case. The 2007 survey results demonstrated the value of music was \$3.37 (for subscribers, unweighted). In the latest survey, the value of music is \$3.24. Dr. Hauser testifies that the difference between these two values is not statistically significant. Professor Noll uses Dr. Hauser's results as one measure of the value of music on Sirius XM – a value that he uses to adjust benchmark license rates from digital music services for application to Sirius XM.

Designated Testimony from *Satellite I* (Docket No. 2006-1)

Sirius XM has also designated a variety of testimony from the *Satellite I* proceeding. Much of this designated testimony describes the early efforts of Sirius and XM in developing and building the satellite radio industry, the investments made by each company to do so, and their programming offerings at the time of the *Satellite I* proceeding. Rather than having the current Company witnesses restate that testimony, they cross-reference the designated testimony in their current submissions, explain its relevance, and provide updates as appropriate.²

² Certain of the designated *Satellite I* written testimony references separate exhibits from that proceeding. Consistent with 37 C.F.R. 351.4(b)(2), and in the interests of not burdening the Judges with irrelevant or unnecessary material, Sirius XM has designated the written testimony and hearing testimony (direct, cross, and redirect examination) from *Satellite I*, but has not designated the separate exhibits, which were determined to be unnecessary to the purposes for which the written testimony has been designated. (In addition, in some instances the exhibits referenced in the written testimony were not offered or admitted at trial.) Sirius XM will promptly make copies of any referenced exhibits available should the Judges so request.

November 29, 2011

Respectfully submitted,



R. Bruce Rich (N.Y. Bar No. 1304534)
Bruce S. Meyer (N.Y. Bar No. 2108447)
Miranda Schiller (N.Y. Bar No. 2295624)
Todd Larson (N.Y. Bar No. 4358438)
WEIL, GOTSHAL & MANGES LLP
767 Fifth Avenue
New York, NY 10153
Tel: (212) 310-8170
Fax: (212) 310-8007
bruce.rich@weil.com
bruce.meyer@weil.com
miranda.schiller@weil.com
todd.larson@weil.com

Counsel for Sirius XM Radio Inc.

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Witness	Title
Steven Blatter	Senior Vice President for Music Programming, Sirius XM Radio Inc.
David J. Frear	Executive Vice President and Chief Financial Officer, Sirius XM Radio Inc.
Ronald H. Gertz	Chairman, Music Reports, Inc.
John R. Hauser	Kirin Professor of Marketing, Massachusetts Institute of Technology Sloan School of Management
Mel Karmazin	Chief Executive Officer, Sirius XM Radio Inc.
James E. Meyer	President, Operations and Sales, Sirius XM Radio Inc.
Roger G. Noll	Professor of Economics <i>Emeritus</i> , Stanford University
William R. Rosenblatt	President, GiantSteps Media Technology Strategies
David P. Stowell	Professor of Finance, Kellogg School of Management

Designated Witnesses from <i>Satellite I</i> (Docket 2006-1)	
Steven Blatter	Senior Vice President for Music Programming, Sirius Satellite Radio Inc.
Steve Cohen	Vice President, Sports, Sirius Satellite Radio Inc.
Jeremy M. Coleman	Vice President, Talk, Entertainment, and Information Programming, Sirius Satellite Radio Inc.
Stephen R. Cook	Executive Vice President, Automotive, XM Satellite Radio Inc.
David J. Frear	Executive Vice President and Chief Financial Officer, Sirius Satellite Radio Inc.
Mel Karmazin	Chief Executive Officer, Sirius Satellite Radio Inc.
Robert Law	Senior Vice President and General Manager of Consumer Electronics, Sirius Satellite Radio Inc.
Eric Logan	Executive Vice President of Programming, XM Satellite Radio Inc.
Anthony J. Masiello	Senior Vice President of Operations, XM Satellite Radio Inc.
Gary M. Parsons	Chairman, XM Satellite Radio Inc.
Terrence Smith	Senior Vice President, Engineering, Sirius Satellite Radio Inc.
John Douglas Wilsterman	Senior Vice President and General Manager of the Original Equipment Manufacturing Division, Sirius Satellite Radio Inc.

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SXM Dir. Ex. 001	Mel Karmazin	Sirius XM Channel Lineups
SXM Dir. Ex. 002	Mel Karmazin	Sirius XM Form 10-K for period ending December 31, 2010
SXM Dir. Ex. 003	James Meyer	<i>New York Times</i> article “Trying Out the World’s First In-Car Music-Streaming System”
SXM Dir. Ex. 004	James Meyer	Ford Focus Commercial (video)
SXM Dir. Ex. 005	James Meyer	Toyota Entune Commercial (video)
SXM Dir. Ex. 006	David Frear	SoundExchange Statement, dated 10/27/2011
SXM Dir. Ex. 007	David Frear	Sirius XM form Direct License Agreement
SXM Dir. Ex. 008	David Frear	10/27/11 Email from Signature Sound to MRI
SXM Dir. Ex. 009	David Frear	A2IM Statement, dated August 9, 2011
SXM Dir. Ex. 010	David Frear	SoundExchange Statement, dated 8/11/2011
SXM Dir. Ex. 011	David Frear	NARAS Statement, dated 10/27/2011
SXM Dir. Ex. 012	David Frear	AFTRA Statement, dated 10/27/2011
SXM Dir. Ex. 013	David Frear	FMC Statement

Exhibit No.	Sponsoring Witness	Description
SXM Dir. Ex. 007	Ronald Gertz	Sirius XM form Direct License Agreement
SXM Dir. Ex. 014	Ronald Gertz	List of Sirius XM Direct Licenses
SXM Dir. Ex. 008	Ronald Gertz	10/27/11 Email from Signature Sound to MRI
SXM Dir. Ex. 015	William Rosenblatt	2012 Toyota Entune Audio System Demo (video)
SXM Dir. Ex. 016	William Rosenblatt	MOG/BMW Product Demo (video)
SXM Dir. Ex. 001	Steven Blatter	Sirius XM Channel Lineups
SXM Dir. Ex. 017	Steven Blatter	Brian Stelter, <i>Clear Channel Cuts DJs Across the Country</i> , N.Y. Times, Oct. 27, 2011
SXM Dir. Ex. 018	Steven Blatter	List of Sirius XM Celebrity Hosts
SXM Dir. Ex. 019	Steven Blatter	Ozzy Osbourne Press Release
SXM Dir. Ex. 020	Steven Blatter	List of Sirius XM's Specialty Programming
SXM Dir. Ex. 021	Steven Blatter	Steve Knopper, <i>Where Did the Rock Hits Go?</i> , Rolling Stone, March 2010
SXM Dir. Ex. 022	Steven Blatter	Steve Knopper, <i>Rock Radio Takes Another Hit</i> , Rolling Stone, November 2011
SXM Dir. Ex. 023	Steven Blatter	Christine Pawlak, <i>We Won't Rock You</i> , Slate, November 15, 2011
SXM Dir. Ex. 024	Steven Blatter	Channel Guides with Channels Not Available on Terrestrial Radio Highlighted
SXM Dir. Ex. 025	Steven Blatter	Arbitron Inc./Edison Research/Scarborough Research, <i>The Road Ahead, Media and Entertainment In The Car</i> (2011) .
SXM Dir. Ex. 026	Steven Blatter	Foster the People Press Release
SXM Dir. Ex. 027	Steven Blatter	Current and Recurrent vs. Gold Ratios Data
SXM Dir. Ex. 028	Steven Blatter	Elton John Interview (Audio File)
SXM Dir. Ex. 029	Steven Blatter	Kirk Hammett of Metallica Interview (Audio File)
SXM Dir. Ex. 030	Steven Blatter	David Draiman of Disturbed Interview (Audio File)
SXM Dir. Ex. 031	Steven Blatter	Elaine Bradley of Neon Trees Interview (Audio File)
SXM Dir. Ex. 032	Steven Blatter	Justin Tranter of Semi Precious Weapons (Audio File)
SXM Dir. Ex. 033	Steven Blatter	Green River Ordinance Thank You Message (Movie File)

Exhibit No.	Sponsoring Witness	Description
SXM Dir. Ex. 034	Steven Blatter	Adam Stewart, <i>House Legend Robbie Rivera On The State of Music, Deadmau5 And 'Jersey Shore'</i> (Apr. 7, 2010), available at, http://newsroom.mtv.com/2010/04/07/robbie-rivera-deadmau5-jersey-shore/
SXM Dir. Ex 035	Steven Blatter	List of Artists Involved in Special Programming
SXM Dir. Ex. 036	Steven Blatter	Examples of Record Industry Ads that Mention Sirius XM
SXM Dir. Ex. 037	Steven Blatter	James N. Dertouzos, <i>Radio Airplay and the Record Industry: An Economic Analysis</i> .
SXM Dir. Ex. 038	Steven Blatter	Edison Research, <i>The National Record Buyers Survey</i> (2001).
SXM Dir. Ex. 039	Steven Blatter	Sampling of SXM Marketing Offers
SXM Dir. Ex. 040	Steven Blatter	Sampling of Waivers
SXM Dir. Ex. 041	Steven Blatter	Sampling of Artist Releases
SXM Dir. Ex. 042	Steven Blatter	May 2, 2011 email re: Bob Schneider
SXM Dir. Ex. 043	Steven Blatter	May 20, 2011 email re: Emphatic
SXM Dir. Ex. 044	Steven Blatter	June 8, 2011 email re: Jacob Lyda
SXM Dir. Ex. 045	Steven Blatter	August 3, 2011 email re: Red Line Chemistry
SXM Dir. Ex. 046	Steven Blatter	Daniel Glass Quote in May 2011 issue of <i>Hits</i>
SXM Dir. Ex. 047	Steven Blatter	May 12, 2011 email re: Grouplove June 13, 2011 email re: Grouplove
SXM Dir. Ex. 048	Steven Blatter	Mediabase Data for "Colours"
SXM Dir. Ex. 049	Steven Blatter	SoundScan Data for "Colours"
SXM Dir. Ex. 050	Steven Blatter	September 2011 emails re: Atlas Genius
SXM Dir. Ex. 051	Steven Blatter	Mediabase Data for "Trojans"
SXM Dir. Ex. 052	Steven Blatter	SoundScan Data for "Trojans"
SXM Dir. Ex. 053	Steven Blatter	Mediabase Data for "Dancing Shoes"
SXM Dir. Ex. 054	Steven Blatter	SoundScan Data for "Dancing Shoes"
SXM Dir. Ex. 055	Steven Blatter	Mediabase Data for "Shuffle"
SXM Dir. Ex. 056	Steven Blatter	SoundScan Data for "Shuffle"

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

_____)	
In the Matter of)	
)	
DETERMINATION OF RATES AND TERMS)	Docket No. 2011-1
FOR PREEXISTING SUBSCRIPTION AND)	CRB PSS/Satellite II
SATELLITE DIGITAL AUDIO RADIO)	
SERVICES)	
_____)	

DECLARATION AND CERTIFICATION OF TODD D. LARSON

(On behalf of Sirius XM Radio Inc.)

1. I am counsel for Sirius XM Radio Inc. (“Sirius XM” or the “Company”) in Docket No. 2011-1. I respectfully submit this declaration and certification pursuant to Rule 350.4(e)(1) per the terms of the Protective Order issued November 16, 2011 (“Protective Order”). I am authorized by Sirius XM to submit this Declaration on Sirius XM’s behalf.

2. I have reviewed Sirius XM’s Written Direct Statement, witness statements, designated testimony, exhibits, and Redaction Log submitted in this proceeding. I have also reviewed the definitions and terms provided in the Protective Order. After consultation with my client, I have determined to the best of my knowledge, information and belief that portions of Sirius XM’s Written Direct Statement, witness statements, designated testimony, and accompanying exhibits contain information that is “Protected Material” as defined by the Order. The Protected Material is identified in the Redaction Log, shaded in the printed copies of Sirius XM’s filing, and described in more detail below.

3. Such Protected Material includes, but is not limited to, testimony and exhibits involving (a) contracts, contractual terms, and contract strategy that are proprietary, not available

to the public, highly competitively sensitive and, at times, subject to express confidentiality provisions with third parties; and (b) highly confidential internal business information, financial projections, financial data, and competitive strategy that are proprietary, not available to the public, and commercially sensitive.

4. If this contractual, strategic, and financial information were to become public, it would place Sirius XM at a commercial and competitive disadvantage, unfairly advantage other parties to the detriment of Sirius XM, and jeopardize its business interests. Information related to confidential contracts or relationships with third-party content providers could be used by Sirius XM's terrestrial radio and Internet-based competitors, or by other content providers, to formulate rival bids, bid up Sirius XM payments, or otherwise unfairly jeopardize Sirius XM's commercial and competitive interests.

5. With respect to the financial information in the Restricted materials, I understand that Sirius XM has not disclosed to the public or the investment community the financial information that it seeks to restrict here (including spending and investment projections, specific royalty payment information, and the like). As a result, neither the Company's competitors nor the investing public has been privy to that information, which the Company has viewed as highly confidential and sensitive, and has guarded closely. In addition, when Sirius XM does disclose information about the Company's finances to the market as required by law, the Company provides accompanying analysis and commentary that contextualizes disclosures by its officers. The information that Sirius XM seeks to restrict under the Protective Order, while truthful and accurate to the best of each witness's knowledge, was not intended for public release or prepared with that audience in mind, and therefore was not accompanied the type of detailed explanation and context that usually accompanies such disclosures by a company officer. Moreover, the

statements and exhibits containing the information have not been approved by Sirius XM's Board of Directors, as such sensitive disclosures usually are, or accompanied by the typical disclaimers that usually accompany such disclosures. Sirius XM could experience negative market repercussions, competitive disadvantage, and even possible legal exposure were this confidential financial information released publicly without proper context or explanation.

6. The written direct statement of Mel Karmazin, Chief Executive Officer of Sirius XM, contains material non-public information concerning Sirius XM's anticipated investments over the 2013-2017 licensing period, as well as confidential financial information concerning Sirius XM's costs and royalty payments over the 2007-2012 licensing period and detailed non-public information regarding the number of customers who subscribe to certain Select or Premier Sirius XM packages. None of this information is publicly known or available. Disclosure of the financial details of these contractual arrangements and non-public financial data would, for reasons discussed in paragraphs 4 and 5 above among others, competitively disadvantage Sirius XM.

7. The written direct statement of James E. Meyer, President, Operations and Sales, contains material non-public internal financial data concerning certain of Sirius XM's costs and expenditures over the 2007-2012 licensing period, as well as certain anticipated costs in updating its technological infrastructure over the 2013-2017 licensing period. Mr. Meyer's testimony also contains material non-public internal financial data concerning payments made by Sirius XM to automobile manufacturers and aftermarket participants pursuant to the terms of the Company's confidential agreements with those entities. None of this information is publicly known or available. Disclosure of the financial details of these contractual arrangements and the non-

public financial data would, for reasons discussed in paragraphs 4 and 5 above among others, competitively disadvantage Sirius XM.

8. The written direct statement of David J. Frear, Executive Vice President and Chief Financial Officer, Sirius XM contains material non-public internal financial data concerning certain of Sirius XM's costs and expenditures over the 2007-2012 licensing period, as well as material non-public internal financial forecasts prepared during the 2005-2010 period. Mr. Frear's testimony also contains certain material non-public terms of agreements with content providers that are subject to confidentiality provisions as well as material non-public details of negotiations with potential lenders. None of this information is publicly known or available. Disclosure of the financial details of these agreements and the non-public financial data would, for reasons discussed in paragraphs 4 and 5 above among others, competitively disadvantage Sirius XM.

9. The written direct statement of Steven Blatter, Senior Vice President and General Manager of Music Programming, contains information regarding terms of contracts with artists and/or record labels regarding Sirius XM's artist-themed channels. None of this information is publicly known or available. For reasons discussed in paragraph 4 above, disclosure of the financial details of these contractual arrangements would competitively disadvantage Sirius XM. In addition, one of the exhibits sponsored by Mr. Blatter contains information relating to a non-public marketing proposal to artists. Disclosure of the identities of these individual artists could jeopardize the Company's relationships with these individuals and cause Sirius XM competitive harm. Finally, the testimony of and exhibits sponsored by Mr. Blatter contain certain non-public communications between Sirius XM personnel and representatives of third-party content providers to Sirius XM. Disclosure of the identities of these third-party content providers would

jeopardize the Company's relationships with these individuals, who communicated with Sirius XM with the understanding the communications were private and confidential, and thus cause Sirius XM competitive harm.

10. One exhibit to the written direct statement of Ronald H. Gertz, SXM Dir. Ex. 14, contains a list of Sirius XM direct licenses identifying the particular rate agreed to by each licensor. Although the range of rates offered by Sirius XM in its direct licenses is public, the specific rates within that range offered to, and agreed to, by particular parties is not public. For reasons discussed in paragraph 4 above, disclosure of these contractual arrangements would competitively disadvantage Sirius XM.

11. The written direct statement of David P. Stowell contains material non-public information concerning Sirius XM's royalty payments over the 2007-2012 licensing period. None of this information is publicly known or available. Disclosure of these financial details would, for reasons described in paragraphs 4 and 5 above, competitively disadvantage Sirius XM.

12. The written direct statement of Roger G. Noll and certain tables and appendices attached thereto contain material non-public information concerning the particular rates agreed to by specific Sirius XM direct licensors, and material non-public internal financial data concerning package subscriber counts, SoundExchange payments, sales and marketing costs, revenue sharing arrangements with automobile manufacturers pursuant to terms of confidential agreements, and depreciation and amortization costs. None of this information is publicly known or available. Disclosure of this information would, for reasons discussed in paragraphs 4 and 5 above among others, competitively disadvantage Sirius XM.

13. In addition to these written direct statements and exhibits, Sirius XM also has submitted designated testimony (including written direct and rebuttal testimony and hearing testimony) from Docket No. 2006-1 CRB DTRA from Mel Karmazin, David Frear, and Stephen R. Cook (among others). Portions of that testimony include detailed discussions of contractual arrangements and financial information that was protected by the Judges under a nearly identical protective order in the prior proceeding. Sirius XM is not seeking to keep all that Protected Material off the public record in this proceeding; rather, after a careful review of the designated testimony, the Company seeks to restrict only specific materials, which are detailed on the Redaction Log. Disclosure of the financial details of the specified contractual arrangements and non-public financial data would, for reasons discussed in paragraphs 4 and 5 above among others, competitively disadvantage Sirius XM, and Sirius XM requests protection of the material consistent with the Judges' prior rulings.

14. The contractual, commercial and financial information described in the paragraphs above and detailed on the accompanying Redaction Log must be treated as restricted "Protected Material" in order to prevent business and competitive harm that would result from the disclosure of such information while, at the same time, enabling Sirius XM to provide the Copyright Royalty Judges with the most complete record possible on which to base their determination in this proceeding.

Pursuant to 28 U.S.C. § 1746 and 37 C.F.R. § 350.4(e)(1), I hereby declare under the penalty of perjury that, to the best of my knowledge, information and belief, the foregoing is true and correct.



Todd Larson (N.Y. Bar No. 4358438)
WEIL, GOTSHAL & MANGES LLP
767 Fifth Avenue
New York, NY 10153
tel: (212) 310-8170
fax: (212) 310-8007
todd.larson@weil.com

Counsel for Sirius XM Radio Inc.

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	<p>Page 4, Paragraph 11</p> <p>Page 15, Paragraph 36</p> <p>Page 18, Paragraph 43</p>	<p>Contains material non-public internal financial data concerning investment in Sirius XM 2.0.</p> <p>Contains material non-public information concerning number of subscribers to Select and Premier packages.</p> <p>Contains material non-public internal financial data concerning total projected royalties paid to SoundExchange through the end of the 2007-2012 licensing period.</p>
<p>Written Direct Testimony of James E. Meyer</p>	<p>Page 2, Paragraph 5, footnote 1</p> <p>Page 20, Paragraph 42</p> <p>Page 20, Paragraph 43</p> <p>Page 21, Paragraph 44</p>	<p>Contains material non-public internal financial data concerning Sirius XM's costs for customer service-related technology in 2010.</p> <p>Contains material non-public internal financial data concerning net subscription revenues paid to automobile manufacturers pursuant to terms of confidential agreements.</p> <p>Contains material non-public internal financial data concerning average annual expenditure on incentives to automobile manufacturers pursuant to terms of confidential agreements.</p> <p>Contains material non-public internal financial data concerning annual expenditure on incentives to aftermarket participants pursuant to terms</p>

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	<p>Page 26, Paragraph 54</p> <p>Page 28, Paragraph 60</p>	<p>of confidential agreements.</p> <p>Contains material non-public internal financial data concerning anticipated cost of upgrade to Sirius repeater network during next licensing period.</p> <p>Contains material non-public internal financial data concerning anticipated cost of upgrades and replacement of broadcast studio infrastructures during next licensing period.</p>
<p>Written Direct Testimony of David J. Frear</p>	<p>Page 5, Paragraph 11</p> <p>Pages 8-9, Paragraph 20 and footnote 5</p> <p>Page 11, Paragraph 27</p> <p>Page 11, Paragraph 28</p> <p>Page 12, Paragraph 29</p> <p>Pages 15-17, Charts following Paragraph 35</p>	<p>Contains material non-public information concerning negotiations with lenders.</p> <p>Contains material non-public information concerning the terms of contracts with content providers that are subject to confidentiality provisions.</p> <p>Contains material non-public internal financial data concerning sales and marketing costs.</p> <p>Contains material non-public internal financial data concerning revenue sharing arrangements with automobile manufacturers pursuant to terms of confidential agreements.</p> <p>Contains material non-public internal financial data concerning depreciation and amortization costs.</p> <p>Contains material non-public</p>

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	<p>Page 21, Paragraph 43</p> <p>SXM Dir. Ex. 7</p>	<p>internal forecasts of subscriber growth, revenue growth, earnings growth, and cash flow growth.</p> <p>Contains material non-public internal financial data concerning actual and projected royalties paid to SoundExchange.</p> <p>Contains material non-public data regarding specific royalty rate agreed to by a Sirius XM direct licensor.</p>
<p>Written Direct Testimony of Steven Blatter</p>	<p>Page 22, Paragraph 55, Footnote 7</p> <p>Page 24, Paragraph 61, Lines 1 and 5</p> <p>Page 24, Paragraph 62, Lines 1 and 2</p> <p>Pages 24-25, Paragraph 63, Line 1</p>	<p>Contains non-public commercial information pertaining to terms of confidential agreements.</p> <p>Contains non-public, confidential communications between Sirius XM personnel and representatives of third-party content providers to Sirius XM.</p> <p>Contains non-public, confidential communications between Sirius XM personnel and representatives of third-party content providers to Sirius XM.</p> <p>Contains non-public, confidential communications between Sirius XM personnel and representatives of third-party content providers to Sirius XM.</p>

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	Page 25, Paragraph 64	Contains non-public, confidential communications between Sirius XM personnel and representatives of third-party content providers to Sirius XM.
	Pages 25-26, Paragraph 67, Lines 2, 3, 4, 6, 11	Contains non-public, confidential communications between Sirius XM personnel and representatives of third-party content providers to Sirius XM.
	SXM Dir. Ex. 39	Contains non-public Sirius XM artist marketing proposal.
	SXM Dir. Exs. 42 – 45, 47	Contains non-public, confidential communications between Sirius XM personnel and representatives of third-party content providers to Sirius XM.
Written Direct Testimony of Ronald H. Gertz	SXM Dir. Exs. 7, 14	Contains material non-public data regarding specific royalty rates agreed to by each Sirius XM direct licensor.
Written Direct Testimony of David P. Stowell	Page 5, Paragraph 13	Contains material non-public internal financial data concerning actual royalties paid to SoundExchange.
	Page 6, Paragraph 14	Contains material non-public information concerning negotiations with lenders.
	Page 15, Exhibit 4 following Paragraph 31	Contains material non-public internal financial data concerning actual royalties paid to SoundExchange.
Written Direct Testimony of Roger G. Noll	Page 32, 41, 42	Contains material non-public data regarding specific royalty rates agreed to by Sirius XM

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	<p>Page 46</p> <p>Table 1</p> <p>Table 3, Appendix D</p> <p>Table 4, Appendix C</p>	<p>direct licensors.</p> <p>Contains material non-public internal financial data concerning actual royalties paid to SoundExchange.</p> <p>Contains material non-public data regarding specific royalty rates agreed to by Sirius XM direct licensors.</p> <p>Contains material non-public internal financial data concerning sales and marketing costs, revenue sharing arrangements with automobile manufacturers pursuant to terms of confidential agreements, and depreciation and amortization costs.</p> <p>Contains material non-public internal data concerning Sirius XM package subscriber counts.</p>
SIRIUS XM DESIGNATED TESTIMONY FROM SATELLITE I (DOCKET NO. 2006-1)		
<p>Designated Written Rebuttal Testimony of Mel Karmazin</p>	<p>Page 3, Paragraph 5 Pages 6-7, Paragraph 14</p> <p>Page 4, Paragraph 11</p>	<p>Material designated as restricted by the Judges pursuant to protective order in Docket No. 2006-1 (discussion of non-public terms of confidential agreement between Sirius and the NFL).</p> <p>Material designated as restricted by the Judges pursuant to protective order in Docket No. 2006-1 (discussion of terms of confidential agreement between Sirius and Howard Stern.)</p>

<u>Document</u>	<u>Page/Paragraph/Exhibit No.</u>	<u>General Description</u>
	Page 7, Paragraph 16	Material designated as restricted by the Judges pursuant to protective order in Docket No. 2006-1 (discussion of terms of confidential agreement between Sirius and NASCAR).
Designated Direct Hearing Testimony of David Frear	June 12, 2007 trial transcript	Session was closed to the public by the Judges pursuant to protective order in Docket No. 2006-1; contains material non-public information concerning financial forecasts.
Designated Rebuttal Hearing Testimony of David Frear	August 15, 2007 transcript	Session was closed to the public by the Judges pursuant to protective order in Docket No. 2006-1; contains material non-public information concerning financial forecasts.
Designated Direct Hearing Testimony of Stephen R. Cook	June 6, 2007 trial transcript	Session was closed to the public by the Judges pursuant to protective order in Docket No. 2006-1; contains material non-public information concerning terms of confidential agreement between XM Satellite Radio, Inc. and Harpo Radio.

Dated: November 29, 2011

Respectfully submitted,

Todd D. Larson / JSK

Todd D. Larson (NY Bar No. 4358438)
Weil, Gotshal & Manges LLP
767 Fifth Avenue
New York, NY 10153
Tel: 212.310.8170
Fax: 212.310.8007
todd.larson@weil.com

Counsel for Sirius XM Radio Inc.

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of:

Determination of Rates and Terms for
Preexisting Subscription Services and
Satellite Digital Audio Radio Services

Docket No. 2011-1
CRB PSS/Satellite II

CERTIFICATE OF SERVICE

I, Jaime S. Kaplan, hereby certify that a copy of the foregoing Written Direct Statement of Sirius XM Radio Inc. has been served electronically by agreement of the parties on this 2nd day of December, 2011, with hard copy to follow, on the following parties:

Paul M. Fakler
ARENT FOX LLP
1675 Broadway
New York, New York 10019-5874
Fax: (212) 484-3990
fakler.paul@arentfox.com
roman.eric@arentfox.com

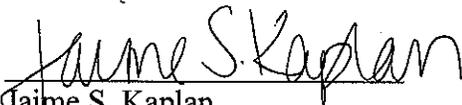
Counsel for Music Choice

David A. Handzo
Michael B. DeSanctis
Jared O. Freedman
JENNER & BLOCK LLP
1099 New York Ave., N.W.
Washington, D.C. 20001
(v) 202-639-6000
(f) 202-639-6066
dhandzo@jenner.com
mdesanctis@jenner.com
jfreedman@jenner.com

Counsel for SoundExchange, Inc.

C. Colin Rushing
General Counsel
SoundExchange, Inc.
1121 14th Street, NW, Suite 700
Washington, DC 20005
(v) 202-640-5869
(f) 202-640-5883
crushing@soundexchange.com

Of Counsel


Jaime S. Kaplan

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of)	
)	
)	
DETERMINATION OF RATES AND TERMS	)	Docket No. 2011-1
FOR PREEXISTING SUBSCRIPTION AND	)	CRB PSS/Satellite II
SATELLITE DIGITAL AUDIO RADIO)	
SERVICES)	

WRITTEN DIRECT TESTIMONY OF MEL KARMAZIN

(On behalf of Sirius XM Radio Inc.)

Introduction

1. My name is Mel Karmazin. I am the Chief Executive Officer of Sirius XM Radio Inc. (“Sirius XM” or “the Company”). I was Chief Executive Officer of Sirius Satellite Radio Inc. (“Sirius”) before its 2008 merger with XM Satellite Radio Holdings, Inc. (“XM”). Prior to joining Sirius in 2004, I served as President and Chief Operating Officer of Viacom, Inc. and Chief Executive Officer of CBS Corporation, and have held senior management positions at other media companies including Infinity Broadcasting and Metromedia.

2. As Chief Executive Officer of Sirius XM, I oversee all aspects of the Company’s operations. As a result, I have intimate familiarity with all components of Sirius XM’s business, including its product offerings, underlying technological infrastructure and innovation, distribution channels and relationships with automobile manufacturers, finances, cost structure, and the competitive landscape in which we operate. Understanding the fundamentals of our business, including the risks and challenges the Company faces, is a critical function of my role as Chief Executive Officer.

3. I testified on behalf of Sirius in the previous proceeding before the Copyright Royalty Board (“CRB”) that set SDARS rates for the period 2007 through 2012 (“*Satellite I*”). I have reviewed the direct and rebuttal testimony that I submitted in that proceeding, as well as the direct testimony submitted by Gary Parsons, then-Chairman of the Board of Directors of XM. Collectively, our testimony covered the following key areas: (a) the history of Sirius and XM; (b) the companies’ extraordinary investments and costs, and their respective efforts to achieve profitability; (c) the value propositions provided by satellite radio, including compelling non-music content and the promotional value of music; (d) the technological infrastructure and continued innovation required of the two companies; and (e) the competitive landscape at the time. I have also reviewed the direct testimony from that proceeding of Steve Cohen and Jeremy Coleman (formerly of Sirius) and Eric Logan (formerly of XM), who covered in detail Sirius’ and XM’s non-music content and programming.

4. I understand that my prior direct and rebuttal testimony, along with the direct testimony of Messrs. Parsons, Cohen, Coleman and Logan, has been designated to be included in this proceeding. My testimony here updates that prior testimony and addresses the current state of the Company, its programming mix, and the challenges we continue to face after the merger. I also provide my perspective on how these matters should bear on the rates set for the next statutory licensing period of 2013 to 2017.

The Merger and Post-Merger Environment

5. A significant development since the *Satellite I* proceeding has been the merger of Sirius and XM. The proposed merger was announced in February 2007 (in the middle of *Satellite I*), but it was not completed until July 2008, after regulatory approvals had been obtained. In August 2008, the combined company changed its name from Sirius Satellite Radio Inc. to Sirius XM Radio Inc.

6. As the accompanying testimony of our CFO David Frear attests, despite the cost savings of synergies and efficiencies that we achieved by combining the two companies, the period following the merger has been an extremely challenging one. The combined companies began with a debt load of approximately \$3.4 billion. At around the same time, the economy plummeted and, despite our best efforts, within a few months of the merger Sirius XM came within hours of filing for bankruptcy over our inability to refinance debt that matured in February 2009. After 21 other investors declined to finance the Company, we were rescued only at the eleventh-hour when Liberty Media agreed to loans that enabled us to repay our bond debt and fund our working capital needs.

7. We are proceeding on sounder financial footing today, and I am generally optimistic about the company's future prospects. Still, the lessons of the past, the continuing challenging economic climate, our intimate ties to the OEM market, and the growing competition from companies that do not have the same significant delivery-of-service costs as Sirius XM present enormous challenges for the Company in the period covered by this rate proceeding.

The Unique Span (and Associated Cost Constraints) of Sirius XM's Business

8. Sirius XM is unique in having built from scratch an audio programming service rich in content, along with the hardware (receivers) necessary to access it and the network that enables it to be seamlessly delivered. The Company's cumulative investment to date in creating and supporting this service exceeds \$10 billion.

9. These capital costs still have not been recovered. Furthermore, the Company now faces an array of Internet-based competitors, discussed more fully in the accompanying testimony of James Meyer and William Rosenblatt, that are able to provide attractive content to our core subscriber base without incurring costs that are remotely comparable to our own. These

ever-more-viable competitors are able to piggyback on the extensive investments made by wireless network providers, consumer electronics manufacturers and consumers in both the platforms (Internet and wireless networks) and receivers (computers, smartphones and other mobile devices) that enable these services.

10. Unlike our competition, for us to remain in business we must maintain, upgrade and, where necessary, replace a technological infrastructure that includes two separate satellite networks used to operate the still-distinct Sirius and XM program services, the chipsets and radio products required to receive our services in the vehicle and elsewhere, as well as our broadcast facilities and data service offerings. We anticipate investing more than [REDACTED] in support of these activities during the 2013-2017 period.

11. Our ongoing commitment to providing innovations and enhancements in our products and services also comes at great expense. One example is our recent introduction of a new service – Sirius XM 2.0 – which makes use of innovations in our chipsets and receivers to provide enhanced programming options (*i.e.*, additional channels) to our subscribers. Sirius XM 2.0 is a major upgrade and evolution of our satellite- and Internet-delivered service that ultimately will span hardware, software, audio and data services. This project will involve a substantial investment in software (upgrades and modifications) in the near term so that radios being rolled out in vehicles will not require a hardware upgrade to incorporate the new Sirius XM 2.0 functionality. The development of the Sirius XM 2.0 service has cost the Company upwards of [REDACTED] over the last two years, we expect to spend another [REDACTED] in 2012 in continuing to develop the service, and we will continue to incur additional operating costs to support Sirius XM 2.0 thereafter. Sirius XM 2.0's deployment will be rolled out in phases over the next year.

12. Our continued commercial viability also depends on our devoting significant resources to attracting and maintaining our customer base. A major expense we continue to incur in this connection is the financial support we provide automakers as an inducement to installing satellite radios in their vehicles – a cost that is unique to us. We must, in addition, present a compelling value proposition to convert trial subscribers to paying subscribers, and to retain existing subscribers, particularly given their ready access to free alternatives, most prominently terrestrial radio and increasingly Internet radio. As I describe in further detail below, as does Steven Blatter in his accompanying testimony, to demonstrate this value Sirius XM continues to invest not only in creative and innovative music content, but also in exclusive and compelling non-music programming that is designed to set Sirius XM apart from our free (or substantially cheaper) competitors.

13. Greater detail as to the costs that Sirius XM bears in operating its service is set forth in Mr. Frear’s testimony. The relevance of these costs in relation to a potential comparison of the appropriate music royalty rates to be paid by the Company versus our competition is discussed in the testimony of our economic expert, Dr. Roger Noll.

Sirius XM’s Direct License Initiative

14. Dr. Noll’s primary rate benchmark for setting the appropriate royalty rate in this proceeding is the more than 60 direct licenses that Sirius XM has signed with record companies covering both the rights at issue in this proceeding as well as certain additional rights. The Company’s direct-licensing efforts and negotiations with the labels are described in detail in the accompanying testimony of Ronald Gertz and Mr. Frear, and I will not repeat that testimony here. Suffice it to say that, in late 2009, Sirius XM began planning an initiative to seek directly from record companies a multi-platform license for all of the rights we need for our various services. This effort led to a number of discussions with various record labels during 2010, and

culminated in the 2011 rollout of a direct-license campaign that continues to this day. There were several compelling reasons for this initiative.

15. First, we wished to secure all rights necessary to offer service features that could compete with the new generation of Internet-based services available to consumers today, including customization, caching, and the like – features that in some cases go beyond the strict limits imposed by the statutory license here in issue. SoundExchange was unable to offer the rights we needed, but we have been successful in securing these rights from many labels directly.

16. Second, we hoped to roll into one license the rights for all Sirius XM services (including webcasting, business establishment services, cable/satellite television music channels) and not merely satellite radio. Third, we hoped to control our music-related costs. We believed that artists and labels would be receptive to a proposal that provides Sirius XM with the incentive to play their music more, get quick and transparent reporting and payment, and avoid the delays and administrative fees involved when SoundExchange is in the middle of the transaction.

17. The initiative, still in its early stages, has been met with considerable success: more than 60 direct license agreements have been signed to date, which collectively cover more than 7,000 artists, 9,000 albums, and 110,000 tracks – many of which are regularly featured on our service.

18. There is no doubt that we would be farther along with acceptance of such licenses had it not been for the ongoing, coordinated efforts of record industry trade organizations – SoundExchange prominently among them – to dissuade artists and labels from entering into these licenses. As a result of this active interference, many record labels have said no to us – scared off by a combination of SoundExchange, A2IM, the Recording Academy, and the musicians unions telling artists and labels that they could expect to earn more for Sirius XM

plays if they refuse to break ranks and instead stick with collective licensing (and the outcome of this rate proceeding) as coordinated on their behalf by SoundExchange. These actions are regrettable; they not only impede the workings of a competitive marketplace, but also seek to diminish the important role Sirius XM plays in the music marketplace. Despite these industry groups' misleading claims that Sirius XM was attempting to take advantage of recording artists in some way, the very opposite is true. We are proud of our record of promoting the careers of countless artists who have gained recognition and increased sales as a result of having their music played on Sirius XM satellite radio. The artists associated with record labels that sign our direct licenses stand only to see potentially enhanced airplay for their recordings.

19. The record companies that have agreed to our direct-license offer have done so voluntarily. The direct licenses reflect business decisions made by sophisticated music executives who were free to take or leave our proposal, and who, in signing on, saw value in doing so. In short, this is the classic example of a rate set in a competitive willing-buyer willing-seller negotiation.

The Continued Importance of Sirius XM's Unique Content

20. As I described in my *Satellite I* testimony, Sirius originally aimed at becoming the world's best music service, but quickly discovered that the ubiquitous availability of music – especially for free on terrestrial radio – required a new business strategy. We realized that to be successful, we needed not only an outstanding music product, but also compelling non-music programming that, in many cases, consumers could not get anywhere else. Given the increasingly competitive market in which we operate, this need remains as compelling today.

Sirius XM's Music Content

21. We continue to make major investments in music programming, including in quality on-air talent and expert music programmers. As Steven Blatter's testimony describes,

Sirius XM's music offerings go well beyond those of terrestrial radio, featuring unique music catalogs and channels dedicated to particular genres of music that, due to their rather narrow appeal, might not be available on terrestrial radio at all. This breadth and depth of music offerings has a promotional effect on music sales. As described in detail by Mr. Blatter, we regularly see evidence of a direct correlation between our performances of an artist's music and a spike in that artist's record sales. This phenomenon has been explicitly recognized by artists and music label executives alike.

Sirius XM's Non-Music Content Offerings

22. As important as music is to our business, it really is Sirius XM's non-music content that sets us apart and allows us to compete vigorously with new market entrants. In the *Satellite I* proceeding, Steve Cohen, then Sirius' Vice President, Sports, offered testimony describing Sirius' ten sports channels and the enormous investment made in those channels – whether developed in-house or licensed from third parties like ESPN. These channels are critical to subscriber acquisition and retention because they contain exclusive programming, such as NFL and NASCAR broadcasts, that is not available elsewhere. Jeremy Coleman, then Sirius' Vice President, Talk, Entertainment, and Information Programming, offered testimony about Sirius' investment in 54 other non-music channels, which offered a variety of third-party and original news, talk, entertainment, comedy, family, health, and traffic and weather programming and information. Like Mr. Cohen, Mr. Coleman's testimony described the critical importance, and value to its subscribers, of exclusive non-music programming found only on Sirius, such as Howard Stern.

23. On the XM side, Eric Logan testified about XM's 52 non-music channels (not counting XM's 20-plus live sports play-by-play channels) and the massive investment by XM in obtaining those offerings from third parties or developing them in-house. Just as Sirius drove

subscriptions by offering exclusive access to Howard Stern and the NFL, XM offered its subscribers exclusive content including Major League Baseball games, Oprah Winfrey, Opie & Anthony, and the NHL.

24. During the rebuttal phase of the last proceeding, I testified along with several joint Sirius/XM experts about the myriad additional “brand” benefits that Sirius and XM received from their many high-profile non-music providers like Howard Stern and MLB that go beyond attracting and retaining subscribers: benefits like advertising and promotional advantages, media exposure, and credibility in the eyes of consumers and the Company’s automaker and retailer partners.

25. The thrust of that testimony remains equally applicable today: while music is available from a variety of sources other than satellite radio (although not presented as powerfully or with the expertise and focus we are able to bring to it), it is our non-music content – particularly our exclusive non-music content – that drives subscriptions and prevents defections. It is important to remember that over 90% of Americans have access to and enjoy free terrestrial radio. Differentiating Sirius XM’s service is critical to supporting our subscription model. Given the dramatically increased availability of streamed music content to compete with Sirius XM in the vehicle, our unique package of non-music content – both exclusive and from third-parties – has taken on even more importance as a differentiator and selling point of our service.

26. While a tech-savvy smartphone user might be able to download the CNN application or a public radio podcast, or subscribe to a slate of NFL or MLB games from other mobile providers, he or she cannot find our Howard Stern, Oprah, Out-Q, Doctor Radio, or other exclusive talk and comedy programming elsewhere on the Web, much less on a mobile device.

Even where some version of such programming (or a comparable type of programming) is available, no other provider bundles that content in a convenient, affordable package the way we do.

27. Both XM and Sirius offered more than 60 non-music channels at the time of the last CRB proceeding. As discussed above, the non-music programming mix featured marquee programming exclusive to one service or the other, including Howard Stern and NFL on Sirius, and Oprah Winfrey, Major League Baseball, and Opie & Anthony on XM. By contrast, about a quarter of the non-music programming was non-exclusive third-party content that was actually identical on each platform (news and sports programming from ESPN Radio, CNN, Bloomberg, Fox News, BBC World Service, and the like). Most of the rest of the non-music channels, while not identical, were functionally equivalent: Sirius' "Sports Byline USA," for example, was similar to "XM Sports Nation"; "Sirius Left" was similar to XM's "Progressive Talk"; and Sirius "Radio Classics" was comparable to XM's "Old Time Radio."

28. Although we still offer two different services since customers still subscribe to either Sirius or XM, we now offer essentially the same group of non-music channels to both sets of subscribers. Whether one subscribes to Sirius or XM, one can access Howard, Opie & Anthony, the NFL, and the other marquee programming that used to be available only on one service or the other.¹ In addition, the same third-party news and sports programming formerly

¹ As explained below, while this content is available to both Sirius and XM subscribers, it remains part of the standard package of one service or the other, while subscribers to the other service can access it for an additional fee. The one significant exception to this new approach is Major League Baseball play-by-play, which, because of contract restrictions, continues to be available only to XM subscribers. (Sirius subscribers can, however, get the MLB news/talk channel.) In addition, due to FCC requirements that we set aside certain space on each service for public education and minority programming, a very small number of other channels remain available only on one service or the other. For example, C-Span Radio is on XM only.

available on both services (CNN, ESPN, etc.) is still part of the standard package for each service.

29. Since the merger, we have made the most programming changes to those counterpart channels that were similar, but not identical, across the two services, by retaining the best of our original programming and eliminating duplication to create a “universal” lineup available to all subscribers. For example, it made no sense to keep both “Sirius Left” and XM “Progressive Talk.” We discontinued the latter and now offer only “Sirius XM Left.”

30. Apart from eliminating redundant channels, we have added a number of new channels that we have either licensed from others or developed on our own. Our goal has been to augment our lineup with programming that sets us apart from our competitors (both terrestrial radio and Internet offerings) in terms of quality and breadth and that will make us the clear leader in the category. New third-party content includes MSNBC, PRX Public Radio, and Spice, an adult content channel produced by Playboy.

31. A great example of our new premium original programming is Sirius XM’s “Doctor Radio.” In contrast to the widely available radio programs that purport to address medical health issues but are often just scarcely concealed infomercials sponsored by supplement companies and other product marketers, we decided to take a different approach. Rather than pairing traditional radio hosts with guests in the medical field, we made the doctors themselves the hosts. The doctors we engaged are experts in their fields; for example, the hosts of “Doctor Radio” include leaders and award-winners in the fields of psychiatry, pulmonary medicine, plastic surgery, emergency medicine, and more. In the end, we engaged over 40 medical experts to host or appear as special guests on the channel, at an annual cost of more than \$1.1 million.

32. Other new original channels include:

- *The Foxxhole*: a comedy channel developed with Oscar-winning actor and comedian Jamie Foxx.
- *Mad Dog Radio*: featuring Chris “Mad Dog” Russo, formerly half of the famous New York talk-radio duo “Mike and the Mad Dog.”
- *POTUS*: a channel started on XM around the time of the last CRB proceeding to provide wall-to-wall coverage of the 2008 presidential election; it has since been expanded to cover “Politics of the United States” on a full-time basis.
- *Sirius XM Fantasy Sports Radio*: a channel devoted to the millions of sports fans who now participate in fantasy sports leagues.

33. In addition to these new channels, we continue to develop new programs on existing channels by attracting extremely prominent and popular talent to our exclusive programming. During the past license period, for example, we brought over Dr. Laura Schlesinger, one of the most successful and prominent talk hosts in the country, from terrestrial radio to produce an exclusive daily broadcast on our “Stars” channel. We similarly hired well-known actress and celebrity Rosie O’Donnell to produce another exclusive daily show on “Stars.”²

34. Our current non-music offerings are fully outlined on the programming grids attached here as SXM Dir. Ex. 1. For convenience, they are summarized as follows:³

A. **News Programming** (14 XM and 13 Sirius channels)

- *CNBC, Bloomberg Radio, FOX News Channel, CNN, HLN, MSNBC, BBC World Service, World Radio Network, Sirius XM Public Radio, NPR Now* (available on both services)
- *C-Span Radio, PRX Public Radio, Radio Parallele, and Canada 360* (XM only)
- *NPR Talk, CBC Radio One, and Première Plus* (Sirius only)

² Although Rosie O’Donnell’s program has now been discontinued, we continue to broadcast a feed of her new television program on the Oprah Winfrey Network.

³ For completeness, the list includes our Canadian-produced channels, which are available to U.S. subscribers.

- B. Political Programming** (5 XM and Sirius channels)
- *POTUS Politics, SiriusXM Patriot, FOX News Talk, SiriusXM Left, and The Power* (African American talk) (available on both services)
- C. Entertainment Programming** (15 XM and 13 Sirius channels)
- *Howard Stern (Howard 100 and Howard 101); Opie & Anthony (formerly The ViRUS); Oprah Radio; Sirius XM Stars and Sirius XM Stars Too; Cosmo Radio; Martha Stewart Living Radio; Road Dog Trucking; OutQ; Playboy Radio; Spice Radio* (available on both services)
 - *Quoi de Neuf, ATN Asian Radio, and XM Preview* (XM only)
 - *Sirius Preview* (Sirius only)
- D. Family & Health** (3 XM and Sirius channels)
- *SiriusXM Book Radio; Doctor Radio; Radio Classics* (available on both services) (complemented by *Kids Place Live* and *Radio Disney*, two kids' music and entertainment channels)
- E. Sports Programming** (13 regular XM, and 12 regular Sirius channels, plus numerous play-by-play channels)
- *ESPN Radio; ESPN Xtra; Mad Dog Radio; Sirius XM Fantasy Sports Radio; NFL Radio; MLB Radio; NHL Home Ice; The PGA Tour Network; NASCAR Radio; College Sports Nation* (available on both services)
 - *Fox Sports Radio, XM Scoreboard and Calendrier Sportif* (XM only)
 - *Sports Extra and Sports Express* (Sirius only)
 - Sports Play-by-Play: Sirius XM provides listeners with live sports play-by-play from: NFL, NHL, NBA, Soccer, Horse Racing, NASCAR, IndyCar, College Sports, PGA and MLB (XM only)⁴
- F. Religious Channels** (3 Sirius, 2 XM channels)
- *The Catholic Channel and Family Talk* (available on both services)
 - *EWTN Radio* (Sirius only)

⁴ The Sirius platform has 13 dedicated play-by-play channels and also broadcasts live play-by-play over other Sirius channels if necessary; XM creates “part-time” play-by-play channels from bandwidth made available by temporarily preempting other channels.

- G. **Comedy Channels** (5 XM, 4 Sirius channels)⁵
 - *Laugh USA, Blue Collar Radio, The Foxxhole, Raw Dog Comedy* (available on both services)
 - *Laugh Attack* (XM only)
- H. **Traffic and Weather Channels** (10 Sirius, 9 XM channels)
 - 9 traffic channels covering 22 metropolitan areas plus one Canadian weather channel (Sirius only)
- I. **Latin Channels** (2 XM and Sirius channels)
 - *ESPN Deportes* and *CNN En Español* (available on both services)
- J. **“More” Channels** (7 XM, 2 Sirius channels)
 - *BYU Radio, HUR Voices* (available on both services)
 - *Extreme Talk, America’s Talk, ReachMD, Talk Radio, and Fox Sports Radio* (Clear Channel stations offered on XM Only)

35. Finally, with the introduction of our new XMH channels (described in the testimony of James Meyer), the following new non-music channels are now available to XM subscribers who have a radio containing our new x65H chipset:

- two new Latin channels: *RadioFórmula México* and *Playboy Radio en Espanol*
- three new comedy channels:
 - *Carlin’s Corner*: created in consultation with the George Carlin estate
 - *UCB Radio*: an alternative comedy channel created with the underground improv troupe the Upright Citizen’s Brigade
 - *Dirty Dog*: an extension of our existing *Raw Dog* comedy channel
- *ESPN Sports Center*
- Expanded Spanish-language sports programming, including NFL, MLB, and major college play-by-play.

⁵ I understand that the comedy channels use sound recordings covered by this proceeding; I include them here to provide a full picture of our non-music offerings.

Sirius XM's Expanded Subscriber Packages and Their Relative Popularity

36. After the merger, Sirius XM began offering a number of different programming packages that allow subscribers to receive the standard Sirius and XM packages (so-called “Select” packages), the Select packages plus premium content from the other service (so-called “Premier” packages), or packages more tailored to the subscriber (such as Family Friendly, Mostly Music, or News Sports & Talk). These packages are listed below, with the total subscriber count for each as of January 2011. The vast majority of subscribers take the standard (Select) package; a small but appreciable number add on premium content from the other service, and only small numbers subscribe to the other more tailored packages. The “Mostly Music” package fall into that category:

- Sirius Select/XM Select (formerly Sirius Everything/XM Everything) – combined 2011 subscribers: approximately [REDACTED]
- Sirius Premier/XM Premier (formerly Sirius Everything Plus The Best of XM/XM Everything Plus The Best of Sirius) – combined 2011 subscribers: approximately [REDACTED]
- Sirius Select Family Friendly/XM Select Family Friendly (formerly Sirius Family Friendly/XM Family Friendly) – combined 2011 subscribers: approximately [REDACTED]
- Sirius Premier Family Friendly/ XM Premier Family Friendly (formerly Sirius Family Friendly Plus The Best of XM/XM Family Friendly Plus the Best of Sirius) – combined 2011 subscribers: approximately [REDACTED]
- Sirius Mostly Music/XM Mostly Music (including a few family, news, and religious channels) – combined 2011 subscribers: approximately [REDACTED]
- Sirius News Sports & Talk/XM News Sports & Talk – combined 2011 subscribers: approximately [REDACTED]

37. Since the merger, we have also offered “A la Carte” packages, which allows subscribers to choose programming packages of 100 channels; 50 channels; 50 channels plus Howard Stern; 50 channels plus Sports; and 50 channels plus Howard Stern plus Sports. To date, each option has attracted only a few thousand subscribers.

Sirius XM Continues to Face Serious Risks To Its Business

38. The Company continues to operate in an environment that poses significant risks and challenges as we strive to bring high-quality service to the public.⁶ I outline several of the more salient challenges below. Other accompanying testimony amplifies on these considerations.

39. Like so many other companies, Sirius XM is affected by the overall state of the economy. For Sirius XM, that risk is enhanced due to the fact that we are a single-product company that is dependent on the OEM distribution channel, which itself is subject to a high degree of volatility and risk. While we cannot predict with certainty how the auto industry will perform over the next several years, should vehicle sales decline, so too will Sirius XM's subscriber count. We saw this exposure firsthand when the auto industry suffered a near-death experience during the last licensing period. The collapse of that market resulted in a corresponding sharp decline in Sirius' and XM's shipments and installments, from which it took the Company more than a year to recover. Although 2011 new vehicle sales are projected to finish stronger than 2009 and 2010, auto sales for the four years from 2009 through 2012 will be at their lowest level since the period 1980 to 1983.

40. Another significant risk the Company faces today is from new technology and other media that either did not exist, or were not fully developed, at the time of the *Satellite I* proceeding. The staggering pace of innovation – illustrated by wireless carriers expanding their network capabilities now to a fourth-generation (4G) that is likely only to improve further over the next few years – has had important implications for Sirius XM. First, we have seen the development of smartphones and other mobile devices that are able to connect seamlessly to the

⁶ The material risks to the Company are disclosed in the “Risk Factors” section of our Annual Report on Form 10-K for the year ending December 31, 2010, a copy of which is attached as SXM Dir. Ex. 2.

Internet virtually anywhere and anytime. Second, this easy mobile access to the Internet and its accompanying high data speeds have facilitated the emergence of numerous Internet-based audio content providers that offer streaming and other functionality affording access to vast arrays of music and non-music content that competes directly with Sirius XM. As discussed in the testimony of Messrs. Meyer and Rosenblatt, these competing services offer increased personalization and convenience to the listener, are mostly free (or at least are much cheaper than Sirius XM's services), and are now being integrated directly into vehicles – our principal distribution channel. Although terrestrial radio (including HD radio) continues to be Sirius XM's main competition (and pays no royalty fees to the music industry), the challenge presented by these new entrants to our ongoing ability to attract and retain subscribers cannot be overstated.

41. In addition, satellites are an inherently risky venture. As described in Mr. Meyer's testimony, each satellite replacement project is extremely expensive, time-consuming, and fraught with risk. Satellites experience failures of component parts and operational and performance anomalies in the ordinary course of their operation, none of which can be repaired once a satellite is in orbit. Any one of these events could seriously impact Sirius XM's signal integrity and thus our ability to deliver content.

Sirius XM's Financial Position And Outlook For The Future

42. As Mr. Frear's testimony recounts, the financial health of the Company has improved since 2007: for the first time, after nearly 20 years of losses, Sirius XM is generating revenues that exceed its costs. This recent turnaround is due in large part to the Company's aggressive post-merger cost-cutting efforts in subscriber acquisition, sales, marketing, and administrative costs as well as newly-renegotiated terms of key contracts.

43. However, while we are encouraged by the recent profitability of the Company and are optimistic about our further performance in the near future, it is important to recognize that Sirius XM is far from being out of the woods. After two decades of substantial losses, even our recent profitability hardly makes a dent in recovering the several billions of dollars in capital that were invested to launch Sirius and XM and bring the Company to where it is now. Over the last five-year licensing period, Sirius XM's made no money net of its costs – while, by the end of the current licensing period in 2012, it will have paid the recording industry nearly [REDACTED] in royalties. As Professor Stowell explains, even with our now-positive annual earnings, it likely will take years of sustained performance for the Company just to break even on a cumulative basis. Notably, our payments to SoundExchange during the last license period were more than Sirius XM stockholders earned in the same period.

44. In light of all of the risks facing the Company, we are not able to project with any certainty how our performance will fare more than 12 or 18 months into the future, in particular because we may very well see our growth slow in the coming years. For these reasons, we have not released any guidance past 2012.⁷ What is clear is that Sirius XM faces numerous significant risks, any one or combination of which could present major challenges for the Company in the next licensing period.

Implications Of A Material Increase In Royalty Rates

45. Before the *Satellite I* proceeding, Sirius XM paid SoundExchange a royalty rate equivalent to just over 2% of its revenues. The CRB dramatically increased Sirius XM's payments by nearly tripling the rate to 6% in 2007 and providing for a structure in which our

⁷ Indeed, as I stated during the Bank of America Merrill Lynch Media, Communications & Entertainment Conference Call in September 2011, we purposely have not given any guidance beyond next year due to the difficulty in projecting that far out. And, with our first-ever price increase coming just after the new year, we have an added layer of uncertainty – we do anticipate some level of increased churn from the increase, but we will not know what the precise effect will be until about mid-2013.

royalty rates will rise to 8% in 2012. Based on the information we have to date, we expect SoundExchange to seek a significant and immediate further escalation in the royalty commencing in 2013.

46. In our estimation, a rate increase of any magnitude, let alone that which we anticipate SoundExchange will seek, is unwarranted. Not only would such an increase take improper advantage of the Company's only-recently improved economic circumstances, it also could jeopardize the Company's ability to earn a fair return on long-term investments to which investors in our Company are entitled. A further rate increase also would fail to take account of the very real risks that the Company faces in today's uncertain economy and in navigating through the competitive landscape. As Professor Stowell opines, even if Sirius XM's royalty rate were to remain at its current level, the Company might still not be able to repay or refinance over \$2 billion of debt that comes due during the next licensing period if its subscriber base significantly declines. To increase the rate by any measure could have a disruptive effect on Sirius XM's business, and the rate set must account for the fragile environment in which Sirius XM operates.

47. Moreover, an increase in statutory rates would fail entirely to take into account any of the better information we have today about the actual market rate of sound recording performance rights as compared to the information that was available at the time of the *Satellite I* proceeding. First, as a result of our direct-license initiative, we have information never before available about the market rate for sound recording performance rights. That effort provides data on royalty rates for rights that are directly comparable to (in fact, exceed) those at stake in this proceeding and provide actual, negotiated arms-length rates in a competitive setting for such rights. As Professor Noll testifies, these direct licenses suggest an appropriate royalty rate of

between 5 and 7 percent. This first-ever evidence of what a willing buyer actually has paid willing sellers in a competitive environment for rights including those involved in this proceeding suggests not only that Sirius XM's royalty rate should not be increased from current levels, but in fact should be lowered.

48. This conclusion is bolstered by Dr. Noll's analysis of the fees paid for sound recording performances by existing music providers that are quite comparable to satellite radio. When properly adjusted to account for the mix of music and non-music content on satellite radio, as well as the different cost structures and overall functionality as between Sirius XM and such Internet-based competitors, this analysis confirms that the appropriate rate for Sirius XM should not exceed 7% of revenues.

* * *

49. Sirius XM has only recently begun to see its performance turn around after decades of significant losses. This new-found profitability is due in large part to the investments made over nearly twenty years, and merger-related cost savings. Any material increase in the royalty rate Sirius XM must pay to the record companies would threaten to jeopardize our recent turnaround. In short, Sirius XM's newly-improved performance should not be cause for the royalty rates to be increased, as such an increase would unduly disadvantage the Company in these uncertain times, and constitute an unwarranted windfall to the music industry. In fact, the analysis put forward by Sirius XM's economist expert suggests the appropriate marketplace rate for the rights at stake in this proceeding is even lower than what the Company pays today. I agree that the CRB should establish a rate in this proceeding that is not greater than the range between 5% and 7%.

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of)

**DETERMINATION OF RATES AND TERMS)
FOR PREEXISTING SUBSCRIPTION AND)
SATELLITE DIGITAL AUDIO RADIO)
SERVICES)**

**Docket No. 2011-1
CRB PSS/Satellite II**

DECLARATION OF MEL KARMAZIN

I, Mel Karmazin, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 28th day of November 2011 at New York, New York.



Mel Karmazin

POP

- 02 **SIRIUS XM Hits 1** Top 40 Hits •
- 03 **20:20** The Latest Pop Music and More •
- 04 **40:4** '40s Pop Hits/Big Band •
- 05 **50:5** '50s Pop Hits •
- 06 **60:6** '60s Pop Hits with Cousin Bruce •
- 07 **70:7** '70s Pop Hits •
- 08 **80:8** '80s Pop Hits •
- 09 **90:9** '90s Pop Hits •
- 10 **the PULSE** 2000s and Today •
- 15 **Studio 54 Radio** Studio 54 Radio •
- 16 **the blend** Lite Pop Hits •
- 17 **Love** Love Songs •
- 18 **UNITED ENGAGEMENTS** Limited Engagements •

ROCK

- 19 **Elvis** Elvis 24/7 Live from Graceland •
- 20 **E STREET RADIO** Bruce Springsteen 24/7 •
- 21 **UNDERGROUND GARAGE** Little Steven's Underground Garage •
- 22 **PEARL JAM RADIO** Pearl Jam 24/7 •
- 23 **GRATEFUL DEAD CHANNEL** Grateful Dead 24/7 •
- 24 **Radio MARGARITAVILLE** Escape to Margaritaville •
- 25 **Classic CREWIND** '70s & '80s Classic Rock •
- 26 **Classic vinyl** '60s & '70s Classic Rock •
- 27 **DEEP GRABBS** Deep Classic Rock •

SPORTS

- 84 **ESPN (RADIO)** ESPN's Sports Talk Channel •
- 85 **ESPN XTRA** The Latest Sports News •
- 86 **MAD DOG RADIO** Chris "Mad Dog" Russo Is Unleashed •
- 88 **NFL RADIO** 24/7 NFL News & Talk •
- 90 **NASCAR RADIO** 24/7 NASCAR® Talk •
- 91 **SIRIUS XM COLLEGE SPORTS NATION** The Best College Sports Talk & Games •
- 92 **SPORTS PLAYBYPLAY** European Soccer & More •
- 93 **SPORTS PLAYBYPLAY** Horse Racing Talk & Play-by-Play •

- 28 **the SPECTRUM** Adult Album Rock •
- 29 **JAM ON** Jam Bands •
- 30 **the LOFT** Contemporary Eclectic •
- 31 **the coffee house** Acoustic Singer-Songwriters •
- 32 **The Ridge** Mellow Rock •
- 33 **1st WAVE** Classic Alternative •
- 34 **LITHIUM** '90s Alternative/Grunge •
- 35 **SIRIUS XM INDIE** Indie Rock •
- 36 **ALT NATION** New Alternative Rock •
- 37 **OCTANE** New Hard Rock •
- 38 **BONE YARD** Classic Hard Rock •
- 39 **HAIR NATION** '80s Hair Bands •
- 40 **LOUD METAL** Heavy Metal •
- 41 **FACTION** Music of Action Sports with Tony Hawk •
- 42 **JOINT** Reggae •

HIP-HOP/R&B

- 44 **HIPHOP NATION** Hip-Hop Hits •
- 45 **SHADE 45** Eminem's Uncut Hip-Hop Channel •
- 46 **BACK SQUAD** Old Skool Rap •
- 47 **the heat** R&B Hits •
- 48 **Heart & Soul** Adult R&B Hits •
- 49 **Soul** Classic Soul/Motown •

DANCE & ELECTRONIC

- 51 **bpm** Dance Hits •

COMMERCIAL-FREE MUSIC

- 52 **electric area** Progressive House, Trance & Electro •
- 53 **SIRIUS XM CHILL** Smooth Electronic •

COUNTRY

- 56 **WILLIE'S ROADHOUSE** Classic Country •
- 58 **PRIME COUNTRY** '90s Country & More •
- 59 **THE HIGHWAY** New Country •
- 60 **OUTLAW COUNTRY** Rockin' Country Rebels •
- 61 **BLUES GRASS JUNCTION** Bluegrass •

CHRISTIAN

- 63 **the message** Christian Pop & Rock •
- 64 **Grace** Gospel •

JAZZ/STANDARDS

- 66 **WATERCOLORS** Smooth/Contemporary Jazz •
- 67 **Real JAZZ** Classic Jazz •
- 68 **spa** New Age •
- 69 **Escape** Beautiful Music •
- 70 **Bluesville** B.B. King's Blues •
- 71 **SINATRA** Sinatra/American Standards •
- 72 **ON BOARD** Show Tunes •

CLASSICAL

- 74 **Met Opera Radio** Opera/Classical Vocals •
- 75 **SIRIUS XM POP** Classical Pops •
- 76 **SYMPHONY HALL** Traditional Classical •

TRAFFIC & WEATHER

- | | |
|--|---|
| 132 BOSTON PHILADELPHIA PITTSBURGH | 137 DALLAS/FT. WORTH HOUSTON PHOENIX |
| 133 NEW YORK | 138 ST. LOUIS MINNEAPOLIS/ST. PAUL LAS VEGAS |
| 134 WASHINGTON DC BALTIMORE ATLANTA | 139 SAN FRANCISCO SEATTLE SAN DIEGO |
| 135 CHICAGO DETROIT | 140 LOS ANGELES |
| 136 MIAMI ORLANDO TAMPA/ ST. PETERSBURG | 162 The Weather Network Canada Weather |

Plus Live Games & Races from and More.

Sirius Premier package Internet Radio Play-by-Play

Sirius satellite service is available only to those at least 18 and older in the 48 contiguous USA, D.C., and PR (with coverage limitations). Our Internet radio service is available throughout our satellite service area and in AK and HI. © 2011 Sirius XM Radio Inc. Sirius, XM and all related marks and logos are trademarks of Sirius XM Radio Inc. All other marks, channel names and logos are the property of their respective owners. All rights reserved. **Effective Date 10/13/11**

HOWARD STERN

- 100 HOWARD 100
- 101 HOWARD 101

ENTERTAINMENT

- 110 MARTHA STEWART LIVING RADIO How-To For Living
- 204 OPRAH RADIO Live Your Best Life SIR
- 104 STARS 100 Great Talk Radio for Guys
- 106 ROAD DOG TRUCKING RADIO Just for Truckers
- 107 STARS Celebrity Hosts & Lifestyle Shows
- 108 OUTQ Gay & Lesbian Radio
- 109 COSMO RADIO Fun, Fearless, Female
- 206 THE OPIE & ANTHONY CHANNEL Opie & Anthony and More SIR
- 102 PLAYBOY RADIO Smart & Sexy Adult Radio
- 103 SPICE RADIO Adult Stories, Reality and Phone Calls

MORE

- 143 BYU Radio Join The Conversation

NEWS/PUBLIC RADIO

- 112 CNBC First in Business Worldwide
- 113 Bloomberg Radio The World Leader in Business News
- 114 FOX NEWS RADIO We Report. You Decide.
- 115 CNN The Worldwide Leader in News
- 116 HLN News & Views
- 117 msnbc MSNBC: Lean Forward
- 118 BBC WORLD SERVICE BBC World Service
- 120 NPR NEWS NOW News from Around the World
- 122 npr now NPR News & Conversation
- 123 npr talk NPR News & Talk
- 159 CBC radio ONE Canadian News & Talk
- 205 SIRIUS PUBLIC RADIO Great Public Radio with Bob Edwards SIR

POLITICS

- 124 POTUS Politics of the United States Unfiltered Political Talk
- 125 SIRIUS XM PATRIOT Conservative Talk
- 126 FOX NEWS RADIO Talk Radio from FOX News
- 127 SIRIUS XM LEFT Liberal Talk
- 128 the power African-American Talk

COMEDY

- 96 LAUGH USA Family Comedy
- 97 BLUE COLLAR RADIO Blue Collar Radio
- 98 THE FOXHOLE Presented by Jamie Foxx
- 99 RAW DOG COMEDY Comedy Uncensored

FAMILY & HEALTH

- 78 KIDS PLACES LIVE All Fun for Kids
- 79 RADIO FOR KIDS & FAMILY Music Destination for Kids & Family
- 80 SIRIUS XM BOOK RADIO Books & Drama
- 81 DOCTOR RADIO Real Doctors Helping Real People
- 82 RADIO CLASSICS Classic Radio Shows

RELIGION

- 129 THE CATHOLIC CHANNEL Not What You'd Expect
- 130 EWTN GLOBAL CATHOLIC RADIO NETWORK Authentic Catholic Radio for the Serious Listener
- 131 FAMILY TALK Christian Talk

SIRIUSXM INTERNET RADIO ONLY

MUSIC

- 14 POP 14 2000s Pop Hits
- 50 THE GROOVE Old Skool R&B
- 62 VOLAGE Folk
- 300 PARTY MEGA MIX Pop, Rock & Dance Party Songs
- 310 ROCK AND ROLL INDUCTED ARTISTS Music By Rock Hall Inducted Artists
- 313 ROCK BAR Rock & Roll Jukebox Songs
- 316 SIRIUS XM COMES ALIVE Live Classic Rock
- 319 CLASSIC INDIE ROCK Classic Indie Rock
- 350 RED WHITE & BOOZE Country Bar Songs
- 360 YOGA Chanting and Spiritual Music
- 800 NEIL DIAMOND RADIO Neil Diamond 24/7
- 801 BOB DYLAN THEME TIME RADIO HOUR Bob Dylan's Acclaimed Show 24/7
- 805 enlighten Southern Gospel
- 806 CINEMAGIC Movie Soundtracks & More
- 808 BOOTLEGS SiriusXM Bootlegs
- 809 SIRIUS XM MUSIC SHOWCASE Artist Confidential
- 810 SIMON & GARFUNKEL RADIO Simon and Garfunkel Music 24/7
- 812-814 SIRIUS XM LIMITED ENGAGEMENTS More Limited Engagements
- 815 BBC RADIO 1 U.K. Pop Hits
- 816 TIM MCGRAW RADIO Tim McGraw 24/7

SPORTS

- 370 SPORTSCENTER The Latest Sports News from ESPN
- 860 SPORTSZONE More Sports Talk
- 861-892 SPORTS PLAY-BY-PLAY Live NFL Play-by-Play

LATIN

- 148 CNN All-News Spanish Language
- 149 ESPN DEPORTES (RADIO) Spanish Sports Talk & Play-by-Play
- 150 SALIENTE Tropical Latin Music

CANADIAN

- 151 ICEBERG Canadian Adult Alternative Music
- 152 CBC radio 3 Canadian Indie Music
- 153 ESPACE MUSIQUE French Songs from Canada and France
- 154 NOCTURNE CANADIENNE Canadian Soft Rock
- 155 LATITUDE FRANCO Canadian Pop, Rock & Urban Music
- 156 SPORTS EXTRA Sports Radio French Language
- 157 SPORTS EXPRESS Sports Express from Canada
- 158 VOICES RADIO New Canadian Music
- 160 PREMIERE PLUS Current Affairs French Language
- 161 BANDE A PART New French-Language Music

LATIN

- 500 VIVA Contemporary Latin Pop & Ballads
- 503 LA MEZCLA Spanish and English Hits
- 506 FLUV NACION Latin Urban Music
- 510 REGINA Regional Mexican Music
- 520 LATIN LOVE SONGS Latin Love Songs
- 523 CANCION Classic Ballads in Spanish & English
- 530 LUNA Latin Jazz
- 533 RUMBON Classic Salsa
- 540 LATIN ROCK Latin Rock
- 560 RADIO FORMULA MEXICO News and More from Mexico
- 569 PLAYBOY RADIO EN ESPAÑOL Smart, Sexy Adult Radio en Español
- 950-959 DEPORTES EN VIVO Sports Play-by-Play en Español

COMEDY

- 400 CARLIN'S CORNER The One and Only George Carlin
- 403 DIRTY DOG Down & Dirtiest Comedy Channel
- 406 UCB RADIO UCB Sketch & Underground Comedy
- 850 SIRIUS XM COMEDY SHOWCASE SiriusXM Comedy Showcase

NEWS, TALK & ENTERTAINMENT

- 119 C-SPAN RADIO C-SPAN Radio
- 122 NPR News, Entertainment & NPR Favorites
- 123 PRX Independent Public Radio
- 851 ROSIE O'DONNELL 24/7 Rosie O'Donnell 24/7
- 852 SIRIUS XM PATRIOT PLUS More Conservative Talk
- 853 SIRIUS XM LEFT PLUS More Left, Liberal, Progressive Talk

Visit siriusxm.com for more information

POP

- 02 Top 40 Hits •
- 03 The Latest Pop Music and More •
- 04 '40s Pop Hits/Big Band •
- 05 '50s Pop Hits •
- 06 '60s Pop Hits with Cousin Bruce •
- 07 '70s Pop Hits •
- 08 '80s Pop Hits •
- 09 '90s Pop Hits •
- 10 2000s and Today •
- 14 2000s Pop Hits •
- 15 Studio 54 Radio •
- 16 Lite Pop Hits •
- 17 Love Songs •
- 18 Limited Engagements XL •

ROCK

- 19 Elvis 24/7 Live from Graceland •
- 20 Bruce Springsteen 24/7 •
- 21 Little Steven's Underground Garage •
- 22 Pearl Jam 24/7 •
- 23 Grateful Dead 24/7 •
- 24 Escape to Margaritaville •
- 25 '70s & '80s Classic Rock •
- 26 '60s & '70s Classic Rock •
- 27 Deep Classic Rock •
- 28 Adult Album Rock •

SPORTS

- 84 ESPN's Sports Talk Channel •
- 85 The Latest Sports News •
- 86 Chris "Mad Dog" Russo Is Unleashed •
- 87 Expert Fantasy Sports Opinion and Information •
- 88 24/7 NFL News & Talk •
- 89 24/7 MLB® Talk •
- 90 24/7 NASCAR® Talk •
- 91 The Best College Sports Talk & Games •
- 92 24/7 Expert NHL® Talk •

- 29 Jam Bands •
- 30 Contemporary Eclectic •
- 31 Acoustic Singer-Songwriters •
- 32 Mellow Rock •
- 33 Classic Alternative •
- 34 '90s Alternative/Grunge •
- 35 Indie Rock •
- 36 New Alternative Rock •
- 37 New Hard Rock •
- 38 Classic Hard Rock •
- 39 '80s Hair Bands •
- 40 Heavy Metal XL •
- 41 Music of Action Sports with Tony Hawk XL •
- 42 Reggae •

HIP-HOP/R&B

- 44 Hip-Hop Hits XL •
- 45 Eminem's Uncut Hip-Hop Channel XL •
- 46 Old Skool Rap XL •
- 47 R&B Hits •
- 48 Adult R&B Hits •
- 49 Classic Soul/Motown •
- 50 Old Skool R&B •

DANCE & ELECTRONIC

- 51 Dance Hits •
- 52 Progressive House, Trance & Electro •

COMMERCIAL-FREE MUSIC

- 53 Smooth Electronic •

COUNTRY

- 56 Classic Country •
- 58 '90s Country & More •
- 59 New Country •
- 60 Rockin' Country Rebels •
- 61 Bluegrass •
- 62 Folk •

CHRISTIAN

- 63 Christian Pop & Rock •
- 64 Gospel •

JAZZ/STANDARDS

- 66 Smooth/Contemporary Jazz •
- 67 Classic Jazz •
- 68 New Age •
- 69 Beautiful Music •
- 70 B.B. King's Blues •
- 71 Sinatra/American Standards •
- 72 Show Tunes •

CLASSICAL

- 74 Opera/Classical Vocals •
- 75 Classical Pops •
- 76 Traditional Classical •

TRAFFIC & WEATHER

- | | |
|--|--|
| <ul style="list-style-type: none"> 132 BOSTON PHILADELPHIA PITTSBURGH 133 NEW YORK 134 WASHINGTON DC BALTIMORE ATLANTA 135 CHICAGO DETROIT 136 MIAMI ORLANDO TAMPA/ST. PETERSBURG | <ul style="list-style-type: none"> 137 DALLAS/FT. WORTH HOUSTON PHOENIX 138 ST. LOUIS MINNEAPOLIS/ST. PAUL LAS VEGAS 139 SAN FRANCISCO SEATTLE SAN DIEGO 140 LOS ANGELES |
|--|--|

XM Premier package Play-by-Play Internet Radio
 XL May include frequent explicit language or mature programming

HOWARD STERN

100 XL XM 101 XL XM

ENTERTAINMENT

110 How-To For Living

111 Live Your Best Life

104 Great Talk Radio for Guys XL

105 Opie & Anthony and More XL

106 Just for Truckers

107 Celebrity Hosts & Lifestyle Shows

108 Gay & Lesbian Radio XL

109 Fun, Fearless, Female XL

102 Smart & Sexy Adult Radio XL

103 Adult Stories, Reality and Phone Calls XL

SIRIUSXM INTERNET RADIO ONLY

MUSIC

300 Pop, Rock & Dance Party Songs

310 Music By Rock Hall Inducted Artists

313 Rock & Roll Jukebox Songs

316 Live Classic Rock

319 Classic Indie Rock

350 Country Bar Songs

360 Chanting and Spiritual Music

800 Neil Diamond 24/7

801 Bob Dylan's Acclaimed Show 24/7

805 Southern Gospel

806 Movie Soundtracks & More

808 SiriusXM Bootlegs

809 Artist Confidentials

810 Simon and Garfunkel Music 24/7

812-814 More Limited Engagements XL

815 U.K. Pop Hits

816 Tim McGraw 24/7

NEWS, TALK & ENTERTAINMENT

122 News, Entertainment & NPR Favorites

130 Authentic Catholic Radio for the Serious Listener

851 Rosie O'Donnell 24/7

852 More Conservative Talk

853 More Left, Liberal, Progressive Talk

COMEDY

96 Family Comedy

97 Blue Collar Radio XL

98 Presented by Jamie Foxx XL

99 Comedy Uncensored XL

160 Canada's Extraordinary Comedy XL

FAMILY & HEALTH

78 All Fun for Kids

79 Music Destination for Kids & Family

80 Books & Drama

81 Real Doctors Helping Real People

82 Classic Radio Shows

RELIGION

129 Not What You'd Expect

131 Christian Talk

LATIN

500 Contemporary Latin Pop & Ballads

503 Spanish and English Hits

506 Latin Urban Music

510 Regional Mexican Music

520 Latin Love Songs

523 Classic Ballads in Spanish & English

530 Latin Jazz

533 Classic Salsa

540 Latin Rock

560 News and More from Mexico

569 Smart, Sexy Adult Radio en Español XL

950-959 Sports Play-by-Play en Español

SPORTS

370 The Latest Sports News from ESPN

860 More Sports Talk

861-892 Live NFL Play-by-Play

COMEDY

400 The One and Only George Carlin XL

403 Down & Dirtiest Comedy Channel XL

406 UCB Sketch & Underground Comedy XL

850 SiriusXM Comedy Showcase XL

LATIN

148 All-News Spanish Language

149 Spanish Sports Talk & Play-by-Play

150 Tropical Latin Music

175 Spanish Language MLB® News & Games

CANADIAN

151 Best New Rock with Unsigned Artists

152 Fusion of Punk, Hip-Hop & More

153 Modern/Classic Pop, Folk & Rock

154 24-Hour Sports Coverage

155 A New Canadian Perspective on News

156 New Canadian Music

157 24-Hour Coverage in French

158 French Language Arts & Entertainment

159 North America's South Asian Channel

NEWS/PUBLIC RADIO

112 First in Business Worldwide

113 The World Leader in Business News

114 We Report. You Decide.

115 The Worldwide Leader in News

116 News & Views

117 MSNBC: Lean Forward

118 BBC World Service

119 C-SPAN Radio

120 News from Around the World

121 Great Public Radio with Bob Edwards

122 NPR News & Conversation

123 Independent Public Radio

POLITICS

124 Unfiltered Political Talk

125 Conservative Talk

126 Talk Radio from FOX News

127 Liberal Talk

128 African-American Talk

MORE

11 KIIS FM Los Angeles

12 Z100 Plays All The Hits

13 106.7 Lite FM

57 Big 98 Country

143 Join The Conversation

163 107.5 WGCI

164 Rock with Nikki Sixx & Kerri Kasem

165 Entertaining, Informative & Extreme

166 Compelling Talk Show Hosts

167 For Healthcare Professionals

168 Clear, No-Nonsense Advice & Opinions

169 All About Your Favorite Sports

Visit siriusxm.com for more information

SIRIUS XM RADIO INC.

FORM 10-K (Annual Report)

Filed 02/16/11 for the Period Ending 12/31/10

Address	1221 AVENUE OF THE AMERICAS 36TH FLOOR NEW YORK, NY 10020
Telephone	212-584-5100
CIK	0000908937
Symbol	SIRI
SIC Code	4832 - Radio Broadcasting Stations
Industry	Broadcasting & Cable TV
Sector	Services
Fiscal Year	12/31

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For Fiscal Year Ended December 31, 2010

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Transition Period From to

COMMISSION FILE NUMBER 001-34295

SIRIUS XM RADIO INC.

(Exact name of registrant as specified in its charter)

Delaware

(or other jurisdiction of
incorporation of organization)

52-1700207

(I.R.S. Employer
Identification Number)

1221 Avenue of the Americas, 36th Floor
New York, New York

(Address of principal executive offices)

10020

(Zip Code)

Registrant's telephone number, including area code:
(212) 584-5100

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class:

Name of Each Exchange on Which Registered:

Common Stock, par value \$0.001 per share

Nasdaq Global Select Market

Securities registered pursuant to Section 12(g) of the Act:

None

(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller Reporting company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant as of June 30, 2010 was \$3,689,667,663. All executive officers and directors of the registrant have been deemed, solely for the purpose of the foregoing calculation, to be "affiliates" of the registrant.

The number of shares of the registrant's common stock outstanding as of February 14, 2011 was 3,933,999,616.

DOCUMENTS INCORPORATED BY REFERENCE

Information included in our definitive proxy statement for our 2011 annual meeting of stockholders scheduled to be held on Wednesday, May 25, 2011 is incorporated by reference in Items 10, 11, 12, 13 and 14 of Part III of this report.

SIRIUS XM RADIO INC.
2010 FORM 10-K ANNUAL REPORT
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Special Note Regarding Forward-Looking Statements

The following cautionary statements identify important factors that could cause our actual results to differ materially from those projected in forward-looking statements made in this Annual Report on Form 10-K and in other reports and documents published by us from time to time. Any statements about our beliefs, plans, objectives, expectations, assumptions, future events or performance are not historical facts and may be forward-looking. These statements are often, but not always, made through the use of words or phrases such as “will likely result,” “are expected to,” “will continue,” “is anticipated,” “estimated,” “intend,” “plan,” “projection” and “outlook.” Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this Annual Report on Form 10-K and in other reports and documents published by us from time to time, particularly the risk factors described under “Risk Factors” in Item 1A of this Annual Report on Form 10-K.

Among the significant factors that could cause our actual results to differ materially from those expressed in the forward-looking statements are:

- our competitive position versus other forms of audio and video entertainment including terrestrial radio, HD radio, Internet radio, mobile phones, iPods and other MP3 devices, and emerging next-generation networks and technologies;
- our ability to retain subscribers and maintain our average monthly revenue per subscriber;
- our dependence upon automakers and other third parties, such as manufacturers and distributors of satellite radios, retailers and programming providers;
- our substantial indebtedness; and
- the useful life of our satellites, which, in most cases, are not insured.

Because the risk factors referred to above could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any of these forward-looking statements. In addition, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which the statement is made, to reflect the occurrence of unanticipated events or otherwise. New factors emerge from time to time, and it is not possible for us to predict which will arise or to assess with any precision the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

ITEM 1. *BUSINESS*

We broadcast our music, sports, news, talk, entertainment, traffic and weather channels in the United States on a subscription fee basis through our two proprietary satellite radio systems. Subscribers can also receive certain of our music and other channels over the Internet, including through applications for Apple, Blackberry and Android-powered mobile devices.

As of December 31, 2010, we had 20,190,964 subscribers. Our subscriber totals include:

- subscribers under our regular and discounted pricing plans;
- subscribers that have prepaid, including payments either made or due from automakers for prepaid subscriptions included in the sale or lease price of a vehicle;
- certain radios activated for daily rental fleet programs;
- certain subscribers to our Internet services; and
- certain subscribers to our weather, traffic, data and Backseat TV services.

Our primary source of revenue is subscription fees, with most of our customers subscribing on an annual, semi-annual, quarterly or monthly basis. We offer discounts for prepaid and long-term subscription plans as well as discounts for multiple subscriptions on each platform. We also derive revenue from activation and other fees, the

sale of advertising on select non-music channels, the direct sale of satellite radios and accessories, and other ancillary services, such as our weather, traffic, data and Backseat TV services.

Our satellite radios are primarily distributed through automakers (“OEMs”); retail locations nationwide; and through our websites. We have agreements with every major automaker to offer satellite radios as factory or dealer-installed equipment in their vehicles. Satellite radio services are also offered to customers of certain rental car companies.

Certain important dates in our corporate history are listed below:

- Sirius XM Radio Inc. was incorporated in the State of Delaware as Satellite CD Radio, Inc. on May 17, 1990.
- On December 7, 1992, Satellite CD Radio, Inc. changed its name to CD Radio Inc., and Satellite CD Radio, Inc. was formed as a wholly owned subsidiary.
- On November 18, 1999, CD Radio Inc. changed its name to Sirius Satellite Radio Inc.
- In July 2008, our wholly owned subsidiary, Vernon Merger Corporation, merged (the “Merger”) with and into XM Satellite Radio Holdings Inc.
- On August 5, 2008, we changed our name from Sirius Satellite Radio Inc. to Sirius XM Radio Inc.
- In April 2010, XM Satellite Radio Holdings Inc. merged with and into XM Satellite Radio Inc.; and in January 2011, XM Satellite Radio Inc., our wholly-owned subsidiary, merged with and into Sirius XM Radio Inc.

Prior to January 12, 2011, we operated XM Satellite Radio Inc., together with its subsidiaries, as an unrestricted subsidiary under the agreements governing our indebtedness.

Programming

We offer a dynamic programming lineup of more than 135 channels of commercial-free music, sports, news, talk, entertainment, and traffic and weather. The channel line-ups for our services vary in certain respects and are available at siriusxm.com.

Our subscription packages allow most listeners to customize and enhance our standard programming lineup. Our “Best of SIRIUS” package offers XM subscribers the Howard Stern channels, Martha Stewart Living Radio, SIRIUS NFL Radio, SIRIUS NASCAR Radio, Playboy Radio, Spice Radio and play-by-play NFL games and college sports programming. Our “Best of XM” package offers SIRIUS subscribers Oprah Radio, The Virus, XM Public Radio, MLB Network Radio, NHL Home Ice, The PGA Tour Network, and select play-by-play of NBA and NHL games and college sports programming.

Subscribers with a la carte-capable radios may customize the programming they receive through our a la carte subscription packages. We also offer family friendly, “mostly music” and “mostly sports, news and talk” packages.

We make changes to our programming lineup from time to time as we strive to attract new subscribers and offer content which appeals to a broad range of audiences and to our existing subscribers.

Music Programming

We offer an extensive selection of music genres, ranging from rock, pop and hip-hop to country, dance, jazz, Latin and classical. Within each genre we offer a range of formats, styles and recordings.

All of our original music channels are broadcast commercial free. Certain of our music channels are programmed by third parties and air commercials. Our channels are produced, programmed and hosted by a team of experts in their fields, and each channel is operated as an individual radio station, with a distinct format and branding. We also, from time to time, provide special features, such as our *Artist Confidential* series which provides interviews and performances from some of the biggest names in music, and an array of “pop up” channels featuring the music of particular artists.

Sports Programming

Live play-by-play sports is an important part of our programming strategy. We are the Official Satellite Radio Partner of the National Football League (“NFL”), Major League Baseball (“MLB”), NASCAR, National Basketball Association (“NBA”), National Hockey League (“NHL”) and PGA Tour, and broadcast most major college sports, including NCAA Division I football and basketball games. Soccer coverage includes matches from the Barclays English Premier League. We also air FIS Alpine Skiing, World Cup events and horse racing.

We offer many exclusive talk channels and programs such as MLB Network Radio, SIRIUS NASCAR Radio, SIRIUS NFL Radio and Chris “Mad Dog” Russo’s *Mad Dog Unleashed* on Mad Dog Radio, as well as two ESPN channels, ESPN Radio and ESPN Xtra. Simulcasts of select ESPN television shows, including *SportsCenter*, can be found on ESPN Xtra.

Talk and Entertainment Programming

We offer a multitude of talk and entertainment channels for a variety of audiences. Our diverse spectrum of talk programming is a significant differentiator from terrestrial radio and other audio entertainment providers.

Our talk radio offerings feature dozens of popular talk personalities, many creating radio shows that air exclusively on our services, including Howard Stern, Oprah Winfrey, Martha Stewart, Dr. Laura Schlessinger, Barbara Walters, Opie and Anthony, Bob Edwards, Senator Bill Bradley, Deepak Chopra and doctors from the NYU Langone Medical Center.

Our comedy channels present a range of humor such as Jamie Foxx’s *The Foxxhole*, *Laugh USA*, *Blue Collar Comedy* and *Raw Dog Comedy*. Other talk and entertainment channels include SIRIUS XM Book Radio, *Kids Place Live* and *Radio Disney*, as well as *OutQ*, *Road Dog Trucking* and *Playboy Radio*.

Our religious programming includes *The Catholic Channel*, which is programmed with the Archdiocese of New York, EWTN, a Global Catholic Radio Network, and *Family Talk*.

News and Information Programming

We offer a wide range of national, international and financial news, including news from BBC World Service News, Bloomberg Radio, CNBC, CNN, FOX News, MSNBC, NPR and World Radio Network. We also air a range of political call-in talk shows on a variety of channels including our exclusive channel, POTUS.

We offer continuous, local traffic reports for 22 metropolitan markets throughout the United States on the XM service, and 20 metropolitan markets throughout the United States on the SIRIUS service. We broadcast these reports together with local weather reports from *The Weather Channel*.

Distribution of Radios

Automakers

Our primary means of distributing satellite radios is through the sale and lease of new vehicles. We have agreements with every major automaker to offer satellite radios as factory or dealer-installed equipment in their vehicles. As of December 31, 2010, satellite radios were available as a factory or dealer-installed option in substantially all vehicle makes sold in the United States.

Many automakers include a subscription to our radio service in the sale or lease price of their vehicles. In many cases, we receive subscription payments from automakers in advance of the activation of our service. We share with certain automakers a portion of the revenues we derive from subscribers using vehicles equipped to receive our service. We also reimburse various automakers for certain costs associated with the satellite radios installed in their vehicles, including in certain cases hardware costs, tooling expenses and promotional and advertising expenses.

Retail

We sell satellite radios directly to consumers through our websites. Satellite radios are also marketed and distributed through major national and regional retailers. We develop in-store merchandising materials and provide sales force training for several retailers.

Previously Owned Vehicles

We expect to acquire an increasing number of subscribers through the sale and lease of previously owned vehicles with factory-installed satellite radios. We have entered into agreements with several automakers to market subscriptions to purchasers and lessees of vehicles which include satellite radios sold through their certified pre-owned programs.

We are developing systems and methods to identify purchasers and lessees of used vehicles which include satellite radios, and expect to make other efforts to market and sell satellite radio subscriptions to owners of used vehicles.

Our Satellite Radio Systems

Our satellite radio systems are designed to provide clear reception in most areas despite variations in terrain, buildings and other obstructions. Subscribers can receive our transmissions in all outdoor locations in the continental US where the satellite radio has an unobstructed line-of-sight with one of our satellites or is within range of one of our terrestrial repeaters. We continually monitor our infrastructure and regularly evaluate improvements in technology.

The FCC has allocated the portion of the S-band located between 2320 MHz and 2345 MHz exclusively for satellite radio. Each of our services uses 12.5 MHz of this bandwidth to transmit its respective signals. Uplink transmissions (from the ground to our satellites) use 12.5 MHz of bandwidth in the 7060-7072.5 MHz band.

Our satellite radio systems have three principal components:

- satellites, terrestrial repeaters and other satellite facilities;
- studios; and
- satellite radios.

Satellites, Terrestrial Repeaters and Other Satellite Facilities

SIRIUS Satellites. We own four orbiting satellites and one spare satellite for use in the SIRIUS system. These satellites are of the Loral FS-1300 model series. The chart below provides certain information on these satellites:

Satellite Designation	Year Delivered	Estimated End of Useful Life	Current Use
FM-1	2000	2013	Broadcasting from an inclined elliptical orbit
FM-2	2000	2013	Broadcasting from an inclined elliptical orbit
FM-3	2000	2015	Broadcasting from an inclined elliptical orbit
FM-4	2002	2010	Spare satellite in ground storage
FM-5	2009	2024	Broadcasting from a geostationary orbit at 96° West Longitude

Our FM-1, FM-2 and FM-3 satellites travel in a figure eight pattern extending above and below the equator, and spend approximately 16 hours per day north of the equator. At any time, two of these three satellites are orbiting north of the equator — with one of them in operation, while the third satellite does not transmit as it traverses the

portion of the orbit south of the equator. This orbital configuration yields high signal elevation angles, reducing service interruptions from signal blockage. Our FM-5 satellite is deployed in a geostationary orbit which provides redundant coverage and enhances performance of the satellite constellation.

Space Systems/Loral is constructing a sixth satellite for use in this system. This satellite is also a Loral FS-1300 model satellite. We have an agreement with International Launch Services to launch this satellite on a Proton rocket, and expect to launch this sixth satellite in the fourth quarter of 2011. We plan to deploy this satellite in a geostationary orbit at 115° West Longitude.

XM Satellites. We own five orbiting satellites for use in the XM system. Four of these satellites were manufactured by Boeing Satellite Systems International and one was manufactured by Space Systems/Loral. The chart below provides certain information on these satellites:

<u>Satellite Designation</u>	<u>Year Delivered</u>	<u>Estimated End of Useful Life</u>	<u>Current Use</u>
XM-1	2001	2013	In-orbit spare satellite in a geostationary orbit at 85° West Longitude
XM-2	2001	2013	In-orbit spare satellite in a geostationary orbit at 115° West Longitude
XM-3	2005	2020	Broadcasting from a geostationary orbit at 85° West Longitude
XM-4	2006	2021	Broadcasting from a geostationary orbit at 115° West Longitude
XM-5	2010	2025	In-orbit spare satellite in a geostationary orbit at 85° West Longitude

Satellite Insurance. We maintain in-orbit insurance for our FM-5, XM-4 and XM-5 satellites. These policies provide coverage for a total, constructive total or partial loss of the satellites that occurs during annual (or multi-year) in-orbit periods. The insurance does not cover the full cost of constructing, launching and insuring new satellites, nor will it protect us from the adverse effect on business operations due to the loss of a satellite. The policies contain standard commercial satellite insurance provisions, including coverage exclusions.

Terrestrial Repeaters. In some areas with high concentrations of tall buildings, such as urban centers, signals from our satellites may be blocked and reception of satellite signals can be adversely affected. In many of these areas, we have deployed terrestrial repeaters to supplement satellite coverage. We operate over 140 terrestrial repeaters in the SIRIUS system and over 580 terrestrial repeaters in the XM system.

Other Satellite Facilities. We control and communicate with our SIRIUS satellites from an uplink facility in New Jersey. We also maintain earth stations in Panama and Ecuador to control and communicate with several of our SIRIUS satellites. Our SIRIUS satellites and the XM-1, XM-2 and XM-5 satellites are monitored, tracked and controlled by Intelsat, a satellite operator. Our XM-3 and XM-4 satellites are monitored, tracked and controlled by Telesat Canada, a satellite operator. We also operate backup earth stations in the United States.

Studios

Our programming originates principally from studios in New York City and Washington D.C., and, to a lesser extent, from smaller studio facilities in Cleveland, Los Angeles, Memphis, Nashville and Orlando. Our New York City offices house our corporate headquarters. Both our New York City and Washington D.C. offices house facilities for programming origination, programming personnel and facilities to transmit programming.

Satellite Radios

We design, establish specifications for, source or specify parts and components for, and manage various aspects of the logistics and production of satellite radios. We do not manufacture radios. We have authorized manufacturers and distributors to produce and distribute satellite radios, and have licensed our technology to various electronics manufacturers to develop, manufacture and distribute radios under certain brands. We directly import radios distributed through our websites. To facilitate the sale of satellite radios, we may subsidize a portion of the radio manufacturing costs to reduce the hardware price to consumers.

Satellite radios are manufactured in three principal configurations — as in-dash radios, Dock & Play radios and portable or wearable radios.

- In-dash radios are integrated into vehicles and allow the user to listen to satellite radio with the push of a button. Aftermarket in-dash radios are available at retailers nationally, and to automakers for factory or dealer installation.
- Dock & Play radios enable subscribers to transport their radios easily to and from their cars, trucks, homes, offices, boats or other locations with available adapter kits. Dock & Play radios adapt to existing audio systems through FM modulation or direct audio connection and can be easily installed. Audio systems and boom boxes, which enable subscribers to use their radios virtually anywhere, are available for various models. The Stratus 6 and Starmate 5 Dock & Play radios also support a la carte channel selection.
- Portable or wearable radios offer live satellite radio “on the go” and recorded satellite, MP3 and WMA content.

Home units that provide our satellite service to home and commercial audio systems are also available.

We have introduced an interoperable radio called MiRGE. This radio has a unified control interface allowing for easy switching between our two satellite radio networks. We have introduced the XM SkyDock, which connects to an Apple iPhone and iPod touch and provides live XM satellite radio using the control capability of the iPhone or iPod touch.

Internet Radio

We simulcast music channels and select non-music channels over the Internet. Access to our Internet services is offered to subscribers for a fee. We have available products that provide access to our internet radio services in the home without the need for a personal computer. We also offer applications to allow consumers to access our internet services on mobile devices. Subscribers to our internet services are not included in our subscriber count, unless the service is purchased separately and not as part of a satellite radio subscription.

International

Canada. We have an interest in the satellite radio services offered in Canada. SIRIUS Canada, a Canadian corporation that we jointly own with Canadian Broadcasting Corporation and Slight Communications Inc., offers a satellite radio service in Canada. SIRIUS Canada offers over 120 channels of commercial-free music and news, sports, talk and entertainment programming, including 12 channels offering Canadian content. XM Canada, a Canadian corporation in which we have an ownership interest, also offers satellite radio service in Canada. XM Canada offers over 130 channels of music and news, sports, talk and entertainment programming. Subscribers to these Canadian services are not included in our subscriber count.

In November 2010, SIRIUS Canada and XM Canada announced a definitive agreement to combine in a stock-for-stock transaction. The transaction is subject to regulatory review and approvals, including approval of the Canadian Radio-television & Telecommunications Commission, approval by XM Canada’s stockholders and other customary conditions. The companies will continue to operate independently until the transaction is complete.

Mexico. In May 2010, our letter of intent with ACIR DARS Mexico, S. de R.L. de C.V. to pursue a license to offer satellite radio in Mexico was terminated.

Other Services

Commercial Accounts. Our music services are also available for commercial establishments. Commercial accounts are available through providers of in-store entertainment solutions and directly from us. Certain commercial subscribers are included in our subscriber count.

Satellite Television Service. We offer music channels as part of certain programming packages on the DISH Network satellite television service. Subscribers to the DISH Network satellite television service are not included in our subscriber count.

Content Through Mobile Phone Carriers. We offer between 20 and 25 music and comedy channels to mobile phone users through relationships with AT&T, Alltel, Sprint and RIM. Subscribers to these services are not included in our subscriber count.

Subscribers to the following services are not included in our subscriber count, unless the applicable service is purchased by the subscriber separately and not as part of a radio subscription to our services:

Backseat TV. We offer Backseat TV, a service offering television content designed primarily for children in the backseat of vehicles. Backseat TV is available as a factory-installed option in select Chrysler, Dodge and Jeep models, and at retail for aftermarket installation.

Travel Link. We offer Travel Link, a suite of data services that includes graphical weather, fuel prices, sports schedules and scores, and movie listings.

Real-Time Traffic Services. We also offer services that provide graphic information as to road closings, traffic flow and incident data to consumers with compatible in-vehicle navigation systems.

Real-Time Weather Services. We offer several real-time weather services designed for improving situational awareness in vehicle, marine and/or aviation use.

FCC Conditions

In order to demonstrate to the FCC that the Merger was in the public interest, we agreed to implement a number of voluntary commitments. These commitments include certain voluntary assurances regarding our programming and programming packages; the creation of public interest channels; and equipment manufacturing, all of which we have complied with. Below we describe other voluntary commitments that we are in the process of complying with or that impose restrictions:

Qualified Entity Channels

We agreed to enter into long-term leases or other agreements to provide rights to four percent of the full-time audio channels on our platforms to a Qualified Entity or Entities defined as an entity or entities that: (1) are not directly or indirectly owned, in whole or in part, by us or one of our affiliates; (2) do not share any common officers, directors or employees with us or any affiliate of us; and (3) do not have any existing relationships with us for the supply of programming during the two years prior to October 19, 2010. We intend to balance the following considerations in selecting lessees:

- provide a new source of programming and is a new entrant in the mass media industry,
- offer a diverse viewpoint or diverse entertainment content,
- provide original content or programming of a type not otherwise available to our subscribers,
- improve service to historically underserved audiences, and
- in our reasonable judgment, be able to meet its obligations and be able to deliver its proposed mix or type of programming for the duration of the lease term.

We will notify the FCC of our tentative selections before signing agreements for the leased channels and will enter into lease agreements by April 17, 2011. As digital compression technology enables us to broadcast additional full-time audio channels, we will ensure that four percent of the full-time audio channels on our platforms are

reserved for Qualified Entities. The Qualified Entities will not be required to make any lease payments for such channels. We may not alter, censor, or otherwise exercise any control over the leased programming but we may remove programming that violates the law.

Subscription Rates

We have agreed not to raise the retail price for, or reduce the number of channels in, our basic \$12.95 per month subscription package, our a la carte programming packages or certain other programming packages until July 28, 2011. Under the FCC's order approving the Merger, we may pass through cost increases incurred since the filing of our FCC merger application as a result of statutorily or contractually required payments to the music, recording and publishing industries for the performance of musical works and sound recordings or for device recording fees. Effective July 29, 2009, we began adding a U.S. Music Royalty Fee to subscriber invoices. Until December 2010, the U.S. Music Royalty Fee was \$1.98 a month on our base \$12.95 subscriptions and \$0.97 for base plans that are eligible for a second radio discount; as of December 6, 2010, we reduced the fee to \$1.40 a month on our base \$12.95 subscriptions. Subscription packages, such as our "News, Sports and Talk" package, that contain little music are not subject to the U.S. Music Royalty Fee. Amounts collected on account of the U.S. Music Royalty Fee are being used to partially offset payments to the music industry. A summary of the costs passed through pursuant to U.S. Music Royalty Fee is available on our websites.

Competition

We face significant competition for both listeners and advertisers. In addition to pre-recorded entertainment purchased or playing in cars, homes and using portable players, we compete with the following providers of radio or other audio services:

Traditional AM/FM Radio

Our services compete with traditional AM/FM radio. Many traditional radio companies are substantial entities owning large numbers of radio stations or other media properties. The radio broadcasting industry is highly competitive.

Traditional AM/FM radio has had a well-established demand for its services and offers free broadcasts paid for by commercial advertising rather than by a subscription fee like satellite radio. Many radio stations offer information programming of a local nature, such as local news and sports. Traditional free AM/FM radio reduces the likelihood that customers would be willing to pay for our subscription services and, by offering free broadcasts, it imposes limits on what we can charge for our services. Some AM/FM radio stations have reduced the number of commercials per hour, expanded the range of music played on the air and experimented with new formats in order to lure customers away from satellite radio.

HD Radio

Many radio stations now broadcast digital signals, which have clarity similar to our signals. These stations do not charge a subscription fee for their digital signals but do generally carry advertising. A group of major broadcast radio networks have created a coalition to jointly market digital radio services. According to this coalition, over 2,000 radio stations are currently broadcasting primary signals with HD Radio technology and broadcasting more than 1,100 new FM multicast channels (HD2/HD3), and manufacturers are marketing and distributing digital receivers. To the extent that traditional AM/FM radio stations adopt digital transmission technology and listeners adopt digital receivers, any competitive advantage that we enjoy over traditional radio because of our clearer digital signal would be lessened. Traditional AM/FM broadcasters are also aggressively pursuing Internet radio and wireless Internet-based distribution arrangements. Several automakers install HD Radio equipment as factory standard equipment in select models, including Ford, Volkswagen, BMW, Mercedes-Benz, Kia and Hyundai.

Internet Radio and Internet-Enabled Smartphones

Internet radio broadcasts often have no geographic limitations and can provide listeners with radio programming from across the country and around the world. Major media companies and online-only providers, including

Clear Channel, CBS and Pandora, make high fidelity digital streams available through the Internet for free or, in some cases, for a fraction of the cost of a satellite radio subscription. These services compete directly with our services, at home, in the automobile, and wherever audio entertainment is consumed.

Mobile Internet-enabled smartphones, most of which have the capability of interfacing with vehicles, have become popular. These smartphones can typically play recorded or cached content and access live Internet radio via dedicated applications or browsers. These applications are often free to the user and offer music and talk content as long as the user is subscribed to a sufficiently large mobile data plan. Leading audio smartphone applications include Pandora, last.FM, Slacker, iheartradio and Stitcher. Certain of these applications also include advanced functionality, such as personalization and song skipping, and allow the user to access large libraries of content and podcasts on demand.

Third generation mobile networks have enabled a steady increase in the audio quality and reliability of mobile Internet radio streaming, and this is expected to further increase as fourth generation networks become the standard. We expect that improvements from higher bandwidths, wider programming selection, and advancements in functionality are likely to continue making Internet radio and smartphone applications an increasingly significant competitor, particularly in vehicles.

Advanced In-Dash Infotainment Systems

A number of automakers have deployed or are planning to deploy integrated multimedia systems in dash boards, such as Ford's SYNC, Toyota's Entune, and BMW/Mini's Connected. These systems can combine control of audio entertainment from a variety of sources, including AM/FM/HD radio broadcasts, satellite radio, Internet radio, and stored audio, with navigation and other advanced applications such as restaurant bookings, movie show times, and financial information, among others. Live Internet radio and other data is typically pulled into the car via a Bluetooth link to an Internet-enabled smartphone, and the entire system may be controlled by touchscreen or voice recognition. These systems enhance the attractiveness of our Internet-based competition by making such applications more prominent, easier to access, and safer to use in the car.

Portable Audio Devices

The Apple iPod[®] is a portable digital music player that allows users to download and purchase music through Apple's iTunes[®] Music Store, as well as convert music on compact disc to digital files. iPods[®] are compatible with certain car stereos and various home speaker systems, and certain automakers have entered into arrangements with manufacturers of portable media players that are expected to enhance this compatibility. Availability of music in the public MP3 audio standard has been growing in recent years with sound files available on the websites of online music retailers, artists and record labels and through numerous file sharing software programs. In addition, many emerging artists give away their music for free via blogs and other websites in order to increase live event ticket sales, which are often more profitable to emerging artists than music sales. These MP3 files can be played instantly, burned to a compact disc or stored in various portable players available to consumers. Internet-based audio formats are becoming increasingly competitive as quality improves and costs are reduced. In addition, many current generation portable audio devices, such as the iPod touch, also contain WiFi connections enabling direct Internet connections for purchasing additional music or streaming music that is not stored on the local device.

Direct Broadcast Satellite and Cable Audio

A number of companies provide specialized audio services through either direct broadcast satellite or cable audio systems. These services are targeted to fixed locations, mostly in-home. The radio service offered by direct broadcast satellite and cable audio is often included as part of a package of digital services with video service, and video customers generally do not pay an additional monthly charge for the audio service.

Other Digital Media Services

The audio entertainment marketplace continues to evolve rapidly, with a steady emergence of new media platforms and portable devices that compete with our services now or that could compete with those services in the future.

Traffic News Services

A number of providers also compete with our traffic services. Clear Channel and Tele Atlas deliver nationwide traffic information for the top 50 markets to in-vehicle navigation systems using RDS/TMC, the radio broadcast standard technology for delivering traffic and travel information to drivers. The in-dash navigation market in which we primarily compete is also being threatened by increasingly capable smartphones that provide advanced navigation functionality, including live traffic. For instance, Android, Palm, Blackberry, and Apple iOS-based smartphones all include GPS mapping and navigation functionality, often with turn-by-turn navigation.

Government Regulation

As operators of a privately owned satellite system, we are regulated by the FCC under the Communications Act of 1934, principally with respect to:

- the licensing of our satellite systems;
- preventing interference with or to other users of radio frequencies; and
- compliance with FCC rules established specifically for U.S. satellites and satellite radio services.

Any assignment or transfer of control of our FCC licenses must be approved by the FCC. The FCC's order approving the Merger requires us to comply with certain voluntary commitments we made as part of the FCC merger proceeding. We believe we comply with those commitments.

In 1997, XM and SIRIUS was each a winning bidder for an FCC license to operate a satellite digital audio radio service and provide other ancillary services. Our FCC licenses for our SIRIUS satellites expire in 2017. Our FCC licenses for our XM satellites expire in 2013, 2014 and 2018. We anticipate that, absent significant misconduct on our part, the FCC will renew our licenses to permit operation of our satellites for their useful lives, and grant a license for any replacement satellites.

We have entered into an agreement with Space Systems/Loral to design and construct a sixth satellite for the SIRIUS system. In September 2008, the FCC granted our application to amend our license to add this satellite to the existing SIRIUS satellite constellation. We applied to modify that authorization in April 2010 and that application remains pending.

In some areas with high concentrations of tall buildings, such as urban centers, signals from our satellites may be blocked and reception can be adversely affected. In many of these areas, we have installed terrestrial repeaters to supplement our satellite signal coverage. In 2010, the FCC established rules governing terrestrial repeaters which are also intended to protect adjacent wireless services from interference. Once fully implemented, these rules will allow us to obtain blanket licenses to authorize operation of our repeater network for repeaters meeting certain technical specifications. Site-by-site licensing is available for all other repeaters.

We design, establish specifications for, source or specify parts and components for, manage various aspects of the logistics and production of, and, in most cases, obtain FCC certifications for, satellite radios, including satellite radios that include FM modulators. We believe our radios that are in production comply with all applicable FCC rules.

We are required to obtain export licenses from the United States government to deliver components of our satellite radio systems and related technical data. In addition, the delivery of satellites and the supply of related ground control equipment, technical data, and satellite communication/control services to destinations outside the United States and to foreign persons is subject to strict export control and prior approval requirements from the United States government (including prohibitions on the sharing of certain satellite-related goods and services with China).

Changes in law or regulations relating to communications policy or to matters affecting our services could adversely affect our ability to retain our FCC licenses or the manner in which we operate.

Copyrights to Programming

In connection with our music programming, we must negotiate and enter into royalty arrangements with two sets of rights holders: holders of copyrights in musical works (that is, the music and lyrics) and holders of copyrights in sound recordings (that is, the actual recording of a work).

Musical works rights holders, generally songwriters and music publishers, are represented by performing rights organizations such as the American Society of Composers, Authors and Publishers (“ASCAP”), Broadcast Music, Inc. (“BMI”), and SESAC, Inc. (“SESAC”). These organizations negotiate fees with copyright users, collect royalties and distribute them to the rights holders. We have arrangements with all of these organizations.

Sound recording rights holders, typically large record companies, are primarily represented by SoundExchange, an organization which negotiates licenses, and collects and distributes royalties on behalf of record companies and performing artists. Under the Digital Performance Right in Sound Recordings Act of 1995 and the Digital Millennium Copyright Act of 1998, we may negotiate royalty arrangements with the sound recording copyright owners, or if negotiation is unsuccessful, the royalty rate is established by the Copyright Royalty Board (the “CRB”) of the Library of Congress. In January 2008, the CRB issued a decision regarding the royalty rate payable by us under the statutory license covering the performance of sound recordings over our satellite radio services for the six-year period starting January 1, 2007 and ending December 31, 2012. Under the terms of the CRB’s decision, we paid, or will pay, a royalty of 6.0%, 6.0%, 6.5%, 7.0%, 7.5% and 8.0% of gross revenues, subject to certain exclusions, for 2007, 2008, 2009, 2010, 2011 and 2012, respectively. Our next rate setting proceeding before the CRB commenced in January 2011 with a request from the CRB for a notice of intention to participate in that rate setting proceeding.

Trademarks

We have registered, and intend to maintain, the trademark “SIRIUS”, “XM” and the “Dog design” logo with the United States Patent and Trademark Office (the “PTO”) in connection with the services we offer. We are not aware of any material claims of infringement or other challenges to our right to use the “SIRIUS” or “XM” trademark or the “Dog design” logo in the United States. We also have registered, and intend to maintain, trademarks for the names of certain of our channels. We have also registered the trademarks “SIRIUS”, “XM”, and the “Dog design” logo in Canada. We have granted a license to use certain of our trademarks in Canada to each of SIRIUS Canada and XM Canada.

Personnel

As of December 31, 2010, we had 1,479 full-time employees. In addition, we rely upon a number of part-time employees, consultants, other advisors and outsourced relationships. None of our employees are represented by a labor union, and we believe that our employee relations are good.

Corporate Information

Our executive offices are located at 1221 Avenue of the Americas, 36th floor, New York, New York 10020 and our telephone number is (212) 584-5100. Our internet address is www.siriusxm.com. Our annual, quarterly and current reports, and any amendments to those reports, filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 may be accessed free of charge through our website after we have electronically filed or furnished such material with the SEC. [Siriusxm.com](http://www.siriusxm.com) (including any other reference to such address in this Annual Report) is an inactive textual reference only, meaning that the information contained on or accessible from the website is not part of this Annual Report on Form 10-K and is not incorporated in this report by reference.

Executive Officers of the Registrant

Certain information regarding our executive officers is provided below:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Mel Karmazin	67	Chief Executive Officer
Scott A. Greenstein	51	President and Chief Content Officer
James E. Meyer	56	President, Operations and Sales
Dara F. Altman	52	Executive Vice President and Chief Administrative Officer
Patrick L. Donnelly	49	Executive Vice President, General Counsel and Secretary
David J. Frear	54	Executive Vice President and Chief Financial Officer

Mel Karmazin has served as our Chief Executive Officer and a member of our board of directors since November 2004. Prior to joining us, Mr. Karmazin was President and Chief Operating Officer and a member of the board of directors of Viacom Inc. from May 2000 until June 2004. Mr. Karmazin served as Chairman, President and Chief Executive Officer of Infinity Broadcasting Corporation from December 1998 until the merger of Infinity with Viacom in February 2001. Prior to joining Viacom, Mr. Karmazin was President and Chief Executive Officer of CBS Corporation from January 1999 and a director of CBS Corporation from 1997 until its merger with Viacom in May 2000. He was President and Chief Operating Officer of CBS Corporation from April 1998 through December 1998. Mr. Karmazin joined CBS Corporation in December 1996 as Chairman and Chief Executive Officer of CBS Radio and served as Chairman and Chief Executive Officer of the CBS Station Group (Radio and Television) from May 1997 to April 1998. Prior to joining CBS Corporation, Mr. Karmazin served as President and Chief Executive Officer of Infinity Broadcasting Corporation from 1981 until its acquisition by CBS Corporation in December 1996.

Scott A. Greenstein has served as our President and Chief Content Officer since May 2004. Prior to May 2004, Mr. Greenstein was Chief Executive Officer of The Greenstein Group, a media and entertainment consulting firm. From 1999 until 2002, he was Chairman of USA Films, a motion picture production, marketing and distribution company. From 1997 until 1999, Mr. Greenstein was Co-President of October Films, a motion picture production, marketing and distribution company. Prior to joining October Films, Mr. Greenstein was Senior Vice President of Motion Pictures, Music, New Media and Publishing at Miramax Films, and held senior positions at Viacom Inc.

James E. Meyer has served as our President, Operations and Sales, since May 2004. Prior to May 2004, Mr. Meyer was President of Aegis Ventures Incorporated, a consulting firm that provides general management services. From December 2001 until 2002, Mr. Meyer served as special advisor to the Chairman of Thomson S.A., a leading consumer electronics company. From January 1997 until December 2001, Mr. Meyer served as the Senior Executive Vice President for Thomson as well as the Chief Operating Officer for Thomson Consumer Electronics. From 1992 until 1996, Mr. Meyer served as Thomson's Senior Vice President of Product Management. Mr. Meyer is a director of ROVI Corporation.

Dara F. Altman has served as our Executive Vice President and Chief Administrative Officer since September 2008. From January 2006 until September 2008, Ms. Altman served as Executive Vice President, Business and Legal Affairs, of XM. Ms. Altman was Executive Vice President of Business Affairs for Discovery Communications from 1997 to 2005. From 1993 to 1997, Ms. Altman served as Senior Vice President and General Counsel of Reiss Media Enterprises, which owned Request TV, a national pay-per-view service. Before Request TV, Ms. Altman served as counsel for Home Box Office. Ms. Altman started her career as an attorney at the law firm of Willkie Farr & Gallagher LLP.

Patrick L. Donnelly has served as our Executive Vice President, General Counsel and Secretary since May 1998. From June 1997 to May 1998, he was Vice President and deputy general counsel of ITT Corporation, a hotel, gaming and entertainment company that was acquired by Starwood Hotels & Resorts Worldwide, Inc. in February 1998. From October 1995 to June 1997, he was assistant general counsel of ITT Corporation. Prior to October 1995, Mr. Donnelly was an attorney at the law firm of Simpson Thacher & Bartlett LLP.

David J. Frear has served as our Executive Vice President and Chief Financial Officer since June 2003. From July 1999 through February 2003, Mr. Frear was Executive Vice President and Chief Financial Officer of Savvis Communications Corporation, a global managed service provider, delivering internet protocol applications for business customers. From October 1999 through February 2003, Mr. Frear also served as a director of Savvis. Mr. Frear was an independent consultant in the telecommunications industry from August 1998 until June 1999. From October 1993 to July 1998, Mr. Frear was Senior Vice President and Chief Financial Officer of Orion Network Systems Inc., an international satellite communications company that was acquired by Loral Space & Communications Ltd. in March 1998. From 1990 to 1993, Mr. Frear was Chief Financial Officer of Millicom Incorporated, a cellular, paging and cable television company. Prior to joining Millicom, he was an investment banker at Bear, Stearns & Co., Inc. and Credit Suisse.

ITEM 1A. RISK FACTORS

In addition to the other information in this Annual Report on Form 10-K, including the information under the caption "Competition," the following risk factors should be considered carefully in evaluating us and our business. This Annual Report on Form 10-K contains forward-looking statements within the meaning of the federal securities laws. Actual results and the timing of events could differ materially from those projected in forward-looking statements due to a number of factors, including those set forth below and elsewhere in this Annual Report on Form 10-K. See "Special Note Regarding Forward-Looking Statements."

We face substantial competition and that competition is likely to increase over time.

We face substantial competition in the audio entertainment business. Our ability to retain and attract subscribers depends on our success in creating and providing popular or unique music, entertainment, news and sports programming. Our subscribers can obtain certain similar content for free through terrestrial radio stations. In addition, audio entertainment delivered via the Internet, including through mobile devices, is becoming increasingly competitive with our services. A number of automakers have introduced, or will shortly introduce, factory-installed radios capable of accessing Internet-delivered audio entertainment. A summary of various services that compete with us is contained in the section entitled "Business — Competition."

Competition could result in lower subscription, advertising or other revenue or increase our marketing, promotion or other expenses and, consequently, lower our earnings and free cash flow. We cannot assure you we will be able to compete successfully with our existing or future competitors or that competition will not have a material adverse effect on our business, financial condition or results of operations.

Our business depends in large part upon automakers and demand for our service is difficult to predict.

Most of our new subscription growth has come from purchasers and lessees of new and used automobiles; as a result, the sale and lease of vehicles with satellite radios is an important source of subscribers for our satellite radio service. We have agreements with every major automaker to include satellite radios in new vehicles, although these agreements do not require automakers to install specific or minimum quantities of radios in any given period.

Automotive production and sales are dependent on many factors, including the availability of consumer credit, general economic conditions, consumer confidence and fuel costs. To the extent vehicle sales by automakers decline, or the penetration of factory-installed satellite radios in those vehicles is reduced, subscriber growth for our satellite radio services will be adversely impacted if there is no offsetting growth in vehicle sales or increased penetration by other automakers.

We cannot estimate with any certainty whether demand for our services will be sufficient for us to continue to increase the number of subscribers to our services.

General economic conditions can affect our business.

The purchase of a satellite radio subscription is discretionary, and our business and our financial condition can be affected by adverse general economic conditions. For example, the dramatic slowdown in auto sales negatively impacted our subscriber growth in 2008 and 2009.

Failure of our satellites would significantly damage our business and potential satellite losses may not be covered by insurance.

The useful lives of our satellites will vary and depend on a number of factors, including:

- degradation and durability of solar panels;
- quality of construction;
- random failure of satellite components, which could result in significant damage to or loss of a satellite;
- amount of fuel the satellites consume; and
- damage or destruction by electrostatic storms or collisions with other objects in space.

Three of the SIRIUS in-orbit satellites have experienced circuit failures on their solar arrays. The circuit failures these satellites have experienced do not affect current operations. Additional circuit failures on the first three SIRIUS satellites could reduce the estimated useful lives of those satellites.

We have entered into an agreement with Space Systems/Loral to design and construct a new satellite for the SIRIUS system that is expected to be launched in the fourth quarter of 2011. Satellite launches have significant risks, including launch failure, damage or destruction of the satellite during launch and failure to achieve a proper orbit or operate as planned. Our agreement with Space Systems/Loral does not protect us against the risks inherent in a satellite launch or in-orbit operations.

Our XM-1 and XM-2 satellites have experienced progressive degradation problems common to early Boeing 702 class satellites and now serve as in-orbit spares. We estimate that the XM-3 and XM-4 satellites will meet their 15-year predicted useful lives, and that the XM-1 and XM-2 satellites' useful lives will end in 2013. Our XM-5 satellite serves as an in-orbit spare for both of our services. In the event of a failure of XM-3, XM-4 or any of the SIRIUS satellites, service would be maintained through XM-5.

In addition, our networks of terrestrial repeaters each communicates with one third-party satellite. If the satellites communicating with the applicable repeater network fail unexpectedly, the services would be disrupted for several hours or longer.

In the ordinary course of operation, satellites experience failures of component parts and operational and performance anomalies. Components on our in-orbit satellites have failed and from time to time we have experienced anomalies in the operation and performance of these satellites. These failures and anomalies are expected to continue in the ordinary course, and we cannot predict if any of these future events will have a material adverse effect on our operations or the useful life of our existing in-orbit satellites.

We maintain in-orbit insurance policies covering only our XM-4, XM-5 and FM-5 satellites. In addition, we may not renew this in-orbit insurance when the policies expire.

Any insurance proceeds will not fully cover our losses in the event of a satellite failure or significant degradation. For example, the policies covering the insured satellites do not cover the full cost of constructing, launching and insuring new satellites, nor will they cover, and we do not have protection against, business interruption, loss of business or similar losses. Our insurance contains customary exclusions, material change and other conditions that could limit recovery under those policies. Further, any insurance proceeds may not be received on a timely basis in order to launch a spare satellite or construct and launch a replacement satellite or take other remedial measures. In addition, the policies are subject to limitations involving uninsured losses, large satellite performance deductibles and policy limits.

Higher than expected costs of attracting new subscribers or higher subscriber turnover (i.e., churn) could each adversely affect our financial performance and operating results.

We are spending substantial funds on advertising and marketing and in transactions with automakers, retailers and others to obtain and attract subscribers. If the costs of attracting new subscribers are greater than expected, our financial performance and operating results could be adversely affected.

We are experiencing, and expect to continue to experience, subscriber turnover (i.e., churn). If we are unable to retain current subscribers, or the costs of retaining subscribers are higher than expected, our financial performance and operating results could be adversely affected. We cannot predict how successful we will be at retaining customers who purchase or lease vehicles that include a subscription to our satellite radio service. During 2010, we converted approximately 46.2% of the customers who received a promotional subscription as part of the purchase or lease of a new vehicle to a self-paying subscription. Over the same period, we have experienced churn of our self-pay subscribers of approximately 1.9% per month.

We cannot predict the amount of churn we will experience over the longer term. Our inability to retain our existing self-pay subscribers, customers who either purchase or lease vehicles with our service beyond the promotional period, or customers who purchase or lease a vehicle that includes a prepaid subscription to our service could adversely affect our financial performance and results of operations.

Our ability to retain subscribers and maintain our average monthly revenue per subscriber is uncertain.

During 2010, we added 1,418,206 net subscribers to our satellite radio service. Our ability to retain our subscribers, or increase the number of subscribers to our service, in any given period is subject to many factors, including:

- the health of the economy;
- the production and sale of new vehicles in the United States;
- our ability to convince owners and lessees of new and used vehicles that include satellite radios to purchase subscriptions to our service;
- the effectiveness of our marketing programs;
- the entertainment value of our programming; and
- actions by our competitors, such as terrestrial radio and other audio entertainment providers.

Average monthly revenue per subscriber, which we refer to as ARPU, is one of the key metrics we use to evaluate our business and the trends in our business. Over the past several years, we have focused substantial attention and efforts on maintaining and increasing ARPU. Our ability to maintain ARPU at present levels is uncertain and depends upon various factors, including:

- the value consumers perceive in our service;
- our ability to add and retain compelling programming;
- the increasing competition we experience from terrestrial radio and other providers of audio entertainment; and
- pricing and other offers we may make to attract new subscribers and retain existing subscribers.

Our business only recently began to generate free cash flow. If we are unable to consistently generate sufficient revenues to be profitable, the value of our common stock could decline, and without sufficient cash flow we may not be able to make the required payments on our indebtedness and could ultimately default on our commitments.

Royalties for music rights may increase.

We must maintain music programming royalty arrangements with, and pay license fees to, BMI, ASCAP and SESAC. These organizations negotiate with copyright users, collect royalties and distribute them to songwriters and music publishers. We have agreements with ASCAP and SESAC through December 2011. We do not have a definitive agreement with BMI and continue to operate under an interim agreement. There can be no assurance that the royalties we pay to ASCAP, SESAC and BMI will not increase.

Under the Digital Performance Right in Sound Recordings Act of 1995 and the Digital Millennium Copyright Act of 1998, we pay royalties to copyright owners of sound recordings. Those royalty rates may be established through negotiation or, if negotiation is unsuccessful, by the CRB. Owners of copyrights in sound recordings have

created SoundExchange, a collective organization, to collect and distribute royalties. SoundExchange is exempt by statute from US antitrust laws and exercises significant market power in the licensing of sound recordings. A rate setting proceeding commenced in January 2011, and, if negotiations with SoundExchange prove unsuccessful, new royalty rates will be determined by the CRB, will be effective for the five-year period beginning in 2013, and may be higher than current royalty rates.

Failure to comply with FCC requirements could damage our business.

We hold FCC licenses and authorizations to operate commercial satellite radio services in the United States, including authorizations for satellites and terrestrial repeaters, and related authorizations. The FCC generally grants licenses and authorizations for a fixed term. Although we expect our licenses and authorizations to be renewed in the ordinary course upon their expiration, there can be no assurance that this will be the case. Any assignment or transfer of control of any of our FCC licenses or authorizations must be approved in advance by the FCC.

The operation of our satellite radio systems is subject to significant regulation by the FCC under authority granted through the Communications Act and related federal law. We are required, among other things, to operate only within specified frequencies; to meet certain conditions regarding the interoperability of our satellite radios with those of other licensed satellite radio systems; to coordinate our satellite radio services with radio systems operating in the same range of frequencies in neighboring countries; and to coordinate our communications links to our satellites with other systems that operate in the same frequency band. Non-compliance by us with these requirements or other conditions or with other applicable FCC rules and regulations could result in fines, additional license conditions, license revocation or other detrimental FCC actions. There is no guarantee that Congress will not modify the statutory framework governing our services, or that the FCC will not modify its rules and regulations in a manner that would have a material impact on our operations.

The terms of our licenses, the order of the FCC approving the Merger, and the consent decrees we entered into with the FCC require us to meet certain conditions. Non-compliance with these conditions could result in fines, additional license conditions, license revocation or other detrimental FCC actions.

The unfavorable outcome of pending or future litigation could have a material adverse effect.

We are parties to several legal proceedings arising out of various aspects of our business, including class action lawsuits alleging violations of federal antitrust laws and state consumer protection statutes. We are defending all claims against us. The outcome of these proceedings may not be favorable, and an unfavorable outcome may have a material adverse effect on our business or financial results.

Rapid technological and industry changes could adversely impact our services.

The audio entertainment industry is characterized by rapid technological change, frequent new product innovations, changes in customer requirements and expectations, and evolving standards. If we are unable to keep pace with these changes, our business may be unsuccessful. Products using new technologies, or emerging industry standards, could make our technologies less competitive in the marketplace.

Failure of other third parties to perform could adversely affect our business.

Our business depends, in part, on various other third parties, including:

- manufacturers that build and distribute satellite radios;
- companies that manufacture and sell integrated circuits for satellite radios;
- programming providers and on-air talent;
- retailers that market and sell satellite radios and promote subscriptions to our services; and
- vendors that have designed or built, and vendors that support or operate, important elements of our systems, such as our satellites and customer service facilities.

If one or more of these third parties do not perform in a sufficient or timely manner, our business could be adversely affected. In addition, a number of third parties on which we depend have experienced, and may in the future experience, financial difficulties or file for bankruptcy protection. Such third parties may not be able to perform their obligations to us in a timely manner, if at all, as a result of their financial condition or may be relieved of their obligations to us as part of seeking bankruptcy protection.

We design, establish specifications, source or specify parts and components, and manage various aspects of the logistics and production of radios. As a result of these activities, we may be exposed to liabilities associated with the design, manufacture and distribution of radios that the providers of an entertainment service would not customarily be subject to, such as liabilities for design defects, patent infringement and compliance with applicable laws, as well as the costs of returned product.

Interruption or failure of our information technology and communications systems could negatively impact our results and our brand.

We operate a complex and growing business. We offer a wide variety of subscription packages at different price points. Our business is dependent on the operation and availability of our information technology and communication systems and those of third party service providers. Any degradation in the quality, or any failure, of our systems could reduce our revenues, cause us to lose customers and damage our brand. Although we have implemented practices designed to maintain the availability of our information technology systems and mitigate the harm of any unplanned interruptions, we do not have complete redundancy for all of our information technology systems, and our disaster recovery planning cannot anticipate all eventualities. We occasionally experience unplanned outages or technical difficulties. We could also experience loss of data or processing capabilities, which could cause us to lose customers and could materially harm our reputation and our operating results.

We are involved in continuing efforts to upgrade and maintain our information technology systems. These maintenance and upgrade activities are costly, and problems with the design or implementation of system enhancements could harm our business and our results of operations.

Our data centers and our information technology and communications systems are vulnerable to damage or interruption from natural disasters, malicious attacks, fire, power loss, telecommunications failures, computer viruses or other attempts to harm our systems. If hackers were able to circumvent our security measures, we could lose proprietary information or personal information or experience significant disruptions. If our systems become unavailable or suffer a security breach, we may be required to expend significant resources to address these problems, including notification under various federal and state data privacy regulations, and our reputation and operating results could suffer.

We rely on internal systems and external systems maintained by manufacturers, distributors and service providers to take, fulfill and handle customer service requests and host certain online activities. Any interruption or failure of our internal or external systems could prevent us from servicing customers or cause data to be unintentionally disclosed.

We may from time to time modify our business plan, and these changes could adversely affect us and our financial condition.

We regularly evaluate our plans and strategy. These evaluations often result in changes to our plans and strategy, some of which may be material. These changes in our plans or strategy may include: the acquisition or termination of unique or compelling programming; the introduction of new features or services; significant new or enhanced distribution arrangements; investments in infrastructure, such as satellites, equipment or radio spectrum; and acquisitions, including acquisitions that are not directly related to our satellite radio business.

Our substantial indebtedness could adversely affect our operations and could limit our ability to react to changes in the economy or our industry.

As of December 31, 2010, we had an aggregate principal amount of approximately \$3.3 billion of indebtedness. Our substantial indebtedness has important consequences. For example, it:

- increases our vulnerability to general adverse economic and industry conditions;
- requires us to dedicate a substantial portion of our cash flow from operations to payments on indebtedness, reducing the availability of cash flow to fund capital expenditures, marketing and other general corporate activities;
- limits our ability to borrow additional funds or make capital expenditures;
- limits our flexibility in planning for, or reacting to, changes in our business and the audio entertainment industry; and
- may place us at a competitive disadvantage compared to other competitors.

The instruments governing our indebtedness contain covenants that, among other things, place certain limitations on our ability to incur more debt, pay dividends, make distributions, make investments, repurchase stock, create liens, enter into transactions with affiliates, enter into sale lease-back transactions, merge or consolidate, and transfer or sell assets. Failure to comply with the covenants associated with this debt could result in an event of default, which, if not cured or waived, could cause us to seek the protection of the bankruptcy laws, discontinue operations or seek a purchaser for our business or assets.

Changes in consumer protection laws and their enforcement could damage our business.

We engage in extensive marketing efforts to attract and retain subscribers to our services. We employ a wide variety of communications tools as part of our marketing campaigns, including telemarketing efforts; print, television, radio and online advertising; and email solicitations.

Consumer protection laws, rules and regulations are extensive and have developed rapidly, particularly at the State level. Consumer protection laws in certain jurisdictions cover nearly all aspects of our marketing efforts, including the content of our advertising, the terms of consumer offers and the manner in which we communicate with subscribers and prospective subscribers. We are engaged in considerable efforts to ensure that all our activities comply with federal and state laws, rules and regulations relating to consumer protection, including laws relating to privacy. Modifications to federal and state laws, rules and regulations concerning consumer protection, including decisions by federal and state courts and agencies interpreting these laws, could have an adverse impact on our ability to attract and retain subscribers to our services. While we monitor the changes in and interpretations of these laws in consumer-related settlements and decisions, and while we believe that we are in material compliance with applicable laws, there can be no assurances that new laws or regulations will not be enacted or adopted, preexisting laws or regulations will not be more strictly enforced or that our varied operations will continue to comply with all applicable laws, which might adversely affect our operations.

A Multistate Working Group of 28 State Attorneys General, led by the Attorney General of the State of Ohio, is investigating certain of our consumer practices. The investigation focuses on practices relating to the cancellation of subscriptions; automatic renewal of subscriptions; charging, billing, collecting, and refunding or crediting of payments from consumers; and soliciting customers. A separate investigation into our consumer practices is being conducted by the Attorney General of the State of Florida. In addition, the Attorney General of the State of Missouri has commenced an action against us regarding our telemarketing practices to residents of the State of Missouri.

Our broadcast studios, terrestrial repeater networks, satellite uplink facilities or other ground facilities could be damaged by natural catastrophes or terrorist activities.

An earthquake, tornado, flood, terrorist attack or other catastrophic event could damage our broadcast studios, terrestrial repeater networks or satellite uplink facilities, interrupt our service and harm our business. We do not have replacement or redundant facilities that can be used to assume the functions of our terrestrial repeater

networks. We do have redundant facilities that can be used to assume immediately many of the functions of the broadcast studios and satellite uplink facilities in the event of a catastrophic event.

Any damage to the satellites that transmit to our terrestrial repeater networks would likely result in degradation of the affected service for some subscribers and could result in complete loss of service in certain or all areas. Damage to our satellite uplink facilities could result in a complete loss of either of our services until we could transfer operations to suitable back-up facilities.

Electromagnetic interference from others could damage our business.

Our satellite radio service may be subject to interference caused by other users of radio frequencies, such as RF lighting, ultra-wideband technology and Wireless Communications Service (“WCS”) users. The FCC has approved modifications to the rules governing the operations of WCS devices in the spectrum adjacent to satellite radio, including rule changes that facilitate mobile broadband services in the WCS frequencies. We have opposed certain of the changes out of a concern for their impact on the reception of satellite radio service; and have filed a petition with the FCC asking the Commission to reconsider certain of the changes. We cannot predict the outcome of our petition for reconsideration. The ultimate impact of certain of these rules changes on satellite radio reception is impossible to predict and dependent on numerous factors outside of our control, such as the design and implementation of WCS systems and devices, the applications deployed through WCS devices, and ultimately the number of WCS devices ultimately adopted by consumers.

Our business may be impaired by third-party intellectual property rights.

Development of our systems has depended upon the intellectual property that we have developed, as well as intellectual property licensed from third parties. If the intellectual property that we have developed or use is not adequately protected, others will be permitted to and may duplicate portions of our satellite radio systems or services without liability. In addition, others may challenge, invalidate, render unenforceable or circumvent our intellectual property rights, patents or existing sublicenses or we may face significant legal costs in connection with defending and enforcing those intellectual property rights. Some of the know-how and technology we have developed, and plan to develop, is not now, nor will it be, covered by U.S. patents or trade secret protections. Trade secret protection and contractual agreements may not provide adequate protection if there is any unauthorized use or disclosure. The loss of necessary technologies could require us to obtain substitute technology of lower quality performance standards, at greater cost or on a delayed basis, which could harm us.

Other parties may have patents or pending patent applications, which will later mature into patents or inventions that may block our ability to operate our system or license technologies. We may have to resort to litigation to enforce our rights under license agreements or to determine the scope and validity of other parties’ proprietary rights in the subject matter of those licenses. This may be expensive. Also, we may not succeed in any such litigation.

Third parties may assert claims or bring suit against us for patent, trademark or copyright infringement, or for other infringement or misappropriation of intellectual property rights. Any such litigation could result in substantial cost, and diversion of effort and adverse findings in any proceeding could subject us to significant liabilities to third parties; require us to seek licenses from third parties; block our ability to operate our systems or license our technology; or otherwise adversely affect our ability to successfully develop and market our satellite radio systems.

Liberty Media Corporation has significant influence over our business and affairs and its interests may differ from ours.

Liberty Media Corporation holds preferred stock that is convertible into 2,586,976,000 shares of common stock. Pursuant to the terms of the preferred stock held by Liberty Media, we cannot take certain actions, such as certain issuances of equity or debt securities, without the consent of Liberty Media. Additionally, Liberty Media has the right to designate a corresponding percentage of our board of directors. As a result, Liberty Media has significant influence over our business and affairs. The interests of Liberty Media may differ from our interests. The extent of Liberty Media’s stock ownership in us also may have the effect of discouraging offers to acquire control of us.

Our net operating loss carryforwards could be substantially limited if we experience an ownership change as defined in the Internal Revenue Code.

We have generated a federal net operating loss carryforward of approximately \$8.1 billion through the year ended December 31, 2010, and we may generate net operating loss carryforwards in future years.

Section 382 of the Internal Revenue Code of 1986, as amended (the “Code”), contains rules that limit the ability of a company that undergoes an ownership change, which is generally any change in ownership of more than 50% of its stock over a three-year period, to utilize its net operating loss carryforwards and certain built-in losses recognized in years after the ownership change. These rules generally operate by focusing on ownership changes among stockholders owning directly or indirectly 5% or more of the stock of a company and any change in ownership arising from a new issuance of stock by the company.

If we undergo an ownership change for purposes of Section 382 as a result of future transactions involving our common stock, including purchases or sales of stock between 5% stockholders, our ability to use our net operating loss carryforwards and to recognize certain built-in losses would be subject to the limitations of Section 382. Depending on the resulting limitation, a significant portion of our net operating loss carryforwards could expire before we would be able to use them. Our inability to utilize our net operating loss carryforwards could have a negative impact on our long-term financial position and results of operations. We have adopted a shareholder rights plan designed to preserve shareholder value and the value of certain tax assets primarily associated with net operating loss carryforwards and built-in losses under Section 382 of the Code.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Below is a list of the principal properties that we own or lease:

<u>Location</u>	<u>Purpose</u>	<u>Own/Lease</u>
New York, NY	Corporate headquarters and studio/production facilities	Lease
New York, NY	Office facilities	Lease
Washington, DC	Office and studio/production facilities	Own
Washington, DC	Office facilities and data center	Own
Lawrenceville, NJ	Office and technical/engineering facilities	Lease
Deerfield Beach, FL	Office and technical/engineering facilities	Lease
Farmington Hills, MI	Office and technical/engineering facilities	Lease
Nashville, TN	Studio/production facilities	Lease
Vernon, NJ	Technical/engineering facilities	Own
Ellenwood, GA	Technical/engineering facilities	Lease

We also own or lease other small facilities that we use as offices for our advertising sales personnel, studios and warehouse and maintenance space. These facilities are not material to our business or operations. We also lease properties in Panama and Ecuador that we use as earth stations to command and control satellites.

In addition, we lease space at over 700 locations for use in connection with the terrestrial repeater networks that support our satellite radio services. In general, these leases are for space on building rooftops and communications towers. None of these individual leases is material to our business or operations.

ITEM 3. LEGAL PROCEEDINGS

State Consumer Investigations. A Multistate Working Group, led by the Attorney General of the State of Ohio and joined by the Attorneys General of 27 other states, has commenced a multi-jurisdictional investigation

into certain of our consumer practices. The investigation focuses on practices relating to the cancellation of subscriptions; automatic renewal of subscriptions; charging, billing, collecting, and refunding or crediting of payments from consumers; and soliciting customers.

A separate investigation into our consumer practices is being conducted by the Attorney General of the State of Florida. In addition, in September 2010, the Attorney General of the State of Missouri commenced an action against us in Missouri Circuit Court, Twenty-Second Judicial Circuit, St. Louis, Missouri, alleging violations of the Missouri Telemarketing No-Call List Act. The suit seeks a permanent injunction prohibiting us from making, or causing to be made, telephone solicitations to our subscribers in the State of Missouri who are on Missouri's no-call list, statutory penalties and reimbursement of costs. We believe our telemarketing activities to our subscribers in Missouri fully comply with applicable law.

We are cooperating with these investigations and believe our consumer practices comply with all applicable federal and state laws and regulations.

Carl Blessing et al. v. Sirius XM Radio Inc. A subscriber, Carl Blessing, filed a lawsuit against us in December 2009 in the United States District Court for the Southern District of New York. Mr. Blessing's lawsuit has been consolidated with substantially identical lawsuits brought by other subscribers. Mr. Blessing and 23 other plaintiffs purport to represent all subscribers who were subject to: an increase in the price for additional-radio subscriptions from \$6.99 to \$8.99; the imposition of the US Music Royalty Fee; and the elimination of our free streaming internet service. Based on these pricing changes, the suit raises four claims. First, the suit claims the pricing changes show that the Merger lessened competition or led to a monopoly in violation of the Clayton Act. Second, it claims that, for the same reason, the Merger led to monopolization in violation of the Sherman Act. Third, it claims that our subscriber service agreement misrepresents that the US Music Royalty Fee will be used exclusively to defray increases in royalty costs incurred since the filing of the merger application with the FCC (and as permitted by the FCC order) in violation of the consumer protection and unfair trade practice laws of 41 states and the District of Columbia. A fourth claim — that the alleged misrepresentation violates the implied duty of good faith and fair dealing we owe our subscribers under New York contract law — has been dismissed by the court. The complaint seeks monetary damages as well as treble damages under the Clayton Act. Discovery in this matter is substantially complete and a trial has been scheduled for May 2011. We believe that the plaintiffs' claims are without merit and we are vigorously defending ourselves in this litigation.

A stockholder, Mark Fialkov, also filed a shareholder derivative suit in January 2010 in the Supreme Court of the State of New York claiming that, by allowing the price increases that prompted the Blessing litigation, our board of directors breached its duty of loyalty to the corporation. The action names as defendants Sirius XM and fifteen individuals — all directors or former directors of Sirius XM. This lawsuit has been stayed pending resolution of the Blessing litigation.

Other Matters. In the ordinary course of business, we are a defendant in various lawsuits and arbitration proceedings, including actions filed by subscribers, both on behalf of themselves and on a class action basis; former employees; parties to contracts or leases; and owners of patents, trademarks, copyrights or other intellectual property. None of these actions are, in our opinion, likely to have a material adverse effect on our business, financial condition or results of operations.

ITEM 4. (REMOVED AND RESERVED)

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is traded on the Nasdaq Global Select Market under the symbol "SIRI." The following table sets forth the high and low sales price for our common stock, as reported by Nasdaq, for the periods indicated below:

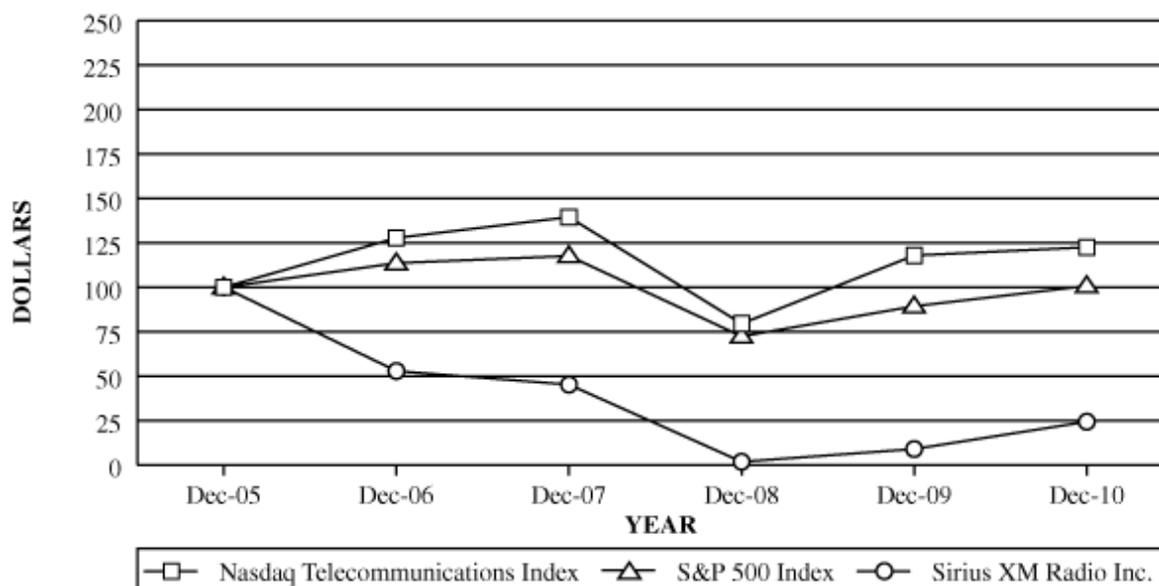
	<u>High</u>	<u>Low</u>
Year ended December 31, 2009		
First Quarter	\$0.43	\$0.05
Second Quarter	0.63	0.30
Third Quarter	0.78	0.35
Fourth Quarter	0.69	0.51
Year ended December 31, 2010		
First Quarter	\$1.18	\$0.61
Second Quarter	1.25	0.84
Third Quarter	1.20	0.90
Fourth Quarter	1.69	1.18

On February 14, 2011, the closing sales price of our common stock on the Nasdaq Global Select Market was \$1.83 per share. On February 14, 2011, there were approximately 11,457 record holders of our common stock.

We have never paid cash dividends on our common stock. We currently intend to retain earnings, if any, for use in our business and do not anticipate paying any cash dividends in the foreseeable future. Our ability to pay dividends on our common stock is currently limited by the covenants under our debt agreements. See Note 11 to our consolidated financial statements included in this report.

COMPARISON OF CUMULATIVE TOTAL RETURNS

Set forth below is a graph comparing the cumulative performance of our common stock with the Standard & Poor's Composite-500 Stock Index, or the S&P 500, and the NASDAQ Telecommunications Index from December 31, 2005 to December 31, 2010. The graph assumes that \$100 was invested on December 31, 2005 in each of our common stock, the S&P 500 and the NASDAQ Telecommunications Index. There were no dividends declared during these periods.



Stockholder Return Performance Table

	Nasdaq Telecommunications Index	S&P 500 Index	Sirius XM Radio Inc.
December 31, 2005	\$100.00	\$100.00	\$100.00
December 31, 2006	\$127.76	\$113.62	\$ 52.84
December 31, 2007	\$139.48	\$117.63	\$ 45.22
December 31, 2008	\$ 79.53	\$ 72.36	\$ 1.79
December 31, 2009	\$117.89	\$ 89.33	\$ 8.96
December 31, 2010	\$122.52	\$100.75	\$ 24.33

Equity Compensation Plan Information

Plan Category (Shares in thousands)	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders	444,291	\$ 1.45	268,255
Equity compensation plans not approved by security holders	—	—	—
Total	444,291	\$ 1.45	268,255

ITEM 6. SELECTED FINANCIAL DATA

Our selected financial data set forth below with respect to the consolidated statements of operations for the years ended December 31, 2010, 2009 and 2008, and with respect to the consolidated balance sheets at December 31, 2010 and 2009, are derived from our audited consolidated financial statements included in Item 8 of this Annual Report on Form 10-K. Our selected financial data set forth below with respect to the consolidated statements of operations for the years ended December 31, 2007 and 2006, and with respect to the consolidated balance sheets at December 31, 2008, 2007 and 2006 are derived from our audited consolidated financial statements, which are not included in this Annual Report on Form 10-K. This selected financial data should be read in conjunction with the Consolidated Financial Statements and related notes thereto included in Item 8 of this Annual Report on Form 10-K and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in Item 7 of this Annual Report on Form 10-K.

	As of and for the Years Ended December 31,				
	2010	2009(1)	2008(1)(2)	2007	2006
(In thousands, except per share data)					
Statements of Operations Data:					
Total revenue	\$2,816,992	\$2,472,638	\$ 1,663,992	\$ 922,066	\$ 637,235
Net income (loss)	\$ 43,055	\$ (538,226)	\$ (5,316,910)	\$ (565,252)	\$ (1,104,867)
Net income (loss) per share — basic	\$ 0.01	\$ (0.15)	\$ (2.45)	\$ (0.39)	\$ (0.79)
Net income (loss) per share — diluted	\$ 0.01	\$ (0.15)	\$ (2.45)	\$ (0.39)	\$ (0.79)
Weighted average common shares outstanding — basic	3,693,259	3,585,864	2,169,489	1,462,967	1,402,619
Weighted average common shares outstanding — diluted	6,391,071	3,585,864	2,169,489	1,462,967	1,402,619
Balance Sheet Data:					
Cash and cash equivalents	\$ 586,691	\$ 383,489	\$ 380,446	\$ 438,820	\$ 393,421
Restricted investments	\$ 3,396	\$ 3,400	\$ 141,250	\$ 53,000	\$ 77,850
Total assets	\$7,383,086	\$7,322,206	\$ 7,527,075	\$1,687,231	\$ 1,650,147
Long-term debt, net of current portion	\$3,021,763	\$3,063,281	\$ 2,820,781	\$1,271,699	\$ 1,059,868
Stockholders’ equity (deficit)(3)	\$ 207,636	\$ 95,522	\$ 75,875	\$ (792,737)	\$ (389,071)

- (1) The 2009 and 2008 results and balances reflect the adoption of ASU 2009-15, *Accounting for Own-Share Lending Arrangements in Contemplation of Convertible Debt Issuance or Other Financing*.
- (2) The 2008 results and balances reflect the results and balances of XM Satellite Radio Holdings Inc. from the date of the Merger and a \$4,766,190 goodwill impairment charge.
- (3) No cash dividends were declared or paid in any of the periods presented.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the federal securities laws. Actual results and the timing of events could differ materially from those projected in forward-looking statements due to a number of factors, including those described under "Item 1A — Risk Factors" and elsewhere in this Annual Report. See "Special Note Regarding Forward-Looking Statements."

(All dollar amounts referenced in this Item 7 are in thousands, unless otherwise stated)

Executive Summary

We broadcast our music, sports, news, talk, entertainment, traffic and weather channels in the United States on a subscription fee basis through two proprietary satellite radio systems. Subscribers can also receive certain of our music and other channels over the Internet, including through an application on Apple, Blackberry and Android-powered mobile devices.

We have agreements with every major automaker ("OEMs") to offer satellite radios as factory- or dealer-installed equipment in their vehicles. We also distribute our satellite radios through retail locations nationwide and through our websites. Satellite radio services are also offered to customers of certain daily rental car companies.

As of December 31, 2010, we had 20,190,964 subscribers. Our subscriber totals include subscribers under our regular pricing plans; discounted pricing plans; subscribers that have prepaid, including payments either made or due from automakers and dealers for subscriptions included in the sale or lease price of a vehicle; activated radios in daily rental fleet vehicles; certain subscribers to our Internet services; and certain subscribers to our weather, traffic, data and video services.

Our primary source of revenue is subscription fees, with most of our customers subscribing on an annual, semi-annual, quarterly or monthly basis. We offer discounts for prepaid and long-term subscription plans, as well as discounts for multiple subscriptions on each platform. We also derive revenue from activation and other subscription-related fees, the sale of advertising on select non-music channels, the direct sale of satellite radios, components and accessories, and other ancillary services, such as our Backseat TV, data and weather services.

In certain cases, automakers include a subscription to our radio services in the sale or lease price of new and certified pre-owned vehicles. The length of these prepaid subscriptions varies, but is typically three to twelve months. In many cases, we receive subscription payments from automakers in advance of the activation of our service. We also reimburse various automakers for certain costs associated with satellite radios installed in their vehicles.

We also have an interest in the satellite radio services offered in Canada. Subscribers to the SIRIUS Canada service and the XM Canada service are not included in our subscriber count.

Actual Results of Operations

Set forth below are our results of operations for the year ended December 31, 2010 compared with the year ended December 31, 2009 and the year ended December 31, 2009 compared with the year ended December 31, 2008.

	For the Years Ended December 31,			2010 vs 2009		2009 vs 2008	
	2010	2009	2008	Amount	%	Amount	%
Revenue:							
Subscriber revenue, including effects of rebates	\$2,414,174	\$2,287,503	\$ 1,548,919	\$126,671	6%	\$ 738,584	48%
Advertising revenue, net of agency fees	64,517	51,754	47,190	12,763	25%	4,564	10%
Equipment revenue	71,355	50,352	56,001	21,003	42%	(5,649)	(10)%
Other revenue	266,946	83,029	11,882	183,917	222%	71,147	599%
Total revenue	2,816,992	2,472,638	1,663,992	344,354	14%	808,646	49%
Operating expenses:							
Revenue share and royalties	435,410	397,210	280,852	38,200	10%	116,358	41%
Programming and content	305,914	308,121	312,189	(2,207)	(1)%	(4,068)	(1)%
Customer service and billing	241,680	234,456	165,036	7,224	3%	69,420	42%
Satellite and transmission	80,947	84,033	59,279	(3,086)	(4)%	24,754	42%
Cost of equipment	35,281	40,188	46,091	(4,907)	(12)%	(5,903)	(13)%
Subscriber acquisition costs	413,041	340,506	371,343	72,535	21%	(30,837)	(8)%
Sales and marketing	215,454	228,956	231,937	(13,502)	(6)%	(2,981)	(1)%
Engineering, design and development	45,390	41,031	40,496	4,359	11%	535	1%
General and administrative	240,970	227,554	213,142	13,416	6%	14,412	7%
Impairment of goodwill	—	—	4,766,190	—	0%	(4,766,190)	nm
Depreciation and amortization	273,691	309,450	203,752	(35,759)	(12)%	105,698	52%
Restructuring, impairments and related costs	63,800	32,807	10,434	30,993	94%	22,373	214%
Total operating expenses	2,351,578	2,244,312	6,700,741	107,266	5%	(4,456,429)	(67)%
Income (loss) from operations	465,414	228,326	(5,036,749)	237,088	104%	5,265,075	105%
Other income (expense):							
Interest expense, net of amounts capitalized	(295,643)	(315,668)	(148,455)	20,025	6%	(167,213)	(113)%
Loss on extinguishment of debt and credit facilities, net	(120,120)	(267,646)	(98,203)	147,526	55%	(169,443)	(173)%
Interest and investment (loss) income	(5,375)	5,576	(21,428)	(10,951)	(196)%	27,004	126%
Other income	3,399	3,355	(9,599)	44	1%	12,954	135%
Total other expense	(417,739)	(574,383)	(277,685)	156,644	27%	(296,698)	(107)%
Income (loss) before income taxes	47,675	(346,057)	(5,314,434)	393,732	114%	4,968,377	93%
Income tax expense	(4,620)	(5,981)	(2,476)	1,361	23%	(3,505)	(142)%
Net income (loss)	43,055	(352,038)	(5,316,910)	395,093	112%	4,964,872	93%
Preferred stock beneficial conversion feature	—	(186,188)	—	186,188	nm	(186,188)	nm
Net income (loss) attributable to common stockholders	\$ 43,055	\$ (538,226)	\$ (5,316,910)	\$581,281	108%	\$ 4,778,684	90%

nm — not meaningful

Total Revenue

Subscriber Revenue includes subscription fees, activation and other fees and the effects of rebates.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, subscriber revenue was \$2,414,174 and \$2,287,503, respectively, an increase of 6%, or \$126,671. The increase was primarily attributable to a 5% increase in daily weighted average subscribers, an increase in the sale of “Best of” programming, decreases in discounts on multi-subscription and internet packages and a \$32,159 decrease in the impact of purchase price accounting adjustments attributable to acquired deferred subscriber revenues, partially offset by an increase in the number of subscribers on promotional plans.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, subscriber revenue was \$2,287,503 and \$1,548,919, respectively, an increase of 48%, or \$738,584. The Merger was responsible for approximately \$670,870 of the increase and the remaining increase was primarily attributable to the sale of “Best of” programming, decreases in discounts on multi-subscription packages, increased sales of internet packages and higher average subscribers.

Future subscriber revenue will be dependent, among other things, upon the growth of our subscriber base, conversion and churn rates, promotions, rebates offered to subscribers and corresponding take-rates, plan mix, subscription prices and the identification of additional revenue streams from subscribers. The impact of purchase price accounting adjustments attributable to acquired subscriber deferred revenues will continue to decline in absolute amount and as a percentage of reported total subscriber revenues through 2013 as balances are earned over the acquired subscription period.

Advertising Revenue includes the sale of advertising on our non-music channels, net of agency fees. Agency fees are based on a contractual percentage of the gross advertising billing revenue.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, advertising revenue was \$64,517 and \$51,754, respectively, an increase of 25%, or \$12,763. The increase was primarily due to more effective sales efforts and improvements in the national market for advertising.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, net advertising revenue was \$51,754 and \$47,190, respectively, an increase of 10%, or \$4,564. The increase was due to the inclusion of XM revenue from the Merger, which was offset by a decrease in advertising revenue due to the economic environment in 2009.

Our advertising revenue is subject to fluctuation based on the effectiveness of our sales efforts and the national economic environment. We expect advertising revenue to grow as our subscribers increase and national advertising spend continues to increase.

Equipment Revenue includes revenue and royalties from the sale of satellite radios, components and accessories.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, equipment revenue was \$71,355 and \$50,352, respectively, an increase of 42%, or \$21,003. The increase was driven by royalties from increased OEM installations and aftermarket radios and accessories.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, equipment revenue was \$50,352 and \$56,001, respectively, a decrease of 10%, or \$5,649. The decrease was primarily due to a decline in sales through our direct to consumer distribution channel and lower product royalties, partially offset by the inclusion of XM revenue for a full year.

We expect equipment revenue to fluctuate based on OEM installations for which we receive royalty payments for our technology and, to a lesser extent, on the volume and mix of equipment sales in our direct to consumer business.

Other Revenue includes the U.S. Music Royalty Fee, revenue from affiliates, content licensing fees and syndication fees.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, other revenue was \$266,946 and \$83,029, respectively. The \$183,917 increase was primarily due to the full year impact of the U.S. Music Royalty Fee introduced in the third quarter of 2009.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, other revenue was \$83,029 and \$11,882, respectively, an increase of 599%, or \$71,147. The increase was primarily due to the introduction of the U.S. Music Royalty Fee in the third quarter of 2009 and the inclusion of XM revenue for a full year.

Future other revenues will be dependent upon revenues from affiliates, content and syndication fees, and the monthly fee assessed for the U.S. Music Royalty Fee. The FCC's order approving the Merger allows us to pass through cost increases incurred since the filing of our FCC merger application as a result of statutorily or contractually required payments to the music, recording and publishing industries for the performance of musical works and sound recordings or for device recording fees.

Operating Expenses

Revenue Share and Royalties include distribution and content provider revenue share, advertising revenue share, residuals and broadcast and web streaming royalties. Residuals are monthly fees paid based upon the number of subscribers using satellite radios purchased from retailers. Advertising revenue share is recognized as a component of revenue share and royalties in the period in which the advertising is broadcast.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, revenue share and royalties were \$435,410 and \$397,210, respectively, an increase of 10%, or \$38,200. For the year ended December 31, 2010, revenue share and royalties decreased as a percentage of total revenue. The increase was primarily attributable to a 12% increase in our revenues subject to royalty and/or revenue sharing arrangements and an 8% increase in the statutory royalty rate for the performance of sound recordings, partially offset by a decrease in the revenue sharing rate with an automaker and a \$18,187 increase in the benefit to earnings from the amortization of deferred credits on executory contracts initially recognized in purchase price accounting associated with the Merger.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, revenue share and royalties were \$397,210 and \$280,852, respectively, an increase of 41%, or \$116,358. The increase was primarily attributable to the inclusion of XM's revenue share and royalty expense as a result of the Merger and an 8% increase in the statutory royalty rate for the performance of sound recordings.

We expect our revenue sharing and royalty costs to increase as our revenues grow, as we expand our distribution of satellite radios through automakers, and as a result of statutory increases in the royalty rate for the performance of sound recordings. Under the terms of the Copyright Royalty Board's decision, we paid royalties of 6.0%, 6.5% and 7.0% of gross revenues, subject to certain exclusions, for 2008, 2009 and 2010, respectively, and will pay royalties of 7.5% and 8.0% for 2011 and 2012, respectively. Our next rate setting proceeding before the Copyright Royalty Board commenced in January 2011 and the results of that proceeding may have an impact on our results of operations. The deferred credits on executory contracts initially recognized in purchase price accounting associated with the Merger are expected to provide increasing benefits to revenue share and royalties through the expiration of the acquired executory contracts, principally in 2012 and 2013.

Programming and Content includes costs to acquire, create and produce content and on-air talent costs. We have entered into various agreements with third parties for music and non-music programming that require us to pay license fees, share advertising revenue, purchase advertising on media properties owned or controlled by the licensor and pay other guaranteed amounts.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, programming and content expenses were \$305,914 and \$308,121, respectively, a decrease of 1%, or \$2,207 and decreased as a percentage of total revenue. The decrease was primarily due to savings in content agreements and production costs, partially offset by increases in personnel costs, general operating expenses and a \$14,503 reduction in the benefit to earnings from purchase price accounting adjustments associated with the Merger attributable to the amortization of the deferred credit on acquired programming executory contracts.

- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, programming and content expenses were \$308,121 and \$312,189, respectively, a decrease of \$4,068, or 1% and decreased as a percentage of total revenue. The increase from the inclusion of a full year of XM expense was offset by savings in content agreements, personnel and on-air talent costs.

Our programming and content expenses are expected to decrease as various agreements expire and are renewed or replaced on more cost effective terms. The impact of purchase price accounting adjustments associated with the Merger attributable to the amortization of the deferred credit on acquired programming executory contracts will continue to decline, in absolute amount and as a percentage of reported programming and content costs, through 2013.

Customer Service and Billing includes costs associated with the operation of third party customer service centers and our subscriber management systems as well as bad debt expense.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, customer service and billing expenses were \$241,680 and \$234,456, respectively, an increase of 3%, or \$7,224 but decreased as a percentage of total revenue. The increase was primarily due to higher call volume, partially offset by lower call center expenses as a result of moving calls to lower cost locations.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, customer service and billing expenses were \$234,456 and \$165,036, respectively, an increase of 42%, or \$69,420 but decreased as a percentage of total revenue. The increase was primarily due to the inclusion of XM's customer and billing expense as a result of the Merger and increased bad debt expense due to the economic environment during 2009.

We expect our customer care and billing expenses to increase as our subscriber base grows due to increased call center operating costs, transaction fees and bad debt expense.

Satellite and Transmission consists of costs associated with the operation and maintenance of our satellites; satellite telemetry, tracking and control systems; terrestrial repeater networks; satellite uplink facilities; and broadcast studios.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, satellite and transmission expenses were \$80,947 and \$84,033, respectively, a decrease of 4%, or \$3,086 but decreased as a percentage of total revenue. The decrease was primarily due to savings in repeater expenses, partially offset by increased satellite insurance costs related to our FM-5 satellite.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, satellite and transmission expenses were \$84,033 and \$59,279, respectively, an increase of 42%, or \$24,754 but decreased as a percentage of total revenue. The increase was primarily due to the inclusion of XM's satellite and transmission expense, partially offset by decreases due to the elimination of contracts, decommissioned repeater sites and a decrease in streaming costs.

We expect satellite and transmission expenses to decline as a result of decreasing operating costs associated with our in-orbit satellite fleet and repeater network optimization.

Cost of Equipment includes costs from the sale of satellite radios, components and accessories and provisions for inventory allowance attributable to products purchased for resale in our direct to consumer distribution channels.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, cost of equipment was \$35,281 and \$40,188, respectively, a decrease of 12%, or \$4,907 and decreased as a percentage of total revenue. The decrease was primarily due to lower inventory write-downs, lower sales through distributors and reduced costs to produce aftermarket radios.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, cost of equipment was \$40,188 and \$46,091, respectively, a decrease of 13%, or \$5,903 and decreased as a percentage of total revenue. The decrease was primarily due to lower sales volume through our direct to consumer channel, lower inventory related charges and lower product and component sales, partially offset by the inclusion of XM's cost of equipment expense as a result of the Merger.

We expect cost of equipment to vary with changes in sales, supply chain management, and inventory valuations.

Subscriber Acquisition Costs include hardware subsidies paid to radio manufacturers, distributors and automakers, including subsidies paid to automakers who include a satellite radio and subscription to our service in the sale or lease price of a new or certified pre-owned vehicle; subsidies paid for chip sets and certain other components used in manufacturing radios; device royalties for certain radios; commissions paid to retailers and automakers as incentives to purchase, install and activate satellite radios; product warranty obligations; and provisions for inventory allowances attributable to inventory consumed in our OEM and retail distribution channels. The majority of subscriber acquisition costs are incurred and expensed in advance of, or concurrent with, acquiring a subscriber. Subscriber acquisition costs do not include advertising, loyalty payments to distributors and dealers of satellite radios and revenue share payments to automakers and retailers of satellite radios.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, subscriber acquisition costs were \$413,041 and \$340,506, respectively, an increase of 21%, or \$72,535 and increased as a percentage of total revenue. The increase was primarily a result of the 25% increase in gross subscriber additions and higher subsidies related to the 49% increase in OEM installations, partially offset by lower OEM subsidies per vehicle and an \$18,275 increase in the benefit to earnings from the amortization of the deferred credit for acquired executory contracts recognized in purchase price accounting associated with the Merger.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, subscriber acquisition costs were \$340,506 and \$371,343, respectively, a decrease of 8%, or \$30,837 and decreased as a percentage of total revenue. The decrease was primarily a result of lower OEM subsidies and chip set costs, decreases in production of certain radios and lower aftermarket inventory charges in the year ended December 31, 2009 compared to the year ended December 31, 2008, partially offset by the inclusion of XM's subscriber acquisition costs as a result of the Merger.

We expect total subscriber acquisition costs to fluctuate with increases or decreases in OEM installations, which are driven by OEM manufacturing and penetration rates, and changes in our gross subscriber additions. Declines in the cost of subsidized radio components will also impact total subscriber acquisition costs. The impact of purchase price accounting adjustments associated with the Merger attributable to the amortization of the deferred credit for acquired executory contracts will vary, in absolute amount and as a percentage of reported subscriber acquisition costs, through the expiration of the acquired contracts, primarily in 2013. We intend to continue to offer subsidies, commissions and other incentives to acquire subscribers.

Sales and Marketing includes costs for advertising, media and production, including promotional events and sponsorships; cooperative marketing; customer retention and personnel. Cooperative marketing costs include fixed and variable payments to reimburse retailers and automakers for the cost of advertising and other product awareness activities performed on our behalf.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, sales and marketing expenses were \$215,454 and \$228,956, respectively, a decrease of 6%, or \$13,502 and decreased as a percentage of total revenue. The decrease was primarily due to reductions in consumer advertising, event marketing and third party distribution support expenses, partially offset by additional cooperative marketing and personnel costs.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, sales and marketing expenses were \$228,956 and \$231,937, respectively, a decrease of 1%, or \$2,981 and decreased as a percentage of total revenue. The decrease was due to reductions in consumer advertising and cooperative marketing, personnel costs and third party distribution support expenses, partially offset by the inclusion of XM's sales and marketing expense.

We expect sales and marketing expenses to increase as we increase advertising and promotional initiatives to attract new subscribers in existing and new distribution channels, and launch and expand programs to retain our subscribers.

Engineering, Design and Development includes costs to develop chip sets and new products, research and development for broadcast information systems and costs associated with the incorporation of our radios into vehicles manufactured by automakers.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, engineering, design and development expenses were \$45,390 and \$41,031, respectively, an increase of 11%, or \$4,359 but remained flat as a percentage of total revenue. The increase was primarily due to higher personnel, overhead and aftermarket product development costs.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, engineering, design and development expenses were \$41,031 and \$40,496, respectively, an increase of 1%, or \$535 but decreased as a percentage of total revenue. The increase was primarily due to the inclusion of XM's engineering, design and development expenses, partially offset by lower costs associated with development, tooling and testing of radios as well as lower personnel costs.

We expect engineering, design and development expenses to increase in future periods as we develop our next generation chip sets and products.

General and Administrative includes rent and occupancy, finance, legal, human resources, information technology and investor relations costs.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, general and administrative expenses were \$240,970 and \$227,554, respectively, an increase of 6%, or \$13,416 but decreased as a percentage of total revenue. The increase was primarily due to increased personnel and legal costs, partially offset by lower share-based payment expense.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, general and administrative expenses were \$227,554 and \$213,142, respectively, an increase of 7%, or \$14,412 but decreased as a percentage of total revenue. The increase was primarily due to the impact of the Merger, offset by lower costs for certain merger, litigation and regulatory matters.

We expect our general and administrative expenses to increase in future periods primarily as a result of increased information technology and personnel costs to support the growth of our business, as well as rising legal costs.

Impairment of Goodwill is recorded when the carrying value of goodwill exceeds the implied fair value of goodwill.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, we did not record any impairment of goodwill.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, impairment of goodwill was \$0 and \$4,766,190, respectively.

Depreciation and Amortization represents the systematic recognition in earnings of the acquisition cost of assets used in operations, including our satellite constellations, property, equipment and intangible assets, over their estimated service lives.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, depreciation and amortization expense was \$273,691 and \$309,450, respectively, a decrease of 12%, or \$35,759 and decreased as a percentage of total revenue. The decrease was primarily due to a \$38,136 reduction in the depreciation of acquired satellite constellation and amortization of subscriber relationships, partially offset by depreciation recognized on additional assets placed in-service.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, depreciation and amortization expense was \$309,450 and \$203,752, respectively, an increase of 52%, or \$105,698 and increased as a percentage of total revenue. The increase was primarily due to the impact of the Merger.

We expect depreciation and amortization expenses to increase in future periods as we recognize depreciation expense on our recently launched satellite, XM-5, and complete the construction and launch of our FM-6 satellite,

which will be partially offset by reduced depreciation and amortization associated with the stepped-up basis in assets acquired in the Merger (including intangible assets, satellites, property and equipment) through the end of their estimated service lives, principally through 2017.

Restructuring, Impairments and Related Costs represents charges related to the re-organization of our staff and restructuring of contracts, as well as charges related to the impairment of assets when those costs are deemed to provide no future benefit.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, restructuring, impairments and related costs was \$63,800 and \$32,807, respectively, an increase of 94%, or \$30,993. The increase was primarily due to the impairment of our FM-4 satellite, due to the launch of XM-5 in the fourth quarter of 2010, and contract termination costs in the year ended December 31, 2010 compared to losses incurred on capitalized installment payments which were expected to provide no future benefit due to the counterparty's bankruptcy filing in the year ended December 31, 2009.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, restructuring, impairments and related costs was \$32,807 and \$10,434, respectively, an increase of 214%, or \$22,373. The increase was primarily due to losses incurred on capitalized installment payments which were expected to provide no future benefit due to the counterparty's bankruptcy filing in the year ended December 31, 2009 compared to Merger related restructuring charges in the year ended December 31, 2008.

Other Income (Expense)

Interest Expense, Net of Amounts Capitalized, includes interest on outstanding debt, reduced by interest capitalized in connection with the construction of our satellites and related launch vehicles.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, interest expense was \$295,643 and \$315,668, respectively, a decrease of 6%, or \$20,025. The decrease was primarily due to decreases in the weighted average interest rate on our outstanding debt in the year ended December 31, 2010 compared to the year ended December 31, 2009 and the redemption of XM's 10% Senior PIK Secured Notes due 2011 on June 1, 2010.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, interest expense was \$315,668 and \$148,455, respectively, an increase of 113%, or \$167,213. Interest expense increased significantly as a result of the Merger, due to additional debt and higher interest rates. Increases in interest expense were partially offset by the capitalized interest associated with satellite construction and related launch vehicles.

Loss on Extinguishment of Debt and Credit Facilities, Net, includes losses incurred as a result of the conversion and retirement of certain debt.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, loss on extinguishment of debt and credit facilities, net, was \$120,120 and \$267,646, respectively, a decrease of 55%, or \$147,526. During the year ended December 31, 2010, the loss was incurred on the repayment of our Senior Secured Term Loan due 2012 and 9.625% Senior Notes due 2013 and XM's 10% Senior PIK Secured Notes due 2011 and 9.75% Senior Notes due 2014, as well as the partial repayment of XM's 11.25% Senior Secured Notes due 2013 and our 3.25% Convertible Notes due 2011. During the year ended December 31, 2009, the loss was incurred on the retirement of our 2.5% Convertible Notes due 2009, the extinguishment of our Term Loan and Purchase Money Loan with Liberty Media, the repayment of the XM's Amended and Restated Credit Agreement due 2011, the partial repayment of XM's 10% Convertible Senior Notes due 2009 and the termination of XM's Second Lien Credit Agreement.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, loss on extinguishment of debt and credit facilities, net, was \$267,646 and \$98,203, respectively, an increase of 173%, or \$169,443. During the year ended December 31, 2009, the loss was incurred on the retirement of our 2.5% Convertible Notes due 2009, the extinguishment of our Term Loan and Purchase Money Loan with Liberty Media, the repayment of XM's Amended and Restated Credit Agreement due 2011, the partial repayment of XM's 10% Convertible Senior Notes due 2009 and the termination of XM's Second Lien Credit Agreement. During the year ended

December 31, 2008, the loss was incurred on the partial induced conversion of our 2.5% Convertible Notes due 2009.

Interest and Investment Income (Loss) includes realized gains and losses, dividends, interest income, our share of SIRIUS Canada's and XM Canada's net losses and losses recorded from investments in those entities, as well as debt instruments issued by XM Canada, when the fair value of those instruments falls below carrying value and the decline is determined to be other than temporary.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, interest and investment (loss) income was (\$5,375) and \$5,576, respectively, a decrease of 196%, or \$10,951. The decrease in income was primarily attributable to higher net losses at XM Canada and SIRIUS Canada and a decrease in payments received from SIRIUS Canada in excess of the carrying value of our investments, partially offset by the gain on sale of auction rate securities during the year ended December 31, 2010. In addition, we recorded an impairment charge on our investment in XM Canada during the year ended December 31, 2009.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, interest and investment (loss) income was \$5,576 and (\$21,428), respectively, an increase of 126%, or \$27,004. The increase was attributable to payments received from SIRIUS Canada in excess of the carrying value of our investment, decreases in our share of XM Canada's net loss and decreases in impairment charges related to our investment in XM Canada for the year ended December 31, 2009 compared to the year ended December 31, 2008, partially offset by increases in our share of SIRIUS Canada's net loss, lower interest rates in 2009 and a lower average cash balance.

Income Taxes

Income Tax Expense primarily represents the deferred tax liability related to the difference in accounting for our FCC licenses, which are amortized over 15 years for tax purposes but not amortized for book purposes in accordance with GAAP and foreign withholding taxes on royalty income.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, income tax expense was \$4,620 and \$5,981, respectively, a decrease of 23%, or \$1,361 primarily related to a decrease in the applicable tax rate and foreign withholding taxes on royalty income.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, income tax expense was \$5,981 and \$2,476, respectively, an increase of 142%, or \$3,505 primarily related to the inclusion of XM.

Subscriber Data

The following table contains actual subscriber data for the years ended December 31, 2010 and 2009, respectively, and adjusted subscriber data for the year ended December 31, 2008. The subscriber data for the year ended December 31, 2008 has been adjusted to include XM results:

	Unaudited		
	For the Years Ended December 31,		
	2010	2009	2008
	(Actual)	(Actual)	(Adjusted)
Beginning subscribers	18,772,758	19,003,856	17,348,622
Gross subscriber additions	7,768,827	6,208,482	7,710,306
Deactivated subscribers	(6,350,621)	(6,439,580)	(6,055,072)
Net additions	1,418,206	(231,098)	1,655,234
Ending subscribers	<u>20,190,964</u>	<u>18,772,758</u>	<u>19,003,856</u>
Retail	6,947,830	7,725,750	8,905,087
OEM	13,104,972	10,930,952	9,995,953
Rental	138,162	116,056	102,816
Ending subscribers	<u>20,190,964</u>	<u>18,772,758</u>	<u>19,003,856</u>
Self-pay	16,686,799	15,703,932	15,549,657
Paid promotional	3,504,165	3,068,826	3,454,199
Ending subscribers	<u>20,190,964</u>	<u>18,772,758</u>	<u>19,003,856</u>
Retail	(777,920)	(1,179,452)	(333,628)
OEM	2,174,020	935,114	1,962,685
Rental	22,106	13,240	26,177
Net additions	1,418,206	(231,098)	1,655,234
Self-pay	982,867	154,275	1,676,311
Paid promotional	435,339	(385,373)	(21,077)
Net additions	<u>1,418,206</u>	<u>(231,098)</u>	<u>1,655,234</u>
Daily weighted average number of subscribers	<u>19,385,055</u>	<u>18,529,696</u>	<u>18,373,274</u>
Average self-pay monthly churn(1)	<u>1.9%</u>	<u>2.0%</u>	<u>1.8%</u>
Conversion rate(2)	<u>46.2%</u>	<u>45.4%</u>	<u>47.5%</u>

Note: See pages 46 through 53 for footnotes.

Subscribers. At December 31, 2010, we had 20,190,964 subscribers, an increase of 1,418,206 subscribers, or 8%, from the 18,772,758 subscribers as of December 31, 2009.

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, net additions were 1,418,206 and (231,098), respectively, an increase in net additions of 1,649,304. The improvement was due to the 25% increase in gross subscriber additions, primarily resulting from an increase in U.S. light vehicle sales, new vehicle penetration and returning activations.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, net additions were (231,098) and 1,655,234, respectively, a decrease in net additions of 1,886,332. The decline was due to a decrease in gross subscriber additions of 19% and an increase in deactivated subscribers of 6%, both of which were impacted by the economic environment during 2009. The decrease in net additions was primarily attributable to fewer

paid promotional trials due to the decline in North American auto sales and an increase in the average self-pay monthly churn rate from 1.8% in 2008 to 2.0% in 2009.

Average Self-pay Monthly Churn is derived by dividing the monthly average of self-pay deactivations for the quarter by the average self-pay subscriber balance for the quarter. (See accompanying footnotes on pages 46 through 53 for more details.)

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, our average self-pay monthly churn rate was 1.9% and 2.0%, respectively. The decrease was due to an improving economy, the success of retention and win-back programs and reductions in non-pay cancellation rates.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, our average self-pay monthly churn rate was 2.0% and 1.8%, respectively. The increase was due to the economic environment during 2009 which drove reductions in consumer discretionary spending, combined with subscriber response to our decreases in discounts on multi-subscription and internet packages, channel line-up changes in 2008 and the introduction of the U.S. Music Royalty Fee in the third quarter of 2009.

Conversion Rate is the percentage of owners and lessees of new vehicles that receive our service and convert to become self-paying subscribers after an initial promotional period. (See accompanying footnotes on pages 46 through 53 for more details.)

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, our conversion rate was 46.2% and 45.4%, respectively. The increase was primarily due to marketing to promotional period subscribers and an improving economy.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, our conversion rate was 45.4% and 47.5%, respectively. The decrease was primarily due to a reduction in consumer discretionary spending resulting from the economic environment during 2009.

The discussion of operating results below excludes the effects of stock-based compensation and purchase price accounting adjustments associated with the Merger. Financial measures and metrics previously reported as “pro forma” have been renamed “adjusted.”

Adjusted Results of Operations

In this section, we present certain financial performance measures that are not calculated and presented in accordance with generally accepted accounting principles in the United States of America (“Non-GAAP”). These Non-GAAP financial measures include: average monthly revenue per subscriber, or ARPU; subscriber acquisition cost, or SAC, per gross subscriber addition; customer service and billing expenses, per average subscriber; free cash flow; adjusted total revenue; and adjusted EBITDA. These measures include the historical results of operations of XM and exclude the impact of certain purchase price accounting adjustments. We use these Non-GAAP financial measures to manage our business, set operational goals and as a basis for determining performance-based compensation for our employees.

The purchase price accounting adjustments include the elimination of the earnings benefit of deferred revenue associated with the investment in XM Canada, the recognition of subscriber revenues not recognized in purchase price accounting and the elimination of the earnings benefit of deferred credits on executory contracts, which are primarily attributable to third party arrangements with an OEM and programming providers.

Our adjusted EBITDA also reallocates share-based payment expense from functional operating expense line items to a separate line within operating expenses. We believe the exclusion of share-based payment expense from functional operating expenses is useful given the significant variation in expense that can result from changes in the fair market value of our common stock, the effect of which is unrelated to the operational conditions that give rise to variations in the components of our operating costs.

We believe these Non-GAAP financial measures provide useful information to investors regarding our financial condition and results of operations. We believe investors find these Non-GAAP financial performance measures useful in evaluating our core trends because it provides a direct view of our underlying contractual costs.

We believe investors use our current and projected adjusted EBITDA to estimate our current or prospective enterprise value and to make investment decisions. By providing these Non-GAAP financial measures, together with the reconciliations to the most directly comparable GAAP measure, we believe we are enhancing investors understanding of our business and our results of operations. These Non-GAAP financial measures should be viewed in addition to, and not as an alternative for or superior to, our reported results prepared in accordance with GAAP. Please refer to the footnotes (pages 46 through 53) for a further discussion of such Non-GAAP financial measures and reconciliations to the most directly comparable GAAP measure.

The following table contains our key operating metrics based on our unaudited adjusted results of operations for the years ended December 31, 2010, 2009 and 2008, respectively:

	Unaudited Adjusted		
	For the Years Ended December 31,		
	2010	2009	2008
(In thousands, except for per subscriber amounts)			
ARPU(3)	\$ 11.73	\$ 10.95	\$ 10.56
SAC, per gross subscriber addition(4)	\$ 59	\$ 63	\$ 74
Customer service and billing expenses, per average subscriber(5)	\$ 1.03	\$ 1.05	\$ 1.11
Free cash flow(6)	\$ 210,481	\$ 185,319	\$ (551,771)
Adjusted total revenue(8)	\$2,838,898	\$2,526,703	\$2,436,740
Adjusted EBITDA(7)	\$ 626,288	\$ 462,539	\$ (136,298)

Note: See pages 46 through 53 for footnotes.

ARPU is derived from total earned subscriber revenue, net advertising revenue and other subscription-related revenue, net of purchase price accounting adjustments, divided by the number of months in the period, divided by the daily weighted average number of subscribers for the period. (See accompanying footnotes on pages 46 through 53 for more details.)

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, ARPU was \$11.73 and \$10.95, respectively. The increase was driven primarily by the full year impact of the U.S. Music Royalty Fee introduced in the third quarter of 2009, increased revenues from the sale of “Best of” programming, decreases in discounts on multi-subscription and internet packages, and increased net advertising revenue, partially offset by an increase in the number of subscribers on promotional plans.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, ARPU was \$10.95 and \$10.56, respectively. The increase in subscriber revenue was driven mainly by the introduction of the U.S. Music Royalty Fee in the third quarter of 2009, the sale of “Best of” programming, decreases in discounts on multi-subscription and internet packages, partially offset by lower advertising revenue.

SAC, Per Gross Subscriber Addition is derived from subscriber acquisition costs and margins from the direct sale of radios and accessories, excluding share-based payment expense and purchase price accounting adjustments, divided by the number of gross subscriber additions for the period. (See accompanying footnotes on pages 46 through 53 for more details.)

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, SAC, per gross subscriber addition was \$59 and \$63, respectively. The decrease was primarily due to lower per radio subsidy rates for certain OEMs and growth in subscriber reactivations and royalties from radio manufacturers compared to the year ended December 31, 2009, partially offset by a 49% increase in OEM production with factory-installed satellite radios.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, SAC, per gross subscriber addition was \$63 and \$74, respectively. The decrease was primarily driven by lower OEM subsidies, fewer OEM installations relative to gross subscriber additions and lower aftermarket inventory charges in the year ended December 31, 2009 compared to the year ended December 31, 2008.

Customer Service and Billing Expenses, Per Average Subscriber is derived from total customer service and billing expenses, excluding share-based payment expense and purchase price accounting adjustments, divided by the number of months in the period, divided by the daily weighted average number of subscribers for the period. (See accompanying footnotes on pages 46 through 53 for more details.)

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, customer service and billing expenses, per average subscriber was \$1.03 and \$1.05, respectively. The decrease was primarily due to lower call center expenses as a result of moving calls to lower cost locations, partially offset by higher call volume.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, customer service and billing expenses, per average subscriber was \$1.05 and \$1.11, respectively. The decrease was primarily due to decreases in personnel costs and customer call center expenses.

Free Cash Flow includes the net cash provided by (used in) operations, additions to property and equipment, merger related costs and restricted and other investment activity. (See accompanying footnotes on pages 46 through 53 for more details.)

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, free cash flow was \$210,481 and \$185,319, respectively, an increase of \$25,162. Net cash provided by operating activities increased \$79,065 to \$512,895 for the year ended December 31, 2010 compared to the \$433,830 provided by operations for the year ended December 31, 2009. Capital expenditures for property and equipment for the year ended December 31, 2010 increased \$63,357 to \$311,868 compared to \$248,511 for the year ended December 31, 2009. The increase in net cash provided by operating activities was primarily the result of growth in deferred revenue and changes in net assets. The increase in capital expenditures for the year ended December 31, 2010 was primarily the result of satellite construction and launch expenditures for our XM-5 and FM-6 satellites.
- *2009 vs. 2008:* For the years ended December 31, 2009 and 2008, free cash flow was \$185,319 and (\$551,771), respectively, an increase of \$737,090. Net cash provided by (used in) operating activities increased \$837,713 to \$433,830 for the year ended December 31, 2009 compared to the (\$403,883) used in operations for the year ended December 31, 2008. Capital expenditures for property and equipment, merger related costs, and restricted and other investment activity for the year ended December 31, 2009 increased \$100,623 to \$248,511 compared to \$147,888 for the year ended December 31, 2008. The increase in net cash provided by operating activities was primarily the result of growth in deferred revenue and changes in net assets. The increase in capital expenditures for the year ended December 31, 2009 was primarily the result of satellite construction and launch expenditures for our FM-4 and XM-5 satellites.

Adjusted Total Revenue. Our adjusted total revenue includes the recognition of deferred subscriber revenues acquired in the Merger that are not recognized in our results under purchase price accounting and the elimination of the benefit in earnings from deferred revenue associated with our investment in XM Canada acquired in the Merger. (See the accompanying footnotes on pages 46 through 53 for more details.)

	Unaudited		
	For the Years Ended December 31,		
	2010	2009	2008
Revenue:			
Subscriber revenue, including effects of rebates	\$2,414,174	\$2,287,503	\$1,548,919
Advertising revenue, net of agency fees	64,517	51,754	47,190
Equipment revenue	71,355	50,352	56,001
Other revenue	266,946	83,029	11,882
Predecessor financial information:			
Subscriber revenue, including effects of rebates	—	—	670,870
Advertising revenue, net of agency fees	—	—	22,743
Equipment revenue	—	—	13,397
Other revenue	—	—	24,184
Purchase price accounting adjustments:			
Subscriber revenue, including effects of rebates	14,655	46,814	38,533
Other revenue	7,251	7,251	3,021
Adjusted total revenue	<u>\$2,838,898</u>	<u>\$2,526,703</u>	<u>\$2,436,740</u>

- *2010 vs. 2009:* Our adjusted total revenue increased 12%, or \$312,195, in the year ended December 31, 2010 compared to the year ended December 31, 2009. Subscriber revenue increased 4%, or \$94,512, in the year ended December 31, 2010 compared to the year ended December 31, 2009. The increase in subscriber revenue was driven by the increase in subscribers as well as an increase in the sale of “Best of” programming and the decreases in discounts on multi-subscription and internet packages, partially offset by an increase in the number of subscribers on promotional plans. Advertising revenue increased 25%, or \$12,763, in the year ended December 31, 2010 compared to the year ended December 31, 2009. The increase in advertising revenue was driven by more effective sales efforts and improvements in the national market for advertising. Equipment revenue increased 42%, or \$21,003, in the year ended December 31, 2010 compared to the year ended December 31, 2009. The increase in equipment revenue was driven by royalties from increased OEM installations. Other revenue increased \$183,917 in the year ended December 31, 2010 compared to the year ended December 31, 2009. The increase in other revenue was driven by the introduction of the U.S. Music Royalty Fee in the third quarter of 2009.
- *2009 vs. 2008:* Our adjusted total revenue increased 4%, or \$89,963, in the year ended December 31, 2009 compared to the year ended December 31, 2008. Subscriber revenue increased 3%, or \$75,995, in the year ended December 31, 2009 compared to the year ended December 31, 2008. The increase in subscriber revenue was driven by the sale of “Best of” programming, decreases in discounts on multi-subscription packages, increased sales of internet packages and higher average subscribers. Advertising revenue decreased 26%, or \$18,179, in the year ended December 31, 2009 compared to the year ended December 31, 2008. The decrease in advertising revenue was driven by the economic environment. Equipment revenue decreased 27%, or \$19,046, in the year ended December 31, 2009 compared to the year ended December 31, 2008. The decrease in equipment revenue was driven by declines in sales through our direct to consumer distribution channel and lower product and component sales offset by higher product royalties. Other revenue increased 131%, or \$51,193, in the year ended December 31, 2009 compared to the year ended December 31, 2008. The increase in other revenue was driven by the introduction of the U.S. Music Royalty Fee in the third quarter of 2009.

Adjusted EBITDA. EBITDA is defined as net income (loss) before interest and investment income (loss); interest expense, net of amounts capitalized; income tax expense and depreciation and amortization. Adjusted EBITDA removes the impact of other income and expense, losses on extinguishment of debt as well as certain other charges, such as, goodwill impairment; restructuring, impairments and related costs; certain purchase price accounting adjustments and share-based payment expense. (See the accompanying footnotes on pages 46 through 53 for more details):

	<u>Unaudited</u>		
	<u>For the Years Ended December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
Adjusted EBITDA	<u>\$626,288</u>	<u>\$462,539</u>	<u>\$(136,298)</u>

- *2010 vs. 2009:* For the years ended December 31, 2010 and 2009, adjusted EBITDA was \$626,288 and \$462,539, respectively, an increase of 35%, or \$163,749. The increase was primarily due to an increase of 12%, or \$312,195, in revenues, partially offset by an increase of 7%, or \$148,446, in expenses included in adjusted EBITDA. The increase in revenue was primarily due to the increase in our subscriber base and the introduction of the U.S. Music Royalty Fee in the third quarter of 2009, as well as increased advertising and equipment revenue, decreases in discounts on multi-subscription and internet packages, and an increase in the sale of “Best of” programming, partially offset by an increase in the number of subscribers on promotional plans. The increase in expenses was primarily driven by higher subscriber acquisition costs related to the 25% increase in gross additions and higher revenue share and royalties expenses associated with growth in revenues subject to revenue sharing and royalty arrangements.
- *2009 vs. 2008:* For the years ended December 31, 2010 and 2009, adjusted EBITDA was \$462,539 and \$(136,298), respectively, an increase of 439%, or \$598,837. The increase was primarily due to an increase of 4%, or \$89,963, in revenues and a decrease of 20%, or \$508,874, in expenses included in adjusted EBITDA. The increase in revenue was primarily due to an increase in weighted average subscribers as well as decreases in discounts on multi-subscription and internet packages, the introduction of the U.S. Music Royalty Fee in the third quarter of 2009 and the sale of “Best of” programming, partially offset by decreased equipment revenue. The decreases in expenses were primarily driven by lower subscriber acquisition costs, lower sales and marketing discretionary spend, savings in programming and content expenses, and lower legal and consulting costs in general and administrative expenses.

Liquidity and Capital Resources

Cash Flows for the Year Ended December 31, 2010 Compared with the Year Ended December 31, 2009 and Year Ended December 31, 2009 Compared with the Year Ended December 31, 2008

As of December 31, 2010 and 2009, we had \$586,691 and \$383,489, respectively, in cash and cash equivalents. The following table presents a summary of our cash flow activity for the periods set forth below:

	<u>For the Years Ended December 31,</u>			<u>2010 vs. 2009</u>	<u>2009 vs. 2008</u>
	<u>2010</u>	<u>2009</u>	<u>2008</u>		
Net cash provided by (used in) operating activities	\$ 512,895	\$ 433,830	\$(152,797)	\$ 79,065	\$ 586,627
Net cash (used in) provided by investing activities	(302,414)	(248,511)	728,425	(53,903)	(976,936)
Net cash used in financing activities	(7,279)	(182,276)	(634,002)	174,997	451,726
Net increase (decrease) in cash and cash equivalents	203,202	3,043	(58,374)	200,159	61,417
Cash and cash equivalents at beginning of period	383,489	380,446	438,820	3,043	(58,374)
Cash and cash equivalents at end of period	<u>\$ 586,691</u>	<u>\$ 383,489</u>	<u>\$ 380,446</u>	<u>\$ 203,202</u>	<u>\$ 3,043</u>

Cash Flows Provided by (Used in) Operating Activities

Cash provided by operating activities increased by \$79,065, or 18%, to \$512,895 for the year ended December 31, 2010 from \$433,830 for the year ended December 31, 2009. Cash provided by operating activities increased by \$586,627, or 384%, to \$433,830 for the year ended December 31, 2009 from cash used in operating activities of \$152,797 for the year ended December 31, 2008. The primary drivers of our operating cash flow growth have been improvements in profitability and changes in operating assets and liabilities.

- Our net income (loss) was \$43,055, (\$352,038) and (\$5,316,910) for the years ended December 31, 2010, 2009 and 2008, respectively. Our revenue growth has been primarily due to growth in our subscriber revenues which increased by \$126,671, or 6%, and \$738,584, or 48% (including the impact of the Merger), for the years ended December 31, 2010 and 2009, respectively. Included in the net loss for 2008 was a \$4,766,190 charge related to the impairment of goodwill.
- Net non-cash adjustments to net income (loss) were \$357,743, \$566,524 and \$5,142,961 for the years ended December 31, 2010, 2009 and 2008, respectively. Significant components of non-cash expenses, and their impact on cash flows from operating activities, include the following:

	<u>For the Years Ended December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
Depreciation and amortization	\$ 273,691	\$ 309,450	\$ 203,752
Impairment of goodwill	—	—	4,766,190
Restructuring, impairments and related costs	66,731	26,964	—
Loss on extinguishment of debt and credit facilities, net	120,120	267,646	98,203
Share-based payment expense	60,437	73,981	87,405
Other non-cash purchase price adjustments	(250,727)	(202,054)	(68,330)

Depreciation and amortization expense is expected to increase in future periods as we recognize depreciation expense on our recently launched satellite, XM-5, and complete the construction and launch of our FM-6 satellite.

During 2008, we recorded a goodwill impairment charge of \$4,766,190, which reduced the carrying value of goodwill from \$6,601,046 to \$1,834,856. There were no impairment charges recorded in 2010 and 2009.

Included in restructuring, impairments and related costs for the year ended December 31, 2010 are contract termination costs of \$7,361 and a loss on the full impairment of our FM-4 satellite of \$56,100.

Loss on extinguishment of debt and credit facilities, net, includes losses incurred as a result of the conversion and retirement of certain debt instruments. Future charges related to the retirement or conversions of debt are dependent upon many factors, including the conversion price of debt or our ability to refinance or retire specific debt instruments.

Share-based payment expense is expected to increase in future periods as we grant equity awards to our employees and directors. Compensation expense for share-based awards is recorded in the financial statements based on the fair value. The fair value of stock option awards are determined using the Black-Scholes-Merton option-pricing model which is subject to various assumptions including the market price of our stock, estimated forfeiture rates of awards and the volatility of our stock price. The fair value of restricted shares and restricted stock units is based on the market price at date of grant.

Other non-cash purchase price adjustments include liabilities recorded as a result of the Merger related to executory contracts with an OEM and certain programming providers, as well as amortization resulting from changes in the value of deferred revenue as a result of the Merger.

- Changes in operating assets and liabilities contributed \$112,097, \$219,344 and \$21,152 to operating cash flows for the years ended December 31, 2010, 2009 and 2008, respectively. Significant changes in operating assets and liabilities include the growth in deferred revenue, the timing of collections from our customers and distributors and the timing of payments to vendors and related parties. As we continue to grow our subscriber and revenue base, we expect that deferred revenue and amounts due from customers and distributors will continue to increase. Amounts payable to vendors are also expected to increase as our business grows. The timing of payments to vendors and related parties are based on both contractual commitments and the terms and conditions of each of our vendors.

Cash Flows (Used in) Provided by Investing Activities

Cash used for investing activities consists primarily of capital expenditures for property and equipment. Capital expenditures have increased as we have continued to invest in the construction of our satellites and related launch vehicles and improvements in infrastructure to support the growth of our business. We will continue to incur significant costs to construct and launch our new satellites and improve our terrestrial repeater network and broadcast and administrative infrastructure. We have entered into various agreements to design, construct, and launch our satellites in the normal course of business.

Cash Flows Used in Financing Activities

Cash flows used in financing activities have generally been the result of the issuance and repayment of long-term debt and related party debt and cash proceeds from equity issuances. Proceeds from long-term debt, related party debt and equity issuances have been used to fund our operations, construct and launch new satellites and invest in other infrastructure improvements.

Financings and Capital Requirements

We have historically financed our operations through the sale of debt and equity securities. The Certificate of Designations for our Series B Preferred Stock provides that, so long as Liberty Media beneficially owns at least half of its initial equity investment, Liberty Media's consent is required for certain actions, including the grant or issuance of our equity securities and the incurrence of debt (other than, in general, debt incurred to refinance existing debt) in amounts greater than \$10,000 in any calendar year.

Future Liquidity and Capital Resource Requirements

We have entered into various agreements to design, construct, and launch our satellites in the normal course of business. As disclosed in Note 15 in our consolidated financial statements, as of December 31, 2010, we expect to incur capital expenditures of approximately \$120,444 and \$5,481 in 2011 and 2012, respectively, and an additional

\$55,610 over the next five years, the majority of which is attributable to the construction and launch of our FM-6 satellite and related launch vehicle.

Based upon our current plans, we believe that we have sufficient cash, cash equivalents and marketable securities to cover our estimated funding needs. We expect to fund operating expenses, capital expenditures, working capital requirements, interest payments, taxes and scheduled maturities of our debt with existing cash and cash flow from operations, and we believe that we will be able to generate sufficient revenues to meet our cash requirements.

Our ability to meet our debt and other obligations depends on our future operating performance and on economic, financial, competitive and other factors. We continually review our operations for opportunities to adjust the timing of expenditures to ensure that sufficient resources are maintained. Our financial projections are based on assumptions, which we believe are reasonable but contain significant uncertainties.

We regularly evaluate our business plans and strategy. These evaluations often result in changes to our business plans and strategy, some of which may be material and significantly change our cash requirements. These changes in our business plans or strategy may include: the acquisition of unique or compelling programming; the introduction of new features or services; significant new or enhanced distribution arrangements; investments in infrastructure, such as satellites, equipment or radio spectrum; and acquisitions, including acquisitions that are not directly related to our satellite radio business. In addition, our operations are affected by the FCC order approving the Merger, which imposed certain conditions upon, among other things, our program offerings and our ability to increase prices.

Debt Covenants

The indentures governing our debt include restrictive covenants. As of December 31, 2010, we were in compliance with our debt covenants.

For a discussion of our “Debt Covenants”, refer to Note 11 to our consolidated financial statements in Item 8 of this Annual Report on Form 10-K.

Off-Balance Sheet Arrangements

We do not have any significant off-balance sheet arrangements other than those disclosed in Note 15 to our consolidated financial statements in Item 8 of this Annual Report on Form 10-K that are reasonably likely to have a material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

2009 Long-Term Stock Incentive Plan

In May 2009, our stockholders approved the Sirius XM Radio Inc. 2009 Long-Term Stock Incentive Plan (the “2009 Plan”). Employees, consultants and members of our board of directors are eligible to receive awards under the 2009 Plan, which provides for the grant of stock options, restricted stock, restricted stock units and other stock-based awards that the compensation committee of our board of directors may deem appropriate. Vesting and other terms of stock-based awards are set forth in the agreements with the individuals receiving the awards. Stock-based awards granted under the 2009 Plan are generally subject to a vesting requirement. Stock-based awards generally expire ten years from the date of grant. Each restricted stock unit entitles the holder to receive one share of common stock upon vesting. As of December 31, 2010, approximately 268,255,000 shares of common stock were available for future grants under the 2009 Plan.

Other Plans

We maintain four other share-based benefit plans — the XM 2007 Stock Incentive Plan, the Amended and Restated Sirius Satellite Radio 2003 Long-Term Stock Incentive Plan, the XM 1998 Shares Award Plan and the XM Talent Option Plan. No further awards may be made under these plans. Outstanding awards under these plans are being continued.

Contractual Cash Commitments

For a discussion of our “Contractual Cash Commitments,” refer to Note 15 to our consolidated financial statements in Item 8 of this Annual Report on Form 10-K.

Related Party Transactions

For a discussion of “Related Party Transactions,” refer to Note 9 to our consolidated financial statements in Item 8 of this Annual Report on Form 10-K.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP, which require management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods. Accounting estimates require the use of significant management assumptions and judgments as to future events, and the effect of those events cannot be predicted with certainty. The accounting estimates will change as new events occur, more experience is acquired and more information is obtained. We evaluate and update our assumptions and estimates on an ongoing basis and use outside experts to assist in that evaluation when we deem necessary. We have disclosed all significant accounting policies in Note 3 to our consolidated financial statements in Item 8 of this Annual Report on Form 10-K. We have identified the following policies, which were discussed with the audit committee of our board of directors, as critical to our business and understanding of our results of operations.

Fair Value of XM Assets Acquired and Liabilities Assumed. On July 28, 2008, our wholly-owned subsidiary, Vernon Merger Corporation, merged with and into XM Satellite Radio Holdings Inc., with XM Holdings becoming our wholly-owned subsidiary. The application of purchase accounting resulted in the transaction being valued at \$5,836,363 and our recording of goodwill acquired totaling \$6,601,046. During 2008, we recorded an impairment charge of \$4,766,190, which resulted in a carrying value of goodwill of \$1,834,856.

Goodwill. Goodwill represents the excess of the purchase price over the estimated fair value of net tangible and identifiable intangible assets acquired in business combinations. Our annual impairment assessment of our single reporting unit is performed as of October 1st of each year, and an assessment is performed at other times if events or circumstances indicate it is more likely than not that the asset is impaired. Step one of the impairment assessment compares the fair value of the entity to its carrying value and if the fair value exceeds its carrying value, goodwill is not impaired. If the carrying value exceeds the fair value, the implied fair value of goodwill is compared to the carrying value of goodwill. If the implied fair value exceeds the carrying value then goodwill is not impaired; otherwise, an impairment loss will be recorded by the amount the carrying value exceeds the implied fair value. At October 1, 2010 and December 31, 2010, the fair value of our single reporting unit substantially exceeded its carrying value and therefore was not at risk of failing step one of ASC 350-20, *Goodwill* (“ASC 350-20”). As a result, there were no changes in the carrying value of our goodwill during the years ended December 31, 2010 and 2009.

Long-Lived Assets. We carry our long-lived assets at cost less accumulated depreciation. We review our long-lived assets for impairment of our single reporting unit whenever events or changes in circumstances indicate that the carrying amount of an asset is not recoverable. At the time an impairment in the value of a long-lived asset is identified, the impairment is measured as the amount by which the carrying amount of a long-lived asset exceeds its fair value. To determine fair value, we employ an expected present value technique, which utilizes multiple cash flow scenarios that reflect the range of possible outcomes and an appropriate discount rate.

Our annual impairment assessment of our FCC licenses is performed as of October 1st of each year and an assessment is made at other times if events or changes in circumstances indicate that it is more likely than not that the asset is impaired. At October 1, 2010 and December 31, 2010, the fair value of our FCC licenses substantially exceeded the carrying value and therefore was not at risk of impairment.

We use independent appraisals to assist in determining the fair value of our FCC licenses. The income approach, which is commonly called the “Jefferson Pilot Method” or the “Greenfield Method”, has been consistently used to estimate the fair value. This method attempts to isolate the income that is properly attributable

to the license alone (that is, apart from tangible and intangible assets and goodwill). It is based upon modeling a hypothetical "Greenfield" build-up to a normalized enterprise that, by design, lacks inherent goodwill and has essentially purchased (or added) all other assets as part of the build-up process. The methodology assumes that, rather than acquiring such an operation as a going concern, the buyer would hypothetically obtain a license at nominal cost and build a new operation with similar attributes from inception. The significant assumption was that the hypothetical start up entity would begin its network build out phase at the impairment testing date and revenues and variable costs would not be generated until the satellite network was operational, approximately five years from inception.

There were no changes in the carrying value of our indefinite life intangible assets during the years ended December 31, 2010 and 2009.

Useful Life of Broadcast/Transmission System. Our satellite system includes the costs of our satellite construction, launch vehicles, launch insurance, capitalized interest, spare satellite, terrestrial repeater network and satellite uplink facility. We monitor our satellites for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset is not recoverable. The expected useful lives of our four in-orbit SIRIUS satellites were originally 15 years from the date they were placed into orbit. In June 2006, we adjusted the useful lives of two of our in-orbit SIRIUS satellites to 13 years to reflect the unanticipated loss of power from the solar array and the way we operate the constellation. We currently expect our first two in-orbit SIRIUS satellites to operate effectively through 2013, FM-3 to operate effectively through 2015, FM-5 to operate effectively through 2024 and will continue to evaluate the impact of current satellite operational data on the expected useful lives. In December 2010, we recorded an other than temporary charge for FM-4, the ground spare held in storage since 2002. We operate five in-orbit XM satellites, three of which function as in-orbit spares. The three in-orbit spare satellites were launched in 2001 and 2010 while the other two satellites were launched in 2005 and 2006. We estimate that the XM-3, XM-4 and XM-5 satellites will meet their 15 year predicted useful lives, and that the useful lives of XM-1 and XM-2 will end in 2013.

Certain of our in-orbit satellites have experienced circuit failures on their solar arrays. We continue to monitor the operating condition of our in-orbit satellites. If events or circumstances indicate that the useful lives of our in-orbit satellites have changed, we will modify the depreciable life accordingly. If we were to revise our estimates, our depreciation expense would change, for example, a 10% decrease in the expected useful lives of satellites and spacecraft control facilities during 2010 would have resulted in approximately \$23,028 of additional depreciation expense.

Revenue Recognition. We derive revenue primarily from subscribers, advertising and direct sales of merchandise. Revenue from subscribers consists of subscription fees; revenue derived from our agreements with daily rental fleet programs; non-refundable activation and other fees; and the effects of rebates. Revenue is recognized as it is realized or realizable and earned.

We recognize subscription fees as our services are provided. Prepaid subscription fees are recorded as deferred revenue and amortized to revenue ratably over the term of the applicable subscription plan.

At the time of sale, vehicle owners purchasing or leasing a vehicle with a subscription to our service typically receive between a three-month and twelve-month prepaid subscription. Prepaid subscription fees received from certain automakers are recorded as deferred revenue and amortized to revenue ratably over the service period which commences upon retail sale and activation. We reimburse automakers for certain costs associated with the satellite radio installed in the applicable vehicle at the time the vehicle is manufactured. The associated payments to the automakers are included in Subscriber acquisition costs. These payments are included in Subscriber acquisition costs because we are responsible for providing the service to the customers, including being obligated to the customers in the case of an interruption of service.

Activation fees are recognized ratably over the estimated term of a subscriber relationship, estimated to be approximately 3.5 years during 2010. The estimated term of a subscriber relationship is based on historical experience. If we were to revise our estimate our recognition of activation fees would change, for example, a 10% decrease to the estimated term of a subscriber relationship during 2010 would have resulted in approximately \$1,781 of additional activation fees.

We record an estimate of rebates that are paid by us to subscribers as a reduction to revenue in the period the subscriber activates service. For certain rebate promotions, a subscriber must remain active for a specified period of time to be considered eligible. In those instances, the estimate is recorded as a reduction to revenue over the required activation period. We estimate the effects of mail-in rebates based on actual take-rates for rebate incentives offered in prior periods, adjusted as deemed necessary based on take-rate data available at the time. In subsequent periods, estimates are adjusted when necessary. For instant rebate promotions, we record the consideration paid to the consumer as a reduction to revenue in the period the customer participates in the promotion.

We recognize revenue from the sale of advertising as the advertising is broadcast. Agency fees are calculated based on a stated percentage applied to gross billing revenue for our advertising inventory and are reported as a reduction of advertising revenue. We pay certain third parties a percentage of advertising revenue. Advertising revenue is recorded gross of such revenue share payments as we are the primary obligor in the transaction. Advertising revenue share payments are recorded to revenue share and royalties during the period in which the advertising is broadcast.

Equipment revenue and royalties from the sale of satellite radios, components and accessories is recognized upon shipment, net of discounts and rebates. Shipping and handling costs billed to customers are recorded as revenue. Shipping and handling costs associated with shipping goods to customers are reported as a component of cost of equipment.

Revenue arrangements with multiple deliverables are divided into separate units of accounting when the products and services meet certain criteria and consideration is allocated among the separate units of accounting based on their relative fair values.

Share-based Payment. We account for equity instruments granted to employees in accordance with ASC 718, *Compensation — Stock Compensation*. ASC 718 requires all share-based compensation payments to be recognized in the financial statements based on fair value. ASC 718 requires forfeitures to be estimated at the time of grant and revised in subsequent periods if actual forfeitures differ from initial estimates. We use the Black-Scholes-Merton option-pricing model to value stock option awards and have elected to treat awards with graded vesting as a single award. Share-based compensation expense is recognized ratably over the requisite service period, which is generally the vesting period, net of forfeitures. We measure non-vested stock awards using the fair market value of restricted shares of common stock on the day the award is granted.

Fair value as determined using Black-Scholes-Merton model varies based on assumptions used for the expected life, expected stock price volatility and risk-free interest rates. We estimate the fair value of awards granted using the hybrid approach for volatility, which weights observable historical volatility and implied volatility of qualifying actively traded options on our common stock. The expected life assumption represents the weighted-average period stock-based awards are expected to remain outstanding. These expected life assumptions are established through a review of historical exercise behavior of stock-based award grants with similar vesting periods. Where historical patterns do not exist, contractual terms are used. The risk-free interest rate represents the daily treasury yield curve rate at the grant date based on the closing market bid yields on actively traded U.S. treasury securities in the over-the-counter market for the expected term. Our assumptions may change in future periods.

Equity instruments granted to non-employees are accounted for in accordance with ASC 505, *Equity*. The final measurement date for the fair value of equity instruments with performance criteria is the date that each performance commitment for such equity instrument is satisfied or there is a significant disincentive for non-performance.

Stock-based awards granted to employees, non-employees and members of our board of directors include warrants, stock options, restricted stock and restricted stock units.

Income Taxes. Deferred income taxes are recognized for the tax consequences related to temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for tax purposes at each year-end, based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. A valuation allowance is recognized when, based on the weight of all available evidence, it is considered more likely than not that all, or some portion, of the deferred tax assets will not be realized. Income tax expense is the sum of current income tax plus the change in deferred tax assets and liabilities.

Footnotes

- (1) Average self-pay monthly churn represents the monthly average of self-pay deactivations for the quarter divided by the average number of self-pay subscribers for the quarter. Average self-pay churn for the year is the average of the quarterly average self-pay churn.
- (2) We measure the percentage of owners and lessees of new vehicles that receive our service and convert to become self-paying subscribers after the initial promotion period. We refer to this as the “conversion rate.” At the time satellite radio enabled vehicles are sold or leased, the owners or lessees generally receive trial subscriptions ranging from three to twelve months. Promotional periods generally include the period of trial service plus 30 days to handle the receipt and processing of payments. We measure conversion rate three months after the period in which the trial service ends.
- (3) ARPU is derived from total earned subscriber revenue, net advertising revenue and other subscription-related revenue, net of purchase price accounting adjustments, divided by the number of months in the period, divided by the daily weighted average number of subscribers for the period. Other subscription-related revenue includes the U.S. Music Royalty Fee, which was initially charged to subscribers in the third quarter of 2009. Purchase price accounting adjustments include the recognition of deferred subscriber revenues not recognized in purchase price accounting associated with the Merger. ARPU is calculated as follows (in thousands, except for subscriber and per subscriber amounts):

	Unaudited		
	For the Years Ended December 31,		
	2010	2009	2008
Subscriber revenue:			
GAAP	\$ 2,414,174	\$ 2,287,503	\$ 1,548,919
Predecessor financial information	—	—	670,870
Net advertising revenue:			
GAAP	64,517	51,754	47,190
Predecessor financial information	—	—	22,743
Other subscription-related revenue (GAAP)	234,148	48,679	—
Purchase price accounting adjustments	14,655	46,814	38,533
	<u>\$ 2,727,494</u>	<u>\$ 2,434,750</u>	<u>\$ 2,328,255</u>
Daily weighted average number of subscribers	<u>19,385,055</u>	<u>18,529,696</u>	<u>18,373,274</u>
ARPU	<u>\$ 11.73</u>	<u>\$ 10.95</u>	<u>\$ 10.56</u>

- (4) Subscriber acquisition cost, per gross subscriber addition (or SAC, per gross subscriber addition) is derived from subscriber acquisition costs and margins from the direct sale of radios and accessories, excluding share-based payment expense and purchase price accounting adjustments, divided by the number of gross subscriber additions for the period. Purchase price accounting adjustments associated with the Merger include the elimination of the benefit of amortization of deferred credits on executory contracts recognized at the Merger

date attributable to an OEM. SAC, per gross subscriber addition, is calculated as follows (in thousands, except for subscriber and per subscriber amounts):

	Unaudited		
	For the Years Ended December 31,		
	2010	2009	2008
Subscriber acquisition costs:			
GAAP	\$ 413,041	\$ 340,506	\$ 371,343
Predecessor financial information	—	—	174,083
Less: margin from direct sales of radios and accessories:			
GAAP	(36,074)	(10,164)	(9,910)
Predecessor financial information	—	—	6,616
Less: share-based payment expense granted to third parties and employees (GAAP)	—	—	(14)
Add: purchase price accounting adjustments	79,439	61,164	31,714
	<u>\$ 456,406</u>	<u>\$ 391,506</u>	<u>\$ 573,832</u>
Gross subscriber additions	<u>7,768,827</u>	<u>6,208,482</u>	<u>7,710,306</u>
SAC, per gross subscriber addition	<u>\$ 59</u>	<u>\$ 63</u>	<u>\$ 74</u>

(5) Customer service and billing expenses, per average subscriber, is derived from total customer service and billing expenses, excluding share-based payment expense and purchase price accounting adjustments associated with the Merger, divided by the number of months in the period, divided by the daily weighted average number of subscribers for the period. We believe the exclusion of share-based payment expense in our calculation of customer service and billing expenses, per average subscriber, is useful given the significant variation in expense that can result from changes in the fair market value of our common stock, the effect of which is unrelated to the operational conditions that give rise to variations in the components of our customer service and billing expenses. Purchase price accounting adjustments associated with the Merger include the elimination of the benefit associated with incremental share-based payment arrangements recognized at the Merger date. Customer service and billing expenses, per average subscriber, is calculated as follows (in thousands, except for subscriber and per subscriber amounts):

	Unaudited		
	For the Years Ended December 31,		
	2010	2009	2008
Customer service and billing expenses:			
GAAP	\$ 241,680	\$ 234,456	\$ 165,036
Predecessor financial information	—	—	82,947
Less: share-based payment expense, net of purchase price accounting adjustments:			
GAAP	(2,207)	(2,504)	(2,112)
Predecessor financial information	—	—	(1,869)
Add: purchase price accounting adjustments	281	453	193
	<u>\$ 239,754</u>	<u>\$ 232,405</u>	<u>\$ 244,195</u>
Daily weighted average number of subscribers	<u>19,385,055</u>	<u>18,529,696</u>	<u>18,373,274</u>
Customer service and billing expenses, per average subscriber	<u>\$ 1.03</u>	<u>\$ 1.05</u>	<u>\$ 1.11</u>

(6) Free cash flow is calculated as follows (in thousands):

	Unaudited		
	For The Years Ended December 31,		
	2010	2009	2008
Net cash provided by operating activities:			
GAAP	\$ 512,895	\$ 433,830	\$(152,797)
Predecessor financial information	—	—	(251,086)
Additions to property and equipment:			
GAAP	(311,868)	(248,511)	(130,551)
Predecessor financial information			(30,843)
Merger related costs:			
GAAP	—	—	(23,519)
Predecessor financial information	—	—	—
Restricted and other investment activity:			
GAAP	9,454	—	62,974
Predecessor financial information			(25,949)
Free cash flow	<u>\$ 210,481</u>	<u>\$ 185,319</u>	<u>\$(551,771)</u>

(7) EBITDA is defined as net income (loss) before interest and investment income (loss); interest expense, net of amounts capitalized; taxes expense and depreciation and amortization. We adjust EBITDA to remove the impact of other income and expense, loss on extinguishment of debt as well as certain other charges discussed below. This measure is one of the primary Non-GAAP financial measures on which we (i) evaluate the performance of our businesses, (ii) base our internal budgets and (iii) compensate management. Adjusted EBITDA is a Non-GAAP financial performance measure that excludes (if applicable): (i) certain adjustments as a result of the purchase price accounting for the Merger, (ii) goodwill impairment, (iii) restructuring, impairments, and related costs, (iv) depreciation and amortization and (v) share-based payment expense. The purchase price accounting adjustments include: (i) the elimination of deferred revenue associated with the investment in XM Canada, (ii) recognition of deferred subscriber revenues not recognized in purchase price accounting, and (iii) elimination of the benefit of deferred credits on executory contracts, which are primarily attributable to third party arrangements with an OEM and programming providers. We believe adjusted EBITDA is a useful measure of the underlying trend of our operating performance, which provides useful information about our business apart from the costs associated with our physical plant, capital structure and purchase price accounting. We believe investors find this Non-GAAP financial measure useful when analyzing our results and comparing our operating performance to the performance of other communications, entertainment and media companies. We believe investors use current and projected adjusted EBITDA to estimate our current and prospective enterprise value and to make investment decisions. Because we fund and build-out our satellite radio system through the periodic raising and expenditure of large amounts of capital, our results of operations reflect significant charges for depreciation expense. The exclusion of depreciation and amortization expense is useful given significant variation in depreciation and amortization expense that can result from the potential variations in estimated useful lives, all of which can vary widely across different industries or among companies within the same industry. We believe the exclusion of restructuring, impairments and related costs is useful given the nature of these expenses. We also believe the exclusion of share-based payment expense is useful given the significant variation in expense that can result from changes in the fair market value of our common stock.

Adjusted EBITDA has certain limitations in that it does not take into account the impact to our statement of operations of certain expenses, including share-based payment expense and certain purchase price accounting for the Merger. We endeavor to compensate for the limitations of the Non-GAAP measure presented by also providing the comparable GAAP measure with equal or greater prominence and descriptions of the reconciling items, including quantifying such items, to derive the Non-GAAP measure. Investors that wish to compare and evaluate our operating results after giving effect for these costs, should refer to net income (loss) as disclosed in our consolidated statements of operations. Since adjusted EBITDA is a Non-GAAP financial performance

measure, our calculation of adjusted EBITDA may be susceptible to varying calculations; may not be comparable to other similarly titled measures of other companies; and should not be considered in isolation, as a substitute for, or superior to measures of financial performance prepared in accordance with GAAP. The reconciliation of net income (loss) to the adjusted EBITDA is calculated as follows (in thousands):

	Unaudited		
	For the Years Ended December 31,		
	2010	2009	2008
Net income (loss) (GAAP):	\$ 43,055	\$(352,038)	\$(5,316,910)
Predecessor financial information:			
Revenues (see page 52)	—	—	731,194
Operating expenses (see page 52)	—	—	(961,663)
Add back items excluded from Adjusted EBITDA:			
Purchase price accounting adjustments:			
Revenues (see pages 50-52)	21,906	54,065	41,554
Operating expenses (see pages 50-52)	(261,832)	(240,891)	4,661,812
Share-based payment expense, net of purchase price accounting adjustments:			
GAAP	63,309	78,782	90,134
Predecessor financial information (see page 52)	—	—	34,485
Depreciation and amortization:			
GAAP	273,691	309,450	203,752
Predecessor financial information (see page 52)	—	—	88,749
Restructuring, impairments and related costs (GAAP)	63,800	32,807	10,434
Interest expense, net of amounts capitalized (GAAP)	295,643	315,668	148,455
Loss on extinguishment of debt and credit facilities, net (GAAP)	120,120	267,646	98,203
Interest and investment (income) loss (GAAP)	5,375	(5,576)	21,428
Other (income) loss (GAAP)	(3,399)	(3,355)	9,599
Income tax expense (GAAP)	4,620	5,981	2,476
Adjusted EBITDA	<u>\$ 626,288</u>	<u>\$ 462,539</u>	<u>\$ (136,298)</u>

(8) The following tables reconcile our actual revenues and operating expenses to our adjusted revenues and operating expenses for the years ended December 31, 2010, 2009 and 2008:

(In thousands)	Unaudited for the Year Ended December 31, 2010			
	As Reported	Purchase Price Accounting Adjustments	Allocation of Share-Based Payment Expense	Adjusted
Revenue:				
Subscriber revenue, including effects of rebates	\$2,414,174	\$ 14,655	\$ —	\$2,428,829
Advertising revenue, net of agency fees	64,517	—	—	64,517
Equipment revenue	71,355	—	—	71,355
Other revenue	266,946	7,251	—	274,197
Total revenue	\$2,816,992	\$ 21,906	\$ —	\$2,838,898
Operating expenses				
Cost of services:				
Revenue share and royalties	435,410	107,967	—	543,377
Programming and content	305,914	57,566	(10,267)	353,213
Customer service and billing	241,680	281	(2,207)	239,754
Satellite and transmission	80,947	1,170	(3,397)	78,720
Cost of equipment	35,281	—	—	35,281
Subscriber acquisition costs	413,041	79,439	—	492,480
Sales and marketing	215,454	13,983	(9,423)	220,014
Engineering, design and development	45,390	520	(5,868)	40,042
General and administrative	240,970	906	(32,147)	209,729
Depreciation and amortization(a)	273,691	—	—	273,691
Restructuring, impairments and related costs	63,800	—	—	63,800
Share-based payment expense(b)	—	—	63,309	63,309
Total operating expenses	\$2,351,578	\$ 261,832	\$ —	\$2,613,410

(a) Purchase price accounting adjustments included above exclude the incremental depreciation and amortization associated with the \$785,000 stepped up basis in property, equipment and intangible assets as a result of the Merger. The increased depreciation and amortization for the year ended December 31, 2010 was \$68,000.

(b) Amounts related to share-based payment expense included in operating expenses were as follows:

Programming and content	\$ 9,817	\$ 450	\$ —	\$ 10,267
Customer service and billing	1,926	281	—	2,207
Satellite and transmission	3,109	288	—	3,397
Sales and marketing	8,996	427	—	9,423
Engineering, design and development	5,348	520	—	5,868
General and administrative	31,241	906	—	32,147
Total share-based payment expense	\$60,437	\$ 2,872	\$ —	\$ 63,309

Unaudited for the Year Ended December 31, 2009

(In thousands)	<u>As Reported</u>	<u>Purchase Price Accounting Adjustments</u>	<u>Allocation of Share-Based Payment Expense</u>	<u>Adjusted</u>
Revenue:				
Subscriber revenue, including effects of rebates	\$2,287,503	\$ 46,814	\$ —	\$2,334,317
Advertising revenue, net of agency fees	51,754	—	—	51,754
Equipment revenue	50,352	—	—	50,352
Other revenue	83,029	7,251	—	90,280
Total revenue	<u>\$2,472,638</u>	<u>\$ 54,065</u>	<u>\$ —</u>	<u>\$2,526,703</u>
Operating expenses				
Cost of services:				
Revenue share and royalties	397,210	89,780	—	486,990
Programming and content	308,121	72,069	(9,720)	370,470
Customer service and billing	234,456	453	(2,504)	232,405
Satellite and transmission	84,033	1,339	(3,202)	82,170
Cost of equipment	40,188	—	—	40,188
Subscriber acquisition costs	340,506	61,164	—	401,670
Sales and marketing	228,956	13,507	(10,264)	232,199
Engineering, design and development	41,031	977	(5,856)	36,152
General and administrative	227,554	1,602	(47,236)	181,920
Depreciation and amortization(a)	309,450	—	—	309,450
Restructuring, impairments and related costs	32,807	—	—	32,807
Share-based payment expense(b)	—	—	78,782	78,782
Total operating expenses	<u>\$2,244,312</u>	<u>\$ 240,891</u>	<u>\$ —</u>	<u>\$2,485,203</u>

(a) Purchase price accounting adjustments included above exclude the incremental depreciation and amortization associated with the \$785,000 stepped up basis in property, equipment and intangible assets as a result of the Merger. The increased depreciation and amortization for the year ended December 31, 2009 was \$106,000.

(b) Amounts related to share-based payment expense included in operating expenses were as follows:

Programming and content	\$ 9,064	\$ 656	\$ —	\$ 9,720
Customer service and billing	2,051	453	—	2,504
Satellite and transmission	2,745	457	—	3,202
Sales and marketing	9,608	656	—	10,264
Engineering, design and development	4,879	977	—	5,856
General and administrative	45,634	1,602	—	47,236
Total share-based payment expense	<u>\$73,981</u>	<u>\$ 4,801</u>	<u>\$ —</u>	<u>\$ 78,782</u>

Unaudited for the Year Ended December 31, 2008

(In thousands)	<u>As Reported</u>	<u>Predecessor Financial Information</u>	<u>Purchase Price Accounting Adjustments</u>	<u>Allocation of Share-Based Payment Expense</u>	<u>Adjusted</u>
Revenue:					
Subscriber revenue, including effects of rebates	\$1,548,919	\$ 670,870	\$ 38,533	\$ —	\$2,258,322
Advertising revenue, net of agency fees	47,190	22,743	—	—	69,933
Equipment revenue	56,001	13,397	—	—	69,398
Other revenue	11,882	24,184	3,021	—	39,087
Total revenue	<u>\$1,663,992</u>	<u>\$ 731,194</u>	<u>\$ 41,554</u>	<u>\$ —</u>	<u>\$2,436,740</u>
Operating expenses					
Cost of services:					
Revenue share and royalties	280,852	166,606	30,504	—	477,962
Programming and content	312,189	117,156	34,667	(17,374)	446,638
Customer service and billing	165,036	82,947	193	(3,981)	244,195
Satellite and transmission	59,279	46,566	424	(7,084)	99,185
Cost of equipment	46,091	20,013	—	—	66,104
Subscriber acquisition costs	371,343	174,083	31,714	(14)	577,126
Sales and marketing	231,937	126,054	5,393	(21,088)	342,296
Engineering, design and development	40,496	23,045	400	(11,441)	52,500
General and administrative	213,142	116,444	1,083	(63,637)	267,032
Impairment of goodwill	4,766,190	—	(4,766,190)	—	—
Depreciation and amortization(a)	203,752	88,749	—	—	292,501
Restructuring, impairments and related costs	10,434	—	—	—	10,434
Share-based payment expense(b)	—	—	—	124,619	124,619
Total operating expenses	<u>\$6,700,741</u>	<u>\$ 961,663</u>	<u>\$ (4,661,812)</u>	<u>\$ —</u>	<u>\$3,000,592</u>

(a) Purchase price accounting adjustments included above exclude the incremental depreciation and amortization associated with the \$785,000 stepped up basis in property, equipment and intangible assets as a result of the Merger. The increased depreciation and amortization for the year ended December 31, 2008 was \$47,000.

(b) Amounts related to share-based payment expense included in operating expenses were as follows:

Programming and content	\$12,148	\$ 4,949	\$ 277	\$ —	\$ 17,374
Customer service and billing	1,920	1,869	192	—	3,981
Satellite and transmission	4,236	2,745	103	—	7,084
Subscriber acquisition costs	14	—	—	—	14
Sales and marketing	13,541	7,047	500	—	21,088
Engineering, design and development	6,192	4,675	574	—	11,441
General and administrative	49,354	13,200	1,083	—	63,637
Total share-based payment expense	<u>\$87,405</u>	<u>\$ 34,485</u>	<u>\$ 2,729</u>	<u>\$ —</u>	<u>\$124,619</u>

(9) The following table reconciles our GAAP Net cash provided by operating activities to our Net income plus non-cash operating activities (in thousands):

	For the Years Ended December 31,		
	2010	2009	2008
Net cash provided by operating activities:			
GAAP	\$ 512,895	\$ 433,830	\$(152,797)
Predecessor financial information	—	—	(251,086)
Less: Changes in operating assets and liabilities, net:			
GAAP	(112,097)	(219,344)	(21,152)
Predecessor financial information	—	—	83,513
Net income plus non cash operating activities	<u>\$ 400,798</u>	<u>\$ 214,486</u>	<u>\$(341,522)</u>

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISKS

As of December 31, 2010, we did not have any derivative financial instruments. We do not hold or issue any free-standing derivatives. We hold investments in marketable securities consisting of money market funds, and we also hold certificates of deposit and investments in debt and equity securities of other entities. We classify our investments in marketable securities as available-for-sale. These securities are consistent with the investment objectives contained within our investment policy. The basic objectives of our investment policy are the preservation of capital, maintaining sufficient liquidity to meet operating requirements and maximizing yield.

Our debt includes fixed rate instruments and the fair market value of our debt is sensitive to changes in interest rates. Under our current policies, we do not use interest rate derivative instruments to manage our exposure to interest rate fluctuations.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See Index to Consolidated Financial Statements contained in Item 15 herein.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Controls and Procedures

As of December 31, 2010, an evaluation was performed under the supervision and with the participation of our management, including Mel Karmazin, our Chief Executive Officer, and David J. Frear, our Executive Vice President and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as that term is defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act). Based on that evaluation, our management, including our Chief Executive Officer and our Chief Financial Officer, concluded that our disclosure controls and procedures were effective as of December 31, 2010. There has been no change in our internal control over financial reporting (as that term is defined in Rule 13a-15(f) and 15d-15(f) under the Securities Exchange Act) during the quarter ended December 31, 2010 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management’s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. We have performed an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of our internal control over financial reporting. Our management used the

framework in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations to perform this evaluation. Based on that evaluation, our management, including our Chief Executive Officer and Chief Financial Officer, concluded that our internal control over financial reporting was effective as of December 31, 2010.

Audit Report of the Independent Registered Public Accounting Firm

The effectiveness of our internal control over financial reporting as of December 31, 2010 has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their audit report appearing on page F-2 of this Annual Report on Form 10-K.

ITEM 9B. *OTHER INFORMATION*

None.

PART III

ITEM 10. *DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE*

The information required by this Item 10 is incorporated in this report by reference to the applicable information in our definitive proxy statement for the 2011 annual meeting of stockholders set forth under the captions Stock Ownership, Governance of the Company and Executive Compensation, which we expect to file with the Securities and Exchange Commission prior to April 30, 2011.

Code of Ethics

We have adopted a code of ethics that applies to all employees, including executive officers, and to directors. The Code of Ethics is available on the Corporate Governance page of our website at www.siriusxm.com. If we ever were to amend or waive any provision of our Code of Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or any person performing similar functions, we intend to satisfy our disclosure obligations with respect to any such waiver or amendment by posting such information on our internet website set forth above rather than filing a Form 8-K.

ITEM 11. *EXECUTIVE COMPENSATION*

The information required by this Item 11 is incorporated in this report by reference to the applicable information in our definitive proxy statement for the 2011 annual meeting of stockholders set forth under the caption Executive Compensation, which we expect to file with the Securities and Exchange Commission prior to April 30, 2011.

ITEM 12. *SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS*

Certain information required by this item is set forth under the heading "Equity Compensation Plan Information" in Part II, Item 5, of this report.

The additional information required by this Item 12 is incorporated in this report by reference to the applicable information in our definitive proxy statement for the 2011 annual meeting of stockholders set forth under the caption Stock Ownership and Governance of the Company, which we expect to file with the Securities and Exchange Commission prior to April 30, 2011.

ITEM 13. *CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE*

The information required by this Item 13 is incorporated in this report by reference to the applicable information in our definitive proxy statement for the 2011 annual meeting of stockholders set forth under the captions Governance of the Company and Executive Compensation, which we expect to file with the Securities and Exchange Commission prior to April 30, 2011.

ITEM 14. *PRINCIPAL ACCOUNTANT FEES AND SERVICES*

The information required by this Item 14 is incorporated in this report by reference to the applicable information in our definitive proxy statement for the 2011 annual meeting of stockholders set forth under the caption Principal Accountant Fees and Services, which we expect to file with the Securities and Exchange Commission prior to April 30, 2011.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

Documents filed as part of this report:

- (1) Financial Statements. See Index to Consolidated Financial Statements appearing on page F-1.
- (2) Financial Statement Schedules. See Index to Consolidated Financial Statements appearing on page F-1.
- (3) Exhibits.

See Exhibit Index appearing on pages E-1 through E-5 for a list of exhibits filed or incorporated by reference as part of this Annual Report on Form 10-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on this 16th day of February 2011.

SIRIUS XM RADIO INC.

By: /s/ DAVID J. FREAR

David J. Frear
Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ EDDY W. HARTENSTEIN</u> (Eddy W. Hartenstein)	Chairman of the Board of Directors and Director	February 16, 2011
<u>/s/ MEL KARMAZIN</u> (Mel Karmazin)	Chief Executive Officer and Director (Principal Executive Officer)	February 16, 2011
<u>/s/ DAVID J. FREAR</u> (David J. Frear)	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 16, 2011
<u>/s/ THOMAS D. BARRY</u> (Thomas D. Barry)	Senior Vice President and Controller (Principal Accounting Officer)	February 16, 2011
<u>/s/ JOAN L. AMBLE</u> (Joan L. Amble)	Director	February 16, 2011
<u>/s/ LEON D. BLACK</u> (Leon D. Black)	Director	February 16, 2011
<u>/s/ DAVID A. FLOWERS</u> (David A. Flowers)	Director	February 16, 2011
<u>/s/ LAWRENCE F. GILBERTI</u> (Lawrence F. Gilberti)	Director	February 16, 2011
<u>/s/ JAMES P. HOLDEN</u> (James P. Holden)	Director	February 16, 2011
<u>/s/ GREGORY B. MAFFEI</u> (Gregory B. Maffei)	Director	February 16, 2011
<u>/s/ JOHN C. MALONE</u> (John C. Malone)	Director	February 16, 2011

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ JAMES F. MOONEY</u> (James F. Mooney)	Director	February 16, 2011
<u>/s/ JACK SHAW</u> (Jack Shaw)	Director	February 16, 2011

SIRIUS XM RADIO INC. AND SUBSIDIARIES
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Sirius XM Radio Inc. and subsidiaries:

We have audited the accompanying consolidated balance sheets of Sirius XM Radio Inc. and subsidiaries as of December 31, 2010 and 2009, and the related consolidated statements of operations, stockholders' equity (deficit) and comprehensive income (loss), and cash flows for each of the years in the three-year period ended December 31, 2010. In connection with our audits of the consolidated financial statements, we also have audited the financial statement schedule listed in Item 15(2). These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Sirius XM Radio Inc. and subsidiaries as of December 31, 2010 and 2009, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2010, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Sirius XM Radio Inc. and subsidiaries' internal control over financial reporting as of December 31, 2010, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 16, 2011 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

As discussed in Note 3 to the consolidated financial statements, Sirius XM Radio Inc. changed its method of accounting for share lending arrangements on January 1, 2010.

/s/ KPMG LLP

New York, New York
February 16, 2011

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Sirius XM Radio Inc. and subsidiaries:

We have audited Sirius XM Radio Inc. and subsidiaries' internal control over financial reporting as of December 31, 2010, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Sirius XM Radio Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Report on Internal Control over Financial Reporting*. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Sirius XM Radio Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Sirius XM Radio Inc. and subsidiaries as of December 31, 2010 and 2009, and the related consolidated statements of operations, stockholders' equity (deficit) and comprehensive income (loss), and cash flows for each of the years in the three-year period ended December 31, 2010, and our report dated February 16, 2011 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

New York, New York
February 16, 2011

SIRIUS XM RADIO INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

	<u>For the Years Ended December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
(In thousands, except per share data)			
Revenue:			
Subscriber revenue	\$2,414,174	\$2,287,503	\$ 1,548,919
Advertising revenue, net of agency fees	64,517	51,754	47,190
Equipment revenue	71,355	50,352	56,001
Other revenue	266,946	83,029	11,882
Total revenue	2,816,992	2,472,638	1,663,992
Operating expenses:			
Cost of services:			
Revenue share and royalties	435,410	397,210	280,852
Programming and content	305,914	308,121	312,189
Customer service and billing	241,680	234,456	165,036
Satellite and transmission	80,947	84,033	59,279
Cost of equipment	35,281	40,188	46,091
Subscriber acquisition costs	413,041	340,506	371,343
Sales and marketing	215,454	228,956	231,937
Engineering, design and development	45,390	41,031	40,496
General and administrative	240,970	227,554	213,142
Impairment of goodwill	—	—	4,766,190
Depreciation and amortization	273,691	309,450	203,752
Restructuring, impairments and related costs	63,800	32,807	10,434
Total operating expenses	2,351,578	2,244,312	6,700,741
Income (loss) from operations	465,414	228,326	(5,036,749)
Other income (expense):			
Interest expense, net of amounts capitalized	(295,643)	(315,668)	(148,455)
Loss on extinguishment of debt and credit facilities, net	(120,120)	(267,646)	(98,203)
Interest and investment (loss) income	(5,375)	5,576	(21,428)
Other income (loss)	3,399	3,355	(9,599)
Total other expense	(417,739)	(574,383)	(277,685)
Income (loss) before income taxes	47,675	(346,057)	(5,314,434)
Income tax expense	(4,620)	(5,981)	(2,476)
Net income (loss)	43,055	(352,038)	(5,316,910)
Preferred stock beneficial conversion feature	—	(186,188)	—
Net income (loss) attributable to common stockholders	\$ 43,055	\$ (538,226)	\$(5,316,910)
Net income (loss) per common share:			
Basic	\$ 0.01	\$ (0.15)	\$ (2.45)
Diluted	\$ 0.01	\$ (0.15)	\$ (2.45)
Weighted average common shares outstanding:			
Basic	3,693,259	3,585,864	2,169,489
Diluted	6,391,071	3,585,864	2,169,489

See accompanying notes to the consolidated financial statements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share data)	As of December 31,	
	2010	2009
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 586,691	\$ 383,489
Accounts receivable, net	121,658	113,580
Receivables from distributors	67,576	48,738
Inventory, net	21,918	16,193
Prepaid expenses	134,994	100,273
Related party current assets	6,719	106,247
Deferred tax asset	44,787	72,640
Other current assets	7,432	18,620
Total current assets	991,775	859,780
Property and equipment, net	1,761,274	1,711,003
Long-term restricted investments	3,396	3,400
Deferred financing fees, net	54,135	66,407
Intangible assets, net	2,629,200	2,695,115
Goodwill	1,834,856	1,834,856
Related party long-term assets	30,162	111,767
Other long-term assets	78,288	39,878
Total assets	\$ 7,383,086	\$ 7,322,206
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	\$ 593,174	\$ 543,686
Accrued interest	72,453	74,566
Current portion of deferred revenue	1,201,346	1,083,430
Current portion of deferred credit on executory contracts	271,076	252,831
Current maturities of long-term debt	195,815	13,882
Related party current liabilities	15,845	108,246
Total current liabilities	2,349,709	2,076,641
Deferred revenue	273,973	255,149
Deferred credit on executory contracts	508,012	784,078
Long-term debt	2,695,856	2,799,702
Long-term related party debt	325,907	263,579
Deferred tax liability	914,637	940,182
Related party long-term liabilities	24,517	46,301
Other long-term liabilities	82,839	61,052
Total liabilities	7,175,450	7,226,684
Commitments and contingencies (Note 15)		
Stockholders' equity:		
Preferred stock, par value \$0.001; 50,000,000 authorized at December 31, 2010 and 2009:		
Series A convertible preferred stock (liquidation preference of \$0 at December 31, 2010 and \$51,370 at December 31, 2009); no shares issued and outstanding at December 31, 2010 and 24,808,959 shares issued and outstanding at December 31, 2009	—	25
Convertible perpetual preferred stock, series B (liquidation preference of \$13 at December 31, 2010 and 2009); 12,500,000 shares issued and outstanding at December 31, 2010 and 2009	13	13
Convertible preferred stock, series C junior; no shares issued and outstanding at December 31, 2010 and 2009, respectively	—	—
Common stock, par value \$0.001; 9,000,000,000 shares authorized at December 31, 2010 and 2009; 3,933,195,112 and 3,882,659,087 shares issued and outstanding at December 31, 2010 and 2009, respectively	3,933	3,882
Accumulated other comprehensive loss, net of tax	(5,861)	(6,581)
Additional paid-in capital	10,420,604	10,352,291
Accumulated deficit	(10,211,053)	(10,254,108)
Total stockholders' equity	207,636	95,522
Total liabilities and stockholders' equity	\$ 7,383,086	\$ 7,322,206

See accompanying notes to the consolidated financial statements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
AND COMPREHENSIVE INCOME (LOSS)

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock		Accumulated Other Comprehensive Loss	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount				
(In thousands, except share and per share data)										
Balance at January 1, 2008	—	\$ —	—	\$ —	1,471,143,570	\$ 1,471	\$ —	\$ 3,604,764	\$ (4,398,972)	\$ (792,737)
Net loss	—	—	—	—	—	—	—	—	(5,316,910)	(5,316,910)
Other comprehensive loss:										
Unrealized loss on available-for-sale securities	—	—	—	—	—	—	(1,040)	—	—	(1,040)
Foreign currency translation adjustment, net of tax of \$137	—	—	—	—	—	—	(6,831)	—	—	(6,831)
Total comprehensive loss										(5,324,781)
Common stock issued to XM Satellite Radio Holdings stockholders	—	—	—	—	1,440,858,219	1,441	—	5,459,412	—	5,460,853
Restricted common stock issued to XM Satellite Radio Holdings stockholders	—	—	—	—	29,739,201	30	—	66,598	—	66,628
Issuance of common stock to employees and employee benefit plans, net of forfeitures	—	—	—	—	5,091,274	5	—	10,841	—	10,846
Issuance of common stock under share borrow agreements	—	—	—	—	262,399,983	262	—	—	—	262
Series A convertible preferred stock issued to XM Satellite Radio Holdings stockholders	24,808,959	25	—	—	—	—	—	47,070	—	47,095
Compensation in connection with the issuance of stock-based awards	—	—	—	—	—	—	—	83,610	—	83,610
Conversion of XM Satellite Radio Holdings vested stock-based awards	—	—	—	—	—	—	—	94,616	—	94,616
Conversion of XM Satellite Radio Holdings outstanding warrants	—	—	—	—	—	—	—	115,784	—	115,784
Exercise of options	—	—	—	—	117,442	—	—	208	—	208
Exercise of warrants	—	—	—	—	899,836	1	—	(1)	—	—
Exercise of XM Satellite Radio Holdings outstanding warrants	—	—	—	—	17,173,644	17	—	(17)	—	—
Exchange of 3.5% Convertible Notes due 2008, including accrued interest	—	—	—	—	24,131,155	24	—	33,478	—	33,502
Exchange of 2.5% Convertible Notes due 2009, including accrued interest	—	—	—	—	400,211,513	401	—	208,712	—	209,113
Restricted shares withheld for taxes upon vesting	—	—	—	—	—	—	—	(84)	—	(84)
Adoption of ASU 2009-15 (Refer to Note 3)	—	—	—	—	—	—	—	70,960	—	70,960
Balance at December 31, 2008	24,808,959	\$ 25	—	\$ —	3,651,765,837	\$ 3,652	\$ (7,871)	\$ 9,795,951	\$ (9,715,882)	\$ 75,875
Net loss	—	—	—	—	—	—	—	—	(352,038)	(352,038)
Other comprehensive loss:										
Unrealized gain on available-for-sale securities	—	—	—	—	—	—	473	—	—	473
Foreign currency translation adjustment, net of tax of \$110	—	—	—	—	—	—	817	—	—	817
Total comprehensive loss										(350,748)
Issuance of preferred stock — related party, net of issuance costs	—	—	12,500,000	13	—	—	—	410,179	(186,188)	224,004
Issuance of common stock to employees and employee benefit plans, net of forfeitures	—	—	—	—	8,511,009	8	—	2,622	—	2,630
Structuring fee on 10% Senior PIK Secured Notes due 2011	—	—	—	—	59,178,819	59	—	5,859	—	5,918
Share-based payment expense	—	—	—	—	—	—	—	71,388	—	71,388
Returned shares under share borrow agreements	—	—	—	—	(60,000,000)	(60)	—	60	—	—
Issuance of restricted stock units in satisfaction of accrued compensation	—	—	—	—	83,803,422	84	—	31,207	—	31,291
Exchange of 2.5% Convertible Notes due 2009, including accrued interest	—	—	—	—	139,400,000	139	—	35,025	—	35,164
Balance at December 31, 2009	24,808,959	\$ 25	12,500,000	\$ 13	3,882,659,087	\$ 3,882	\$ (6,581)	\$10,352,291	\$ (10,254,108)	\$ 95,522

See accompanying notes to the consolidated financial statements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
AND COMPREHENSIVE INCOME (LOSS)

	Series A Convertible Preferred Stock		Convertible Perpetual Preferred Stock, Series B		Common Stock		Accumulated Other Comprehensive Loss	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount				
(In thousands, except share and per share data)										
Balance at December 31, 2009	24,808,959	\$ 25	12,500,000	\$ 13	3,882,659,087	\$ 3,882	(6,581)	\$10,352,291	\$ (10,254,108)	\$ 95,522
Net income									43,055	43,055
Other comprehensive income:										
Unrealized gain on available-for-sale securities	—	—	—	—	—	—	469	—	—	469
Foreign currency translation adjustment, net of tax of \$63	—	—	—	—	—	—	251	—	—	251
Total comprehensive income	—	—	—	—	—	—	—	—	—	43,775
Issuance of common stock to employees and employee benefit plans, net of forfeitures	—	—	—	—	6,175,089	6	—	5,265	—	5,271
Share-based payment expense	—	—	—	—	—	—	—	52,229	—	52,229
Exercise of options and vesting of restricted stock units	—	—	—	—	19,551,977	20	—	10,819	—	10,839
Conversion of preferred stock to common stock	(24,808,959)	(25)	—	—	24,808,959	25	—	—	—	—
Balance at December 31, 2010	—	\$ —	12,500,000	\$ 13	3,933,195,112	\$ 3,933	(5,861)	\$10,420,604	\$ (10,211,053)	\$ 207,636

See accompanying notes to the consolidated financial statements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
	2010	2009	2008
(In thousands)			
Cash flows from operating activities:			
Net income (loss)	\$ 43,055	\$(352,038)	\$(5,316,910)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	273,691	309,450	203,752
Impairment of goodwill	—	—	4,766,190
Non-cash interest expense, net of amortization of premium	42,841	43,066	(2,689)
Provision for doubtful accounts	32,379	30,602	21,589
Restructuring, impairments and related costs	66,731	26,964	—
Amortization of deferred income related to equity method investment	(2,776)	(2,776)	(1,156)
Loss on extinguishment of debt and credit facilities, net	120,120	267,646	98,203
Loss on investments, net	11,722	13,664	28,999
Loss on disposal of assets	1,017	—	4,879
Share-based payment expense	60,437	73,981	87,405
Deferred income taxes	2,308	5,981	2,476
Other non-cash purchase price adjustments	(250,727)	(202,054)	(68,330)
Other	—	—	1,643
Changes in operating assets and liabilities:			
Accounts receivable	(39,236)	(42,158)	(32,121)
Receivables from distributors	(11,023)	(2,788)	14,401
Inventory	(5,725)	8,269	8,291
Related party assets	(9,803)	15,305	(22,249)
Prepaid expenses and other current assets	75,374	10,027	(19,953)
Other long-term assets	17,671	86,674	(5,490)
Accounts payable and accrued expenses	5,420	(46,645)	(83,037)
Accrued interest	(884)	2,429	23,081
Deferred revenue	133,444	93,578	79,090
Related party liabilities	(53,413)	50,172	28,890
Other long-term liabilities	272	44,481	30,249
Net cash provided by (used in) operating activities	<u>512,895</u>	<u>433,830</u>	<u>(152,797)</u>
Cash flows from investing activities:			
Additions to property and equipment	(311,868)	(248,511)	(130,551)
Sales of property and equipment	—	—	105
Purchases of restricted and other investments	—	—	(3,000)
Acquisition of acquired entity cash	—	—	819,521
Merger related costs	—	—	(23,519)
Sale of restricted and other investments	9,454	—	65,869
Net cash (used in) provided by investing activities	<u>(302,414)</u>	<u>(248,511)</u>	<u>728,425</u>
Cash flows from financing activities:			
Proceeds from exercise of warrants and stock options	10,839	—	471
Preferred stock issuance, net of costs	—	(3,712)	—
Long-term borrowings, net of costs	1,274,707	582,612	531,743
Related party long-term borrowings, net of costs	196,118	362,593	—
Payment of premiums on redemption of debt	(84,326)	(17,075)	(18,693)
Payments to noncontrolling interest	—	—	(61,880)
Repayment of long-term borrowings	(1,262,396)	(755,447)	(1,085,643)
Repayment of related party long-term borrowings	(142,221)	(351,247)	—
Net cash used in financing activities	<u>(7,279)</u>	<u>(182,276)</u>	<u>(634,002)</u>
Net increase (decrease) in cash and cash equivalents	203,202	3,043	(58,374)
Cash and cash equivalents at beginning of period	383,489	380,446	438,820
Cash and cash equivalents at end of period	<u>\$ 586,691</u>	<u>\$ 383,489</u>	<u>\$ 380,446</u>

See accompanying notes to the consolidated financial statements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)

	For the Years Ended		
	December 31,		
	2010	2009	2008
(In thousands)			
Supplemental Disclosure of Cash and Non-Cash Flow Information			
Cash paid during the period for:			
Interest, net of amounts capitalized	\$241,160	\$257,328	\$ 137,542
Non-cash investing and financing activities:			
Share-based payments in satisfaction of accrued compensation	—	31,291	8,729
Common stock issued in exchange of 3.5% Convertible Notes due 2008, including accrued interest	—	—	33,502
Common stock issued in exchange of 2.5% Convertible Notes due 2009, including accrued interest	—	18,000	209,113
Structuring fee on 10% Senior PIK Secured Notes due 2011	—	5,918	—
Preferred stock issued to Liberty Media	—	227,716	—
Release of restricted investments	—	137,850	—
Equity issued in the acquisition of XM	—	—	5,784,976
In-orbit satellite performance incentives	21,450	14,905	—
Sale-leaseback of equipment	5,305	—	—
Conversion of Series A preferred stock to common stock	25	—	—

See accompanying notes to the consolidated financial statements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Dollar amounts in thousands, unless otherwise stated)

(1) Business

We broadcast our music, sports, news, talk, entertainment, traffic and weather channels in the United States on a subscription fee basis through our two proprietary satellite radio systems. Subscribers can also receive certain of our music and other channels over the Internet, including through applications for Apple, Blackberry and Android-powered mobile devices.

Our primary source of revenue is subscription fees, with most of our customers subscribing on an annual, semi-annual, quarterly or monthly basis. We offer discounts for prepaid and long-term subscription plans as well as discounts for multiple subscriptions on each platform. We also derive revenue from activation and other fees, the sale of advertising on select non-music channels, the direct sale of satellite radios and accessories, and other ancillary services, such as our weather, traffic, data and Backseat TV services.

Our satellite radios are primarily distributed through automakers (“OEMs”); nationwide through retail locations; and through our websites. We have agreements with every major automaker to offer satellite radios as factory or dealer-installed equipment in their vehicles. Satellite radios are also offered to customers of rental car companies.

(2) Principles of Consolidation and Basis of Presentation

Principles of Consolidation

The accompanying consolidated financial statements of Sirius XM Radio Inc. and subsidiaries have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). All significant intercompany transactions have been eliminated in consolidation.

Basis of Presentation

In the opinion of management, all normal recurring adjustments necessary for a fair presentation of our consolidated financial statements as of December 31, 2010 and 2009, and for the years ended December 31, 2010, 2009 and 2008 have been made.

Although the effective date of the Merger was July 28, 2008, due to the immateriality of the results of operations for the period between July 28 and July 31, 2008, we have accounted for the Merger as if it had occurred on July 31, 2008 with the results and balances of XM Holdings included as of July 31, 2008. We accounted for the Merger as an acquisition of XM Holdings under the purchase method of accounting for business combinations. The acquisition cost approximated \$5,836,363, including transaction costs, and was allocated to the underlying net assets acquired, based on the respective estimated fair values. This allocation included intangible assets, such as FCC licenses, customer relationships, license agreements and trademarks. The excess of the purchase price over the estimated fair values of the net assets acquired was recorded as goodwill. Because the Merger was consummated on July 28, 2008, the accompanying financial statements and notes for periods prior to that date reflect only the financial results of Sirius Satellite Radio Inc., as predecessor to Sirius XM Radio Inc., and are therefore not comparable to our financial results for 2010, 2009 and the fourth quarter of 2008.

We have evaluated events subsequent to the balance sheet date and prior to the filing of this Annual Report on Form 10-K for the year ended December 31, 2010 and have determined no events have occurred that would require adjustment to our consolidated financial statements. For a discussion of subsequent events refer to Note 16.

Reclassifications

Certain amounts in our prior period consolidated financial statements have been reclassified to conform to our current period presentation.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(3) Summary of Significant Accounting Policies

Use of Estimates

In presenting consolidated financial statements, management makes estimates and assumptions that affect the reported amounts and accompanying notes. Additionally, estimates were used when recording the fair values of assets acquired and liabilities assumed in the Merger. Estimates, by their nature, are based on judgment and available information. Actual results could differ materially from those estimates.

Significant estimates inherent in the preparation of the accompanying consolidated financial statements include revenue recognition, asset impairment, useful lives of our satellites, share-based payment expense, and valuation allowances against deferred tax assets. Economic conditions in the United States could have a material impact on our accounting estimates.

Recent Accounting Pronouncements

The Financial Accounting Standards Board (“FASB”) updated Accounting Standards Codification (“ASC”) 470 to incorporate ASU 2009-15, *Accounting for Own-Share Lending Arrangements in Contemplation of Convertible Debt Issuance or Other Financing*, into the ASC. This standard requires share-lending arrangements in an entity’s own shares to be initially measured at fair value and treated as an issuance cost, excluded from basic and diluted earnings per share, and requires an entity to recognize a charge to earnings if it becomes probable the counterparty will default on the arrangement. This guidance was adopted as of January 1, 2010 on a retrospective basis, as required, for all arrangements outstanding as of that date. The following table reflects the retrospective adoption of ASU 2009-15 on our December 31, 2009 consolidated balance sheet:

	<u>As Originally Reported</u>	<u>Retrospective Adjustments</u>	<u>As Currently Reported</u>
Balance Sheet Line Item:			
Deferred financing fees, net	\$ 8,902	\$ 57,505	\$ 66,407
Related party long-term assets, net of current portion	110,594	1,173	111,767
Long-term debt, net of current portion	2,799,127	575	2,799,702
Long-term related party debt, net of current portion	263,566	13	263,579
Additional paid-in capital	10,281,331	70,960	10,352,291
Accumulated deficit	(10,241,238)	(12,870)	(10,254,108)

The following table reflects the adoption of ASU 2009-15 on our statement of operations for the years ended December 31, 2009 and 2008:

	<u>For the Year Ended December 31, 2009</u>			<u>For the Year Ended December 31, 2008</u>		
	<u>As Originally Reported</u>	<u>Retrospective Adjustments</u>	<u>As Currently Reported</u>	<u>As Originally Reported</u>	<u>Retrospective Adjustments</u>	<u>As Currently Reported</u>
Statement of Operations Line Item:						
Interest expense, net of amounts capitalized	\$ (306,420)	\$ (9,248)	\$ (315,668)	\$ (144,833)	\$ (3,622)	\$ (148,455)
Net loss attributable to common stockholders	(528,978)	(9,248)	(538,226)	(5,313,288)	(3,622)	(5,316,910)

For the year ended December 31, 2010, we recorded \$10,095, in interest expense related to the amortization of the costs associated with the share-lending arrangement and other issuance costs. As of December 31, 2010, the unamortized balance of the debt issuance costs was \$51,243, with \$50,218 recorded in deferred financing fees, net,

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

and \$1,025 recorded in long-term related party assets. As of December 31, 2010 and 2009, the estimated fair value of the remaining 202,400,000 loaned shares was approximately \$329,912 and \$121,440, respectively.

Revenue Recognition

We derive revenue primarily from subscribers, advertising and direct sales of merchandise. Revenue from subscribers consists of subscription fees; revenue derived from our agreements with daily rental fleet programs; non-refundable activation and other fees; and the effects of rebates. Revenue is recognized as it is realized or realizable and earned.

We recognize subscription fees as our services are provided. Prepaid subscription fees are recorded as deferred revenue and amortized to revenue ratably over the term of the applicable subscription plan.

Prepaid subscription fees received from certain automakers are recorded as deferred revenue and amortized to revenue ratably over the service period which commences upon retail sale and activation. We reimburse automakers for certain costs associated with the satellite radio installed in the applicable vehicle at the time the vehicle is manufactured. The associated payments to the automakers are included in Subscriber acquisition costs. These payments are included in Subscriber acquisition costs because we are responsible for providing the service to the customers, including being obligated to the customers in the case of an interruption of service.

Activation fees are recognized ratably over the estimated term of a subscriber relationship, estimated to be approximately 3.5 years during 2010. The estimated term of a subscriber relationship is based on historical experience.

We record an estimate of rebates that are paid by us to subscribers as a reduction to revenue in the period the subscriber activates service. For certain rebate promotions, a subscriber must remain active for a specified period of time to be considered eligible. In those instances, the estimate is recorded as a reduction to revenue over the required activation period. We estimate the effects of mail-in rebates based on actual take-rates for rebate incentives offered in prior periods, adjusted as deemed necessary based on take-rate data available at the time. In subsequent periods, estimates are adjusted when necessary. For instant rebate promotions, we record the consideration paid to the consumer as a reduction to revenue in the period the customer participates in the promotion.

We recognize revenue from the sale of advertising as the advertising is broadcast. Agency fees are calculated based on a stated percentage applied to gross billing revenue for our advertising inventory and are reported as a reduction of Advertising revenue. We pay certain third parties a percentage of Advertising revenue. Advertising revenue is recorded gross of such revenue share payments as we are the primary obligor in the transaction. Advertising revenue share payments are recorded to Revenue share and royalties during the period in which the advertising is broadcast.

Equipment revenue and royalties from the sale of satellite radios, components and accessories are recognized upon shipment, net of discounts and rebates. Shipping and handling costs billed to customers are recorded as revenue. Shipping and handling costs associated with shipping goods to customers are reported as a component of Cost of equipment.

ASC 605, *Revenue Recognition*, provides guidance on how and when to recognize revenues for arrangements that may involve the delivery or performance of multiple products, services and/or rights to use assets. Revenue arrangements with multiple deliverables are required to be divided into separate units of accounting if the deliverables in the arrangement meet certain criteria. Arrangement consideration must be allocated among the separate units of accounting based on their relative fair values.

Programming Costs

Programming costs which are for a specified number of events are amortized on an event-by-event basis; programming costs which are for a specified season or period are amortized over the season or period on a straight-

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

line basis. We allocate a portion of certain programming costs which are related to sponsorship and marketing activities to sales and marketing expenses on a straight-line basis over the term of the agreement.

Advertising Costs

Media is expensed when aired and advertising production costs are expensed as incurred. Market development funds consist of fixed and variable payments to reimburse retailers for the cost of advertising and other product awareness activities. Fixed market development funds are expensed over the periods specified in the applicable agreement; variable costs are expensed when aired and production costs are expensed as incurred. During the years ended December 31, 2010, 2009 and 2008, we recorded advertising costs of \$110,050, \$128,784 and \$109,253, respectively. These costs are reflected in Sales and marketing expense in our consolidated statements of operations.

Stock-Based Compensation

We account for equity instruments granted to employees in accordance with ASC 718, *Compensation — Stock Compensation*. ASC 718 requires all share-based compensation payments to be recognized in the financial statements based on fair value. ASC 718 requires forfeitures to be estimated at the time of grant and revised in subsequent periods if actual forfeitures differ from initial estimates. We use the Black-Scholes-Merton option-pricing model to value stock option awards and have elected to treat awards with graded vesting as a single award. Share-based compensation expense is recognized ratably over the requisite service period, which is generally the vesting period, net of forfeitures. We measure non-vested stock awards using the fair market value of restricted shares of common stock on the day the award is granted.

Fair value as determined using Black-Scholes-Merton model varies based on assumptions used for the expected life, expected stock price volatility and risk-free interest rates. We estimate the fair value of awards granted using the hybrid approach for volatility, which weights observable historical volatility and implied volatility of qualifying actively traded options on our common stock. The expected life assumption represents the weighted-average period stock-based awards are expected to remain outstanding. These expected life assumptions are established through a review of historical exercise behavior of stock-based award grants with similar vesting periods. Where historical patterns do not exist, contractual terms are used. The risk-free interest rate represents the daily treasury yield curve rate at the grant date based on the closing market bid yields on actively traded U.S. treasury securities in the over-the-counter market for the expected term. Our assumptions may change in future periods.

Equity instruments granted to non-employees are accounted for in accordance with ASC 505, *Equity*. The final measurement date for the fair value of equity instruments with performance criteria is the date that each performance commitment for such equity instrument is satisfied or there is a significant disincentive for non-performance.

Stock-based awards granted to employees, non-employees and members of our board of directors include warrants, stock options, restricted stock and restricted stock units.

Subscriber Acquisition Costs

Subscriber acquisition costs consist of costs incurred to acquire new subscribers and include hardware subsidies paid to radio manufacturers, distributors and automakers, including subsidies paid to automakers who include a satellite radio and a prepaid subscription to our service in the sale or lease price of a new vehicle; subsidies paid for chip sets and certain other components used in manufacturing radios; device royalties for certain radios; commissions paid to retailers and automakers as incentives to purchase, install and activate radios; product warranty obligations; and provisions for inventory allowance. Subscriber acquisition costs do not include advertising, loyalty payments to distributors and dealers of radios and revenue share payments to automakers and retailers of radios.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Subsidies paid to radio manufacturers and automakers are expensed upon installation, shipment, receipt of product or activation. Commissions paid to retailers and automakers are expensed upon either the sale or activation of radios. Chip sets that are shipped to radio manufacturers and held on consignment are recorded as inventory and expensed as Subscriber acquisition costs when placed into production by radio manufacturers. Costs for chip sets not held on consignment are expensed as Subscriber acquisition costs when the automaker confirms receipt.

We record product warranty obligations in accordance with ASC 460, *Guarantees*, which requires a guarantor to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken by issuing the guarantee. We warrant that certain products sold through our retail and direct to consumer distribution channels will perform in all material respects in accordance with specifications in effect at the time of the purchase of the products by the customer. The product warranty period on our products is 90 days from the purchase date for repair or replacement of components and/or products that contain defects of material or workmanship. We record a liability for costs that we expect to incur under our warranty obligations when the product is shipped from the manufacturer. Factors affecting the warranty liability include the number of units sold and historical and anticipated rates of claims and costs per claim. We periodically assess the adequacy of our warranty liability based on changes in these factors.

Research & Development Costs

Research and development costs are expensed as incurred and primarily include the cost of new product development, chip set design, software development and engineering. During the years ended December 31, 2010, 2009 and 2008, we recorded research and development costs of \$40,043, \$38,852 and \$41,362, respectively. These costs are reported as a component of Engineering, design and development expense in our consolidated statements of operations.

Income Taxes

Deferred income taxes are recognized for the tax consequences related to temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for tax purposes at each year-end, based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. A valuation allowance is recognized when, based on the weight of all available evidence, it is considered more likely than not that all, or some portion, of the deferred tax assets will not be realized. Income tax expense is the sum of current income tax plus the change in deferred tax assets and liabilities.

ASC 740, *Income Taxes*, requires a company to first determine whether it is more-likely-than-not that a tax position will be sustained based on its technical merits as of the reporting date, assuming that taxing authorities will examine the position and have full knowledge of all relevant information. A tax position that meets this more-likely-than-not threshold is then measured and recognized at the largest amount of benefit that is greater than fifty percent likely to be realized upon effective settlement with a taxing authority. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. We record interest and penalties related to uncertain tax positions in income tax expense, net of amounts capitalized, in our consolidated statement of operations.

We report revenues net of any tax assessed by a governmental authority that is both imposed on, and concurrent with, a specific revenue-producing transaction between a seller and a customer in our consolidated statements of operations.

Earnings per Share ("EPS")

Basic net income (loss) per common share is calculated using the weighted average common shares outstanding during each reporting period. Diluted net income (loss) per common share adjusts the weighted average common shares outstanding for the potential dilution that could occur if common stock equivalents (convertible debt and preferred stock, warrants, stock options, restricted stock and restricted stock units) were

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

exercised or converted into common stock, calculated using the treasury stock method. For the year ended December 31, 2010, common stock equivalents of approximately 689,922,000 were excluded from the calculation of diluted net income per common share as the effect would have been anti-dilutive. Due to the net loss for the years ended December 31, 2009 and 2008, common stock equivalents of approximately 3,381,905,000 and 787,000,000, respectively, were excluded from the calculation of diluted net loss per common share as the effect would have been anti-dilutive.

(In thousands, except per share data)	Years Ended December 31,		
	2010	2009	2008
Net income (loss)	\$ 43,055	\$ (352,038)	\$ (5,316,910)
Preferred stock beneficial conversion feature	—	(186,188)	—
Net income (loss) per common share:	\$ 43,055	\$ (538,226)	\$ (5,316,910)
Average common shares outstanding-basic	3,693,259	3,585,864	2,169,489
Dilutive effect of equity awards	2,697,812	—	—
Average common shares outstanding-diluted	6,391,071	3,585,864	2,169,489
Net income (loss) per common share			
Basic	\$ 0.01	\$ (0.15)	\$ (2.45)
Diluted	\$ 0.01	\$ (0.15)	\$ (2.45)

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand, money market funds, certificates of deposit, in-transit credit card receipts and highly liquid investments with an original maturity of three months or less when purchased. Cash and cash equivalents are stated at fair market value.

Accounts Receivable

Accounts receivable are stated at amounts due from customers net of an allowance for doubtful accounts. Our allowance for doubtful accounts considers historical experience, the age of amounts due, current economic conditions and other factors that may affect the counterparty's ability to pay.

Accounts receivable, net, consists of the following:

	December 31, 2010	December 31, 2009
Gross accounts receivable	\$ 131,880	\$ 122,247
Allowance for doubtful accounts	(10,222)	(8,667)
Total accounts receivable, net	\$ 121,658	\$ 113,580

Receivables from distributors include billed and unbilled amounts due from OEMs for radio services included in the sale or lease price of vehicles, as well as billed amounts due from retailers. Receivables from distributors consist of the following:

	December 31, 2010	December 31, 2009
Billed	\$ 30,456	\$ 25,207
Unbilled	37,120	23,531
Total	\$ 67,576	\$ 48,738

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Inventory

Inventory consists of finished goods, refurbished goods, chip sets and other raw material components used in manufacturing radios. Inventory is stated at the lower of cost, determined on a first-in, first-out basis, or market. We record an estimated allowance for inventory that is considered slow moving, obsolete or whose carrying value is in excess of net realizable value. The provision related to products purchased for resale in our direct to consumer distribution channel and components held for resale by us is reported as a component of Cost of equipment in our consolidated statements of operations. The provision related to inventory consumed in our OEM and retail distribution channel is reported as a component of Subscriber acquisition costs in our consolidated statements of operations.

Inventory, net, consists of the following:

	<u>December 31, 2010</u>	<u>December 31, 2009</u>
Raw materials	\$ 18,181	\$ 17,370
Finished goods	24,492	19,704
Allowance for obsolescence	<u>(20,755)</u>	<u>(20,881)</u>
Total inventory, net	<u>\$ 21,918</u>	<u>\$ 16,193</u>

Investments

Marketable Securities — Marketable securities consist of certificates of deposit, auction rate certificates and investments in debt and equity securities of other entities. Our investment policy objectives are the preservation of capital, maintenance of liquidity to meet operating requirements and yield maximization. Marketable securities are classified as available-for-sale securities and carried at fair market value. Unrealized gains and losses on available-for-sale securities are included in Accumulated other comprehensive loss, net of tax, as a separate component of Stockholders' equity (deficit). Realized gains and losses, dividends and interest income, including amortization of the premium or discount arising at purchase, are included in Interest and investment income. The specific-identification method is used to determine the cost of all securities and the basis by which amounts are reclassified from Accumulated other comprehensive loss into earnings.

We received proceeds from the sale or maturity of marketable securities of \$9,456, \$0 and \$5,469 for the years ended December 31, 2010, 2009 and 2008, respectively. We recorded \$425 of realized gains on marketable securities for the year ended December 31, 2010 and \$473 of net unrealized gains on marketable securities for the year ended December 31, 2009.

Restricted Investments — Restricted investments consist of letters of credit, certificates of deposit, money market funds and interest-bearing accounts which are restricted as to their withdrawal. We received proceeds from the release of restricted investments of \$60,400 for the year ended December 31, 2008.

Equity Method Investments — Investments in which we have the ability to exercise significant influence but not control are accounted for pursuant to the equity method of accounting. We recognize our proportionate share of earnings or losses of our affiliates as they occur as a component of Other (expense) income in our consolidated statements of operations. We evaluate our equity method investments for impairment whenever events, or changes in circumstances, indicate that the carrying amounts of such investments may not be recoverable. The difference between the carrying value and the estimated fair values of our equity method investments is recognized as an impairment loss when the loss is deemed to be other than temporary.

Cost Method Investments — Investments in equity securities that do not have readily determinable fair values and in which we do not have a controlling interest or are unable to exert significant influence are recorded at cost.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

ASC 820, *Fair Value Measurements and Disclosures*, establishes a fair value hierarchy for input into valuation techniques as follows: i) Level 1 input — unadjusted quoted prices in active markets for identical instrument; ii) Level 2 input — observable market data for the same or similar instrument but not Level 1; and iii) Level 3 input — unobservable inputs developed using management's assumptions about the inputs used for pricing the asset or liability. We use Level 3 inputs to fair value our investments in auction rate certificates issued by student loan trusts and the 8% convertible unsecured subordinated debentures issued by XM Canada. These investments are not material to our consolidated results of operations or financial position.

Investments are periodically reviewed for impairment and a write down is recorded whenever declines in fair value below carrying value are determined to be other than temporary. In making this determination, we consider, among other factors, the severity and duration of the decline as well as the likelihood of a recovery within a reasonable timeframe.

Property and Equipment

Property and equipment, including satellites, are stated at cost less accumulated depreciation and amortization. Equipment under capital leases is stated at the present value of minimum lease payments. Depreciation and amortization are calculated using the straight-line method over the following estimated useful lives:

Satellite system	2 - 15 years
Terrestrial repeater network	5 - 15 years
Broadcast studio equipment	3 - 15 years
Capitalized software and hardware	3 - 7 years
Satellite telemetry, tracking and control facilities	3 - 17.5 years
Furniture, fixtures, equipment and other	2 - 7 years
Building	20 or 30 years
Leasehold improvements	Lesser of useful life or remaining lease term

We review long-lived assets, such as property and equipment, and purchased intangibles subject to amortization for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds the estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount exceeds the fair value of the asset.

Goodwill and Other Intangible Assets

Goodwill represents the excess of the purchase price over the estimated fair value of net tangible and identifiable intangible assets acquired in business combinations. Our annual impairment assessment of our single reporting unit is performed as of October 1st of each year, and an assessment is performed at other times if events or circumstances indicate it is more likely than not that the asset is impaired. Step one of the impairment assessment compares the fair value of the entity to its carrying value and if the fair value exceeds its carrying value, goodwill is not impaired. If the carrying value exceeds the fair value, the implied fair value of goodwill is compared to the carrying value of goodwill. If the implied fair value exceeds the carrying value then goodwill is not impaired; otherwise, an impairment loss will be recorded by the amount the carrying value exceeds the implied fair value.

The impairment test for other intangible assets not subject to amortization consists of a comparison of the fair value of the intangible asset with its carrying value. If the carrying value of the intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

We use independent appraisals to assist in determining the fair value of our FCC licenses. The income approach, which is commonly called the “Jefferson Pilot Method” or the “Greenfield Method”, has been consistently used to estimate the fair value. This method attempts to isolate the income that is properly attributable to the license alone (that is, apart from tangible and intangible assets and goodwill). It is based upon modeling a hypothetical “Greenfield” build-up to a normalized enterprise that, by design, lacks inherent goodwill and has essentially purchased (or added) all other assets as part of the build-up process. The methodology assumes that, rather than acquiring such an operation as a going concern, the buyer would hypothetically obtain a license at nominal cost and build a new operation with similar attributes from inception. The significant assumption was that the hypothetical start up entity would begin its network build out phase at the impairment testing date and revenues and variable costs would not be generated until the satellite network was operational, approximately five years from inception.

Other intangible assets with finite lives are amortized over their respective estimated useful lives to their estimated residual values, and reviewed for impairment under the provisions of ASC 360-10-35, *Property, Plant and Equipment/Overall/Subsequent Measurement*. We review intangible assets subject to amortization for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be recoverable. If the sum of the expected cash flows, undiscounted and without interest, is less than the carrying amount of the asset, an impairment loss is recognized as the amount by which the carrying amount of the asset exceeds its fair value.

Fair Value of Financial Instruments

The fair value of a financial instrument is the amount at which the instrument could be exchanged in an orderly transaction between market participants to sell the asset or transfer the liability. As of December 31, 2010 and 2009, the carrying amounts of cash and cash equivalents, accounts and other receivables, and accounts payable approximated fair value due to the short-term nature of these instruments.

The fair value for publicly traded instruments is determined using quoted market prices while the fair value for non-publicly traded instruments is based upon estimates from a market maker and brokerage firm. As of December 31, 2010 and 2009, the carrying value of our debt was \$3,217,578 and \$3,077,163, respectively; and the fair value approximated \$3,722,905 and \$3,195,375, respectively.

(4) Goodwill

Goodwill represents the excess of the purchase price over the estimated fair value of net tangible and identifiable intangible assets acquired in business combinations. Our annual impairment assessment is performed as of October 1st of each year, and an assessment is performed at other times if events or circumstances indicate it is more likely than not that the asset is impaired. At October 1, 2010 and December 31, 2010, the fair value of our single reporting unit substantially exceeded its carrying value and therefore was not at risk of failing step one of ASC 350-20, *Goodwill* (“ASC 350-20”). As a result, there were no changes in the carrying value of our goodwill during the years ended December 31, 2010 and 2009. During 2008, we recorded goodwill in the amount of \$6,601,046 and we recorded an impairment charge of \$4,766,190.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(5) Intangible Assets

Intangible assets consisted of the following:

	Weighted Average Useful Lives	December 31, 2010			December 31, 2009		
		Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Indefinite life intangible assets:							
FCC licenses	Indefinite	\$2,083,654	\$ —	\$ 2,083,654	\$2,083,654	\$ —	\$ 2,083,654
Trademark	Indefinite	250,000	—	250,000	250,000	—	250,000
Definite life intangible assets:							
Subscriber relationships	9 years	380,000	(144,325)	235,675	380,000	(91,186)	288,814
Licensing agreements	9.1 years	75,000	(23,721)	51,279	75,000	(13,906)	61,094
Proprietary software	6 years	16,552	(9,566)	6,986	16,552	(6,823)	9,729
Developed technology	10 years	2,000	(483)	1,517	2,000	(283)	1,717
Leasehold interests	7.4 years	132	(43)	89	132	(25)	107
Total intangible assets		<u>\$2,807,338</u>	<u>\$ (178,138)</u>	<u>\$ 2,629,200</u>	<u>\$2,807,338</u>	<u>\$ (112,223)</u>	<u>\$ 2,695,115</u>

Indefinite Life Intangible Assets

We have identified our FCC licenses and the XM trademark as indefinite life intangible assets after considering the expected use of the assets, the regulatory and economic environment within which they are used and the effects of obsolescence on their use.

We hold FCC licenses to operate our satellite digital audio radio service and provide ancillary services. The following table outlines the years in which each of our licenses expires:

FCC License	Expiration Year
SIRIUS FM-1 satellite	2017
SIRIUS FM-2 satellite	2017
SIRIUS FM-3 satellite	2017
SIRIUS FM-4 ground spare satellite	2017
SIRIUS FM-5 satellite	2017
XM-1 satellite	2014
XM-2 satellite	2014
XM-3 satellite	2013
XM-4 satellite	2014
XM-5 satellite	2018

Prior to expiration, we are required to apply for a renewal of our FCC licenses. The renewal and extension of our licenses is reasonably certain at minimal cost, which is expensed as incurred. Each of the FCC licenses authorizes us to use the broadcast spectrum, which is a renewable, reusable resource that does not deplete or exhaust over time.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In connection with the Merger, \$250,000 of the purchase price was allocated to the XM trademark. As of December 31, 2010, there were no legal, regulatory or contractual limitations associated with the XM trademark.

Our annual impairment assessment of our indefinite intangible assets is performed as of October 1st of each year. An assessment is made at other times if events or changes in circumstances indicate that it is more likely than not that the assets have been impaired. At October 1, 2010 and December 31, 2010, the fair value of our indefinite intangible assets substantially exceeded its carrying value and therefore was not at risk of impairment.

Definite Life Intangible Assets

Subscriber relationships are amortized on an accelerated basis over 9 years, which reflects the estimated pattern in which the economic benefits will be consumed. Other definite life intangible assets include certain licensing agreements, which are amortized over a weighted average useful life of 9.1 years on a straight-line basis.

Amortization expense for definite life intangible assets was \$65,915, \$76,587 and \$35,789 for the years ended December 31, 2010, 2009 and 2008, respectively. Expected amortization expense for each of the fiscal years through December 31, 2015 and for periods thereafter is as follows:

<u>Year Ending December 31,</u>	<u>Amount</u>
2011	\$ 58,850
2012	53,420
2013	47,097
2014	38,619
2015	37,293
Thereafter	60,267
Total definite life intangibles assets, net	<u>\$295,546</u>

(6) Subscriber Revenue

Subscriber revenue consists of subscription fees, revenue derived from agreements with certain daily rental fleet operators, non-refundable activation and other fees as well as the effects of rebates. Revenues received from OEMs for subscriptions included in the sale or lease price of vehicles are also included in subscriber revenue over the service period.

Subscriber revenue consists of the following:

	<u>For the Years Ended December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
Subscription fees	\$2,398,790	\$2,266,809	\$1,529,726
Activation fees	16,028	21,837	23,025
Effect of rebates	(644)	(1,143)	(3,832)
Total subscriber revenue	<u>\$2,414,174</u>	<u>\$2,287,503</u>	<u>\$1,548,919</u>

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(7) Interest Costs

We capitalize a portion of the interest on funds borrowed to finance the construction costs of our satellites and related launch vehicles for our FM-6 and XM-5 satellites. We also incur interest costs on all of our debt instruments and on our satellite incentive agreements. The following is a summary of our interest costs:

	For the Years Ended December 31,		
	2010	2009	2008
Interest costs charged to expense	\$295,643	\$315,668	\$148,455
Interest costs capitalized	63,880	61,201	20,872
Total interest costs incurred	\$359,523	\$376,869	\$169,327

Included in interest costs incurred is non-cash interest expense, consisting of amortization related to original issue discounts, premiums and deferred financing fees of \$42,841, \$43,066 and \$(2,689) for the years ended December 31, 2010, 2009 and 2008, respectively.

(8) Property and Equipment

Property and equipment, net, consists of the following:

	December 31, 2010	December 31, 2009
Satellite system	\$ 1,943,537	\$ 1,680,732
Terrestrial repeater network	109,582	108,841
Leasehold improvements	43,567	43,480
Broadcast studio equipment	51,985	49,965
Capitalized software and hardware	163,689	146,035
Satellite telemetry, tracking and control facilities	57,665	55,965
Furniture, fixtures, equipment and other	63,265	57,536
Land	38,411	38,411
Building	56,685	56,424
Construction in progress	297,771	430,543
Total property and equipment	2,826,157	2,667,932
Accumulated depreciation and amortization	(1,064,883)	(956,929)
Property and equipment, net	\$ 1,761,274	\$ 1,711,003

Construction in progress consists of the following:

	December 31, 2010	December 31, 2009
Satellite system	\$ 262,744	\$ 398,425
Terrestrial repeater network	19,239	19,396
Other	15,788	12,722
Construction in progress	\$ 297,771	\$ 430,543

Depreciation and amortization expense on property and equipment was \$207,367, \$232,863 and \$167,963 for the years ended December 31, 2010, 2009 and 2008, respectively. We retired property and equipment, which included our SIRIUS FM-4 satellite, with a cost basis of \$155,000 during the year ended December 31, 2010.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Satellites

We own four orbiting satellites and one spare satellite, FM-4, for use in the SIRIUS system. These satellites are of the Loral FS-1300 model series. Space Systems/Loral is constructing a sixth satellite for use in this system. We have an agreement with International Launch Services to launch this satellite on a Proton rocket.

During the fourth quarter of 2010, we recorded an other than temporary impairment charge of \$56,100 to Restructuring, impairments, and related costs in the statement of operations for FM-4, a ground spare satellite held in storage since 2002. We determined that the probability of launching FM-4 is remote due to the launch of XM-5 in the fourth quarter of 2010 and our business plan.

We own five orbiting satellites for use in the XM system. Four of these satellites were manufactured by Boeing Satellite Systems International and one was manufactured by Space Systems/Loral.

During the year ended December 31, 2010, we capitalized interest of \$63,880 and expenditures of \$184,727 related to the construction of our satellites and related launch vehicles for FM-6 and XM-5.

(9) Related Party Transactions

We had the following related party transaction balances at December 31, 2010 and 2009:

	Related party Current Assets		Related Party Long-Term Assets		Related Party Current Liabilities		Related Party Long-Term Liabilities		Related Party Long-Term Debt	
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Liberty Media	\$ —	\$ —	\$ 1,571	\$ 1,974	\$ 9,765	\$ 8,523	\$ —	\$ —	\$325,907	\$263,579
SIRIUS Canada	5,613	2,327	—	—	1,805	—	—	—	—	—
XM Canada	1,106	1,011	28,591	24,429	4,275	2,775	24,517	28,793	—	—
General Motors	—	99,995	—	85,364	—	93,107	—	17,508	—	—
American Honda	—	2,914	—	—	—	3,841	—	—	—	—
Total	<u>\$6,719</u>	<u>\$106,247</u>	<u>\$30,162</u>	<u>\$111,767</u>	<u>\$15,845</u>	<u>\$108,246</u>	<u>\$ 24,517</u>	<u>\$ 46,301</u>	<u>\$325,907</u>	<u>\$263,579</u>

Neither General Motors nor American Honda is considered a related party following May 27, 2010, the date on which the individuals nominated by General Motors and American Honda, respectively, ceased to be members of our board of directors.

Liberty Media

In February, 2009, we entered into an Investment Agreement (the “Investment Agreement”) with an affiliate of Liberty Media Corporation, Liberty Radio, LLC (collectively, “Liberty Media”). Pursuant to the Investment Agreement, in March 2009 we issued to Liberty Radio, LLC 12,500,000 shares of our Convertible Perpetual Preferred Stock, Series B (the “Series B Preferred Stock”), with a liquidation preference of \$0.001 per share in partial consideration for certain loan investments. Liberty Media has representatives on our board of directors.

The Series B Preferred Stock is convertible into 2,586,976,000 shares of common stock. Liberty Media has agreed not to acquire more than 49.9% of our outstanding common stock prior to March 2012, except that Liberty Media may acquire more than 49.9% of our outstanding common stock at any time after March 2011 pursuant to any cash tender offer for all of the outstanding shares of our common stock that are not beneficially owned by Liberty Media or its affiliates at a price per share greater than the closing price of the common stock on the trading day preceding the earlier of the public announcement or commencement of such tender offer. The Investment Agreement also provides for certain other standstill provisions during the three year period ending in March 2012.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

We accounted for the Series B Preferred Stock by recording a \$227,716 increase to additional paid-in capital, excluding issuance costs, for the amount of allocated proceeds received and an additional \$186,188 increase in paid-in capital for the beneficial conversion feature, which was immediately recognized as a charge to retained earnings.

Loan Investments

On February 17, 2009, SIRIUS entered into a Credit Agreement (the “LM Credit Agreement”) with Liberty Media Corporation, as administrative agent and collateral agent, and Liberty Media, LLC, as lender. The LM Credit Agreement provided for a \$250,000 term loan and \$30,000 of purchase money loans. In August 2009, we repaid all amounts due and terminated the LM Credit Agreement in connection with the issue and sale of SIRIUS’ 9.75% Senior Secured Notes due 2015.

On February 17, 2009, XM entered into a Credit Agreement with Liberty Media Corporation, as administrative agent and collateral agent, and Liberty Media, LLC, as lender. On March 6, 2009, XM amended and restated that credit agreement (the “Second-Lien Credit Agreement”) with Liberty Media Corporation. In June 2009, XM repaid all amounts due and terminated the Second-Lien Credit Agreement in connection with the issue and sale of its 11.25% Senior Secured Notes due 2013.

On March 6, 2009, XM amended and restated the \$100,000 Term Loan, dated as of June 26, 2008 and the \$250,000 Credit Agreement, dated as of May 5, 2006. These facilities were combined as term loans into the Amended and Restated Credit Agreement, dated as of March 6, 2009. Liberty Media, LLC, purchased \$100,000 aggregate principal amount of such loans from the existing lenders. In June 2009, XM used a portion of the net proceeds from the sale of its 11.25% Senior Secured Notes due 2013 to extinguish the Amended and Restated Credit Agreement.

Liberty Media has advised us that as of December 31, 2010 and 2009, respectively, it owned the following:

	<u>December 31,</u> <u>2010</u>	<u>December 31,</u> <u>2009</u>
9.625% Senior Notes due 2013	\$ —	\$ 55,221
8.75% Senior Notes due 2015	150,000	—
9.75% Senior Secured Notes due 2015	50,000	50,000
11.25% Senior Secured Notes due 2013	—	87,000
13% Senior Notes due 2013	76,000	76,000
7% Exchangeable Senior Subordinated Notes due 2014	11,000	11,000
7.625% Senior Notes due 2018	50,000	—
Total principal debt	337,000	279,221
Less: discounts	11,093	15,642
Total carrying value debt	<u>\$ 325,907</u>	<u>\$ 263,579</u>

In October 2010, Liberty Media tendered its \$87,000 of the 11.25% Senior Secured Notes due 2013 and purchased \$50,000 of the 7.625% Senior Notes due 2018 at issuance.

As of December 31, 2010 and 2009, we recorded \$9,765 and \$8,523, respectively, related to accrued interest with Liberty Media to Related party current liabilities. We recognized Interest expense associated with debt held by Liberty Media of \$40,169 and \$79,640 for the years ended December 31, 2010 and 2009, respectively.

SIRIUS Canada

In 2005, we entered into a license and services agreement with SIRIUS Canada. Pursuant to such agreement, SIRIUS is reimbursed for certain costs incurred to provide SIRIUS Canada service, including certain costs incurred

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

for the production and distribution of radios, as well as information technology support costs. In consideration for the rights granted pursuant to this license and services agreement, we have the right to receive a royalty equal to a percentage of SIRIUS Canada's gross revenues based on subscriber levels (ranging between 5% to 15%) and the number of Canadian-specific channels made available to SIRIUS Canada. Our investment in SIRIUS Canada is primarily non-voting shares which carry an 8% cumulative dividend.

We recorded the following revenue from SIRIUS Canada. Royalty income is included in other revenue and dividend income is included in Interest and investment income (loss) in our consolidated statements of operations:

	For the Years Ended December 31,		
	2010	2009	2008
Royalty income	\$10,684	\$5,797	\$1,309
Dividend income	926	839	199
Total revenue from SIRIUS Canada	\$11,610	\$6,636	\$1,508

Receivables from royalty and dividend income were utilized to absorb a portion of our share of net losses generated by SIRIUS Canada during the years ended December 31, 2010 and 2009. Total costs that have been or will be reimbursed by SIRIUS Canada for the years ended December 31, 2010, 2009 and 2008 were \$12,185, \$11,031 and \$14,973, respectively.

XM Canada

In 2005, XM entered into agreements to provide XM Canada with the right to offer XM satellite radio service in Canada. The agreements have an initial ten year term and XM Canada has the unilateral option to extend the agreements for an additional five years. We receive a 15% royalty for all subscriber fees earned by XM Canada each month for its basic service and an activation fee for each gross activation of an XM Canada subscriber on XM's system. XM Canada is obligated to pay us a total of \$70,300 for the rights to broadcast and market National Hockey League ("NHL") games for a 10-year term. We recognize these payments on a gross basis as a principal obligor pursuant to the provisions of ASC 605, *Revenue Recognition*. The estimated fair value of deferred revenue from XM Canada as of the Merger date was approximately \$34,000, which is amortized on a straight-line basis through 2020, the expected term of the agreements. As of December 31, 2010 and 2009, the carrying value of deferred revenue related to XM Canada was \$28,792 and \$31,568, respectively.

We have extended a Cdn\$45,000 standby credit facility to XM Canada, which can be utilized to purchase terrestrial repeaters or finance royalty and activation fees payable to us. The facility matures on December 31, 2012 and bears interest at 17.75% per annum. We have the right to convert unpaid principal amounts into Class A subordinate voting shares of XM Canada at the price of Cdn\$16.00 per share. As of December 31, 2010 and 2009, amounts drawn by XM Canada on this facility in lieu of payment of fees recorded in Related party long-term assets were \$21,390, net of a \$9,607 valuation allowance, and \$18,429, respectively. The December 31, 2010 valuation allowance of \$9,607 related to the absorption of our share of the net loss from our investment in XM Canada shares.

As of December 31, 2010 and 2009, amounts due from XM Canada also included \$7,201 and \$6,000, respectively, attributable to deferred programming costs and accrued interest (in addition to the amounts drawn on the standby credit facility), all of which is reported as Related party long-term assets.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

We recorded the following revenue from XM Canada as Other revenue in our consolidated statements of operations:

	<u>For the Years Ended December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
Amortization of XM Canada deferred income	\$ 2,776	\$ 2,776	\$1,156
Subscriber and activation fee royalties	10,313	11,603	97
Licensing fee revenue	4,500	6,000	2,500
Advertising reimbursements	1,083	1,067	366
Total revenue from XM Canada	<u>\$18,672</u>	<u>\$21,446</u>	<u>\$4,119</u>

General Motors and American Honda

We have a long-term distribution agreement with General Motors Company (“GM”). GM had a representative on our board of directors and was considered a related party through May 27, 2010. During the term of the agreement, GM has agreed to distribute the XM service. We subsidize a portion of the cost of satellite radios and makes incentive payments to GM when the owners of GM vehicles with factory- or dealer-installed satellite radios become self-paying subscribers. We also share with GM a percentage of the subscriber revenue attributable to GM vehicles with factory- or dealer- installed satellite radios. As part of the agreement, GM provides certain call-center related services directly to subscribers who are also GM customers for which we reimburse GM.

We make bandwidth available to OnStar Corporation for audio and data transmissions to owners of enabled GM vehicles, regardless of whether the owner is a subscriber. OnStar’s use of our bandwidth must be in compliance with applicable laws, must not compete or adversely interfere with our business, and must meet our quality standards. We also granted to OnStar a certain amount of time to use our studios on an annual basis and agreed to provide certain audio content for distribution on OnStar’s services.

We have a long-term distribution agreement with American Honda. American Honda had a representative on our board of directors and was considered a related party through May 27, 2010. We have an agreement to make a certain amount of its bandwidth available to American Honda. American Honda’s use of our bandwidth must be in compliance with applicable laws, must not compete or adversely interfere with our business, and must meet our quality standards. This agreement remains in effect so long as American Honda holds a certain amount of its investment in us. We make incentive payments to American Honda for each purchaser of a Honda or Acura vehicle that becomes a self-paying subscriber and shares with American Honda a portion of the subscriber revenue attributable to Honda and Acura vehicles with installed satellite radios.

As of May 27, 2010, the following aggregate assets and liabilities related to GM and American Honda were reclassified from related party to non-related party:

Balance sheet line item:	
Related party current assets	\$107,908
Related party long term assets	73,016
Related party current liabilities	57,996

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

We recorded the following total related party revenue from GM and American Honda, primarily consisting of subscriber revenue, in connection with the agreements above:

	For the Years Ended December 31,		
	2010*	2009	2008
GM	\$12,759	\$31,037	\$16,803
American Honda	4,990	12,254	7,504
Total	\$17,749	\$43,291	\$24,307

* GM and American Honda were considered related parties through May 27, 2010.

We have incurred the following related party expenses with GM and American Honda:

	For the Years Ended December 31,					
	2010*		2009		2008	
	GM	American Honda	GM	American Honda	GM	American Honda
Sales and marketing	\$13,374	\$ —	\$ 31,595	\$ 500	\$16,115	\$ 815
Revenue share and royalties	15,823	3,167	58,992	6,541	36,305	2,051
Subscriber acquisition costs	17,514	1,969	34,895	5,397	30,975	3,433
Customer service and billing	125	—	268	—	119	—
Interest expense, net of amounts capitalized	1,421	—	4,644	—	51	—
Total	\$48,257	\$ 5,136	\$130,394	\$12,438	\$83,565	\$ 6,299

* GM and American Honda were considered related parties through May 27, 2010.

(10) Investments

Our investments consist of the following:

	December 31, 2010	December 31, 2009
Investment in SIRIUS Canada	\$ —	\$ —
Investment in XM Canada	—	2,390
Investment in XM Canada debentures	3,313	2,970
Auction rate certificates	—	8,556
Restricted investments	3,396	3,400
Total investments	\$ 6,709	\$ 17,316

Canadian Entities

Our investments in SIRIUS Canada and XM Canada (the “Canadian Entities”) are recorded using the equity method since we have a significant influence, but do not control the Canadian Entities. Under this method, our investments in the Canadian Entities, originally recorded at cost, are adjusted quarterly to recognize our proportionate share of net earnings or losses as they occur, rather than at the time dividends or other distributions are received, limited to the extent of our investment in, advances to and commitments to fund the Canadian Entities. We have a 49.9% economic interest in SIRIUS Canada and a 21.54% economic interest in XM Canada.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Our share of net earnings or losses of the Canadian Entities is recorded to Interest and investment income (loss) in our consolidated statements of operations. As it relates to XM Canada, this is done on a one month lag. We evaluate the Canadian Entities periodically and record an impairment charge to Interest and investment income (loss) in our consolidated statements of operations if we determine that decreases in fair value are considered to be other-than temporary. In addition, any payments received from the Canadian Entities in excess of the carrying value of our investments in, advances to and commitments to such entity is recorded to Interest and investment income (loss) in our consolidated statements of operations.

We recorded the following related party amounts to Interest and investment income (loss):

	<u>For the Years Ended December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
Share of SIRIUS Canada net loss	\$(10,257)	\$ (6,636)	\$ (4,745)
Payments received from SIRIUS Canada in excess of carrying value	10,281	13,738	—
Release of liability with SIRIUS Canada	—	1,351	—
Share of XM Canada net loss	(12,147)	(2,292)	(9,309)
Impairment of XM Canada	—	(4,734)	(16,453)
Realized gain on sale of auction rate certificates	425	—	—
Other	—	504	—
Total	<u>\$(11,698)</u>	<u>\$ 1,931</u>	<u>\$(30,507)</u>

In addition, during the years ended December 31, 2010 and 2009, we recorded \$149 and \$543, respectively, of a foreign exchange gain to Accumulated other comprehensive loss, net of tax, related to our investment in XM Canada.

We hold an investment in Cdn\$4,000 face value of 8% convertible unsecured subordinated debentures issued by XM Canada, for which the embedded conversion feature is bifurcated from the host contract. The host contract is accounted for at fair value as an available-for-sale security with changes in fair value recorded to Accumulated other comprehensive loss, net of tax. The embedded conversion feature is accounted for at fair value as a derivative with changes in fair value recorded in earnings as Interest and investment income (loss). As of December 31, 2010, the carrying values of the host contract and embedded derivative related to our investment in the debentures was \$3,302 and \$11, respectively. As of December 31, 2009, the carrying values of the host contract and embedded derivative related to our investment in the debentures was \$2,961 and \$9, respectively.

Auction Rate Certificates

Auction rate certificates are long-term securities structured to reset their coupon rates by means of an auction. We accounted for our investment in auction rate certificates as available-for-sale securities. In January 2010, our investment in the auction rate certificates was called by the issuer at par plus accrued interest, or \$9,456, resulting in a gain of \$425 in the year ended December 31, 2010.

Restricted Investments

Restricted investments relate to reimbursement obligations under letters of credit issued for the benefit of lessors of office space. As of December 31, 2010 and 2009, Long-term restricted investments were \$3,396 and \$3,400, respectively.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(11) Debt

Our debt consists of the following:

	Conversion Price (per Share)	December 31, 2010	December 31, 2009
3.25% Convertible Notes due 2011(a)	\$ 5.30	\$ 191,979	\$ 230,000
Less: discount		(515)	(1,371)
Senior Secured Term Loan due 2012(b)	N/A	—	244,375
9.625% Senior Notes due 2013(c)	N/A	—	500,000
Less: discount		—	(3,341)
8.75% Senior Notes due 2015(d)	N/A	800,000	—
Less: discount		(12,213)	—
9.75% Senior Secured Notes due 2015(e)	N/A	257,000	257,000
Less: discount		(10,116)	(11,695)
10% Senior PIK Secured Notes due 2011(f)	N/A	—	113,685
Less: discount		—	(7,325)
11.25% Senior Secured Notes due 2013(g)	N/A	36,685	525,750
Less: discount		(1,705)	(32,259)
13% Senior Notes due 2013(h)	N/A	778,500	778,500
Less: discount		(59,592)	(76,601)
9.75% Senior Notes due 2014(i)	N/A	—	5,260
7% Exchangeable Senior Subordinated Notes due 2014(j)	\$ 1.875	550,000	550,000
Less: discount		(7,620)	(9,119)
7.625% Senior Notes due 2018(k)	N/A	700,000	—
Less: discount		(12,054)	—
Other debt:			
Capital leases	N/A	7,229	14,304
Total debt		3,217,578	3,077,163
Less: total current maturities non-related party		195,815	13,882
Total long-term		3,021,763	3,063,281
Less: related party		325,907	263,579
Total long-term, excluding related party		<u>\$ 2,695,856</u>	<u>\$ 2,799,702</u>

(a) 3.25% Convertible Notes due 2011

In October 2004, we issued \$230,000 in aggregate principal amount of 3.25% Convertible Notes due October 15, 2011 (the “3.25% Notes”), which are convertible, at the option of the holder, into shares of our common stock at any time at a conversion rate of 188.6792 shares of common stock for each \$1,000 principal amount, or \$5.30 per share of common stock, subject to certain adjustments. Interest is payable semi-annually on April 15 and October 15 of each year. The obligations under the 3.25% Notes are not secured by any of our assets. In December 2010, we purchased \$38,021 of the outstanding 3.25% Notes at a price of 100.25% of the principal amount plus accrued interest. We recorded an aggregate loss on extinguishment of the 3.25% Notes of \$209,

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

consisting primarily of unamortized discount, deferred financing fees and repayment of premium to Loss on extinguishment of debt and credit facilities, net, in our consolidated statement of operations.

In February 2011, we purchased \$94,148 of the outstanding 3.25% Notes at a price of 100.75%-100.94% of the principal amount plus accrued interest. We will recognize an aggregate loss on extinguishment of \$1,079 on the 3.25% Notes, which consists primarily of unamortized discount and deferred financing fees in the first quarter of 2011.

(b) Senior Secured Term Loan due 2012

In June 2007, we entered into a term credit agreement with a syndicate of financial institutions. The term credit agreement provided for a senior secured term loan (the "Senior Secured Term Loan") of \$250,000, which was fully drawn. On March 16, 2010, we used net proceeds of \$244,714 from the sale of our 8.75% Senior Notes due 2015 to repay the Senior Secured Term Loan, including accrued and unpaid interest of \$339. We recorded an aggregate loss on extinguishment on the Senior Secured Term Loan of \$2,450, consisting of deferred financing fees to Loss on extinguishment of debt and credit facilities, net, in our consolidated statements of operations.

(c) 9.625% Senior Notes due 2013

In August 2005, we issued \$500,000 in aggregate principal amount of 9.625% Senior Notes due 2013 (the "9.625% Notes"). In April 2010, we used net proceeds of \$534,091 from the issuance of our 8.75% Senior Notes due 2015 to redeem the 9.625% Notes, including accrued and unpaid interest of \$10,026 and a repayment premium of \$24,065. We recorded an aggregate loss on extinguishment on the 9.625% Notes of \$27,705, consisting primarily of unamortized discount, deferred financing fees and repayment premium to Loss on extinguishment of debt and credit facilities, net, in our consolidated statements of operations.

(d) 8.75% Senior Notes due 2015

In March 2010, we issued \$800,000 aggregate principal amount of 8.75% Senior Notes due 2015 (the "8.75% Notes"). Interest is payable semi-annually in arrears on April 1 and October 1 of each year at a rate of 8.75% per annum. The 8.75% Notes mature on April 1, 2015. The 8.75% Notes were issued for \$786,000, resulting in an aggregate original issuance discount of \$14,000. Substantially all of our domestic wholly-owned subsidiaries guarantee our obligations under the 8.75% Notes on a senior unsecured basis.

(e) 9.75% Senior Secured Notes due 2015

In August 2009, we issued \$257,000 aggregate principal amount of 9.75% Senior Secured Notes due September 1, 2015 (the "9.75% Notes"). Interest is payable semi-annually in arrears on March 1 and September 1 of each year at a rate of 9.75% per annum. The 9.75% Notes were issued for \$244,292, resulting in an aggregate original issuance discount of \$12,708. Substantially all of our domestic wholly-owned subsidiaries guarantee our obligations under the 9.75% Notes. The 9.75% Notes and related guarantees are secured by first-priority liens on substantially all of our assets and the assets of the guarantors. In connection with the merger of XM Satellite Radio Inc. into us, we entered into a new collateral agreement relating to the 9.75% Notes which secures the 9.75% Notes with a lien on substantially all of our and the guarantors' assets.

(f) 10% Senior PIK Secured Notes due 2011

On December 31, 2009, XM had outstanding \$113,685 aggregate principal amount of 10% Senior PIK Secured Notes due 2011 (the "PIK Notes"). On June 1, 2010, XM redeemed all outstanding PIK Notes at a price of 100% plus accrued interest. We recognized an aggregate loss on extinguishment of the PIK Notes of \$4,138, consisting primarily of unamortized discount, as a Loss on extinguishment of debt and credit facilities, net, in our consolidated statements of operations.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(g) 11.25% Senior Secured Notes due 2013

In June 2009, XM issued \$525,750 aggregate principal amount of 11.25% Senior Secured Notes due 2013 (the “11.25% Notes”). The 11.25% Notes were issued for \$488,398, resulting in an aggregate original issuance discount of \$37,352.

In October 2010, XM purchased \$489,065 in aggregate principal amount of the 11.25% Notes. The aggregate purchase price for the 11.25% Notes, including the consent payments and accrued and unpaid interest, was \$567,927. We recorded an aggregate loss on extinguishment of the 11.25% Notes of \$85,216, consisting primarily of unamortized discount, deferred financing fees and repayment premium to Loss on extinguishment of debt and credit facilities, net, in our consolidated statement of operations. The purchases were made pursuant to a tender offer for the 11.25% Notes. Concurrent with the tender offer for the 11.25% Notes, XM solicited consents to amend the 11.25% Notes and the related indenture and security documents to eliminate most of the restrictive covenants and certain events of default applicable to the 11.25% Notes and to release the security for, and guarantees of, the 11.25% Notes.

The remainder of the 11.25% Notes of \$36,685 was purchased in January 2011 for an aggregate purchase price of \$40,376. A loss from extinguishment of debt of \$4,891 will be recorded in the first quarter of 2011.

(h) 13% Senior Notes due 2013

In July 2008, XM issued \$778,500 aggregate principal amount of 13% Senior Notes due 2013 (the “13% Notes”). Interest is payable semi-annually in arrears on February 1 and August 1 of each year at a rate of 13% per annum. The 13% Notes mature on August 1, 2013. Substantially all of our domestic wholly-owned subsidiaries guarantee the obligations under the 13% Notes.

(i) 9.75% Senior Notes due 2014

On December 31, 2009, XM had outstanding \$5,260 aggregate principal amount of 9.75% Senior Notes due 2014 (the “XM 9.75% Notes”). In August 2010, XM redeemed all of the outstanding XM 9.75% Notes plus accrued interest of \$150 for \$5,666. We recorded a loss on extinguishment on the XM 9.75% Notes of \$256 due to the cash redemption premium paid, as a Loss on extinguishment of debt and credit facilities, net, in our consolidated statements of operations.

(j) 7% Exchangeable Senior Subordinated Notes due 2014

In August 2008, XM issued \$550,000 aggregate principal amount of 7% Exchangeable Senior Subordinated Notes due 2014 (the “Exchangeable Notes”). The Exchangeable Notes are senior subordinated obligations and rank junior in right of payment to our existing and future senior debt and equally in right of payment with our existing and future senior subordinated debt. Substantially all of our domestic wholly-owned subsidiaries have guaranteed the Exchangeable Notes on a senior subordinated basis.

Interest is payable semi-annually in arrears on June 1 and December 1 of each year at a rate of 7% per annum. The Exchangeable Notes mature on December 1, 2014. The Exchangeable Notes are exchangeable at any time at the option of the holder into shares of our common stock at an initial exchange rate of 533.3333 shares of common stock per \$1,000 principal amount of Exchangeable Notes, which is equivalent to an approximate exchange price of \$1.875 per share of common stock.

(k) 7.625% Senior Notes due 2018

In October 2010, XM issued \$700,000 aggregate principal amount of 7.625% Senior Notes due 2018 (the “7.625% Senior Notes”). Interest is payable semi-annually in arrears on May 1 and November 1 of each year, commencing on May 1, 2011, at a rate of 7.625% per annum. A majority of the net proceeds were used to purchase

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

\$489,065 aggregate principal amount of the 11.25% Notes. The 7.625% Senior Notes mature on November 1, 2018. Substantially all of our domestic wholly-owned subsidiaries guarantee our obligations under the 7.625% Senior Notes.

Expired Credit Arrangements

LM Term Loan and LM Purchase Money Loan

In February 2009, SIRIUS entered into a Credit Agreement (the “LM Credit Agreement”) with Liberty Media Corporation, as administrative agent and collateral agent. The LM Credit Agreement provided for a \$250,000 term loan (“LM Term Loan”) and \$30,000 of purchase money loans (“LM Purchase Money Loan”). Concurrently with entering into the LM Credit Agreement, SIRIUS borrowed \$250,000 under the LM Term Loan. The proceeds of the LM Term Loan were used (i) to repay at maturity our outstanding 2.5% Convertible Notes due February 17, 2009 and (ii) for general corporate purposes, including related transaction costs.

In August 2009, SIRIUS used net proceeds from the sale of its 9.75% Notes to extinguish the LM Term Loan and LM Purchase Money Loan. We recorded an aggregate loss on extinguishment of the LM Term Loan and LM Purchase Money Loan of \$134,520 consisting primarily of the unamortized discount, deferred financing fees and unaccreted portion of the repayment premium to Loss on extinguishment of debt and credit facilities, net, in our consolidated statements of operations.

Amended and Restated Credit Agreement due 2011

In March 2009, XM amended and restated the \$100,000 Senior Secured Term Loan due 2009, dated as of June 26, 2008, and the \$250,000 Senior Secured Revolving Credit Facility due 2009, dated as of May 5, 2006. These facilities were combined as term loans into the Amended and Restated Credit Agreement, dated as of March 6, 2009. Liberty Media LLC purchased \$100,000 aggregate principal amount of such loans from the lenders.

In June 2009, XM used net proceeds from the sale of its 11.25% Notes to repay amounts due under and extinguish the Amended and Restated Credit Agreement. XM paid a repayment premium of \$6,500. We recorded an aggregate loss on extinguishment of the Amended and Restated Credit Agreement of \$49,996 consisting primarily of the unamortized discount, deferred financing fees and unaccreted portion of the repayment premium to Loss on extinguishment of debt and credit facilities, net, in our consolidated statements of operations.

Second-Lien Credit Agreement

In February 2009, XM entered into a Credit Agreement (the “XM Credit Agreement”) with Liberty Media Corporation, as administrative agent and collateral agent. The XM Credit Agreement provided for a \$150,000 term loan. On March 6, 2009, XM amended and restated the XM Credit Agreement (the “Second-Lien Credit Agreement”) with Liberty Media Corporation.

In June 2009, XM terminated the Second-Lien Credit Agreement in connection with the sale of the 11.25% Notes and repaid all amounts due thereunder. We recorded a loss on termination of the Second-Lien Credit Agreement of \$57,663 related to deferred financing fees to Loss on extinguishment of debt and credit facilities, net, in our consolidated statements of operations.

Covenants and Restrictions

Our debt generally requires compliance with certain covenants that restrict our ability to, among other things, (i) incur additional indebtedness unless our consolidated leverage ratio would be no greater than 6.00 to 1.00 after the incurrence of the indebtedness, (ii) incur liens, (iii) pay dividends or make certain other restricted payments, investments or acquisitions, (iv) enter into certain transactions with affiliates, (v) merge or consolidate with another person, (vi) sell, assign, lease or otherwise dispose of all or substantially all of our assets, and (vii) make voluntary

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

prepayments of certain debt, in each case subject to exceptions. We operated XM as an unrestricted subsidiary for purposes of compliance with the covenants contained in our debt instruments through January 12, 2011.

Under our debt agreements, the following generally constitute an event of default: (i) a default in the payment of interest; (ii) a default in the payment of principal; (iii) failure to comply with covenants; (iv) failure to pay other indebtedness after final maturity or acceleration of other indebtedness exceeding a specified amount; (v) certain events of bankruptcy; (vi) a judgment for payment of money exceeding a specified aggregate amount; and (vii) voidance of subsidiary guarantees, subject to grace periods where applicable. If an event of default occurs and is continuing, our debt could become immediately due and payable.

At December 31, 2010, we were in compliance with our debt covenants.

(12) Stockholders' Equity

Common Stock, par value \$0.001 per share

We were authorized to issue up to 9,000,000,000 shares of common stock as of December 31, 2010 and 2009. There were 3,933,195,112 and 3,882,659,087 shares of common stock issued and outstanding as of December 31, 2010 and 2009, respectively.

As of December 31, 2010, approximately 3,361,345,000 shares of common stock were reserved for issuance in connection with outstanding convertible debt, preferred stock, warrants, incentive stock awards and common stock to be granted to third parties upon satisfaction of performance targets.

To facilitate the offering of the Exchangeable Notes, we entered into share lending agreements with Morgan Stanley Capital Services Inc. ("MS") and UBS AG London Branch ("UBS") in July 2008, under which we loaned MS and UBS an aggregate of 262,400,000 shares of our common stock in exchange for a fee of \$0.001 per share. The obligations of MS to us under its share lending agreement are guaranteed by its parent company, Morgan Stanley. During the third quarter of 2009, MS returned to us 60,000,000 shares of our common stock borrowed in July 2008, which were retired upon receipt. As of December 31, 2010 and 2009, there were 202,400,000 shares loaned under the facilities.

Under each share lending agreement, the share loan will terminate in whole or in part, as the case may be, and the relevant borrowed shares must be returned to us upon the earliest of the following: (i) the share borrower terminates all or a portion of the loan between it and us, (ii) we notify the share borrower that some of the Exchangeable Notes as to which borrowed shares relate have been exchanged, repaid or repurchased or are otherwise no longer outstanding, (iii) the maturity date of the Exchangeable Notes, December 1, 2014, (iv) the date as of which the entire principal amount of the Exchangeable Notes ceases to be outstanding as a result of exchange, repayment, repurchase or otherwise or (v) the termination of the share lending agreement by the share borrower or by us upon default by the other party, including the bankruptcy of us or the share borrower or, in the case of the MS share lending agreement, the guarantor. A share borrower may delay the return of borrowed shares for up to 30 business days (or under certain circumstances, up to 60 business days) if such share borrower is legally prevented from returning the borrowed shares to us, in which case the share borrower may, under certain circumstances, choose to pay us the value of the borrowed shares in cash instead of returning the borrowed shares. Once borrowed shares are returned to us, they may not be re-borrowed under the share lending agreements. There were no requirements for the share borrowers to provide collateral.

The shares we loaned to the share borrowers are issued and outstanding for corporate law purposes, and holders of borrowed shares (other than the share borrowers) have the same rights under those shares as holders of any of our other outstanding common shares. Under GAAP, the borrowed shares are not considered outstanding for the purpose of computing and reporting our net income (loss) per common share. The accounting method may change if, due to a default by either UBS or MS (or Morgan Stanley, as guarantor), the borrowed shares, or the equivalent value of those shares, will not be returned to us as required under the share lending agreements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In January 2004, SIRIUS signed a seven-year agreement with a sports programming provider. Upon execution of this agreement, SIRIUS delivered 15,173,070 shares of common stock valued at \$40,967 to that programming provider. These shares of common stock are subject to transfer restrictions which lapse over time. We recognized share-based payment expense associated with these shares of \$5,852 in the years ended December 31, 2010, 2009 and 2008. As of December 31, 2010, there was a \$1,568 remaining balance of common stock value included in other current assets. As of December 31, 2009, there was a \$7,420 remaining balance of common stock value included in other current assets and other long-term assets in the amount of \$5,852 and \$1,568, respectively.

Preferred Stock, par value \$0.001 per share

We were authorized to issue up to 50,000,000 shares of undesignated preferred stock as of December 31, 2010 and 2009.

There were zero and 24,808,959 shares of Series A Convertible Preferred Stock (“Series A Preferred Stock”) issued and outstanding as of December 31, 2010 and 2009, respectively. In September 2010, the holder of the Series A Preferred Stock converted the 24,808,959 outstanding shares into an equal number of shares of our common stock.

There were 12,500,000 shares of Convertible Perpetual Preferred Stock, Series B (the “Series B Preferred Stock”), issued and outstanding as of December 31, 2010 and 2009. The Series B Preferred Stock is convertible into shares of our common stock at the rate of 206.9581409 shares of common stock for each share of Series B Preferred Stock, representing approximately 40% of our outstanding shares of common stock (after giving effect to such conversion). As the holder of the Series B Preferred Stock, Liberty Radio LLC is entitled to a number of votes equal to the number of shares of our common stock into which each such Series B Preferred Stock share is convertible. Liberty Radio LLC will also receive dividends and distributions ratably with our common stock, on an as-converted basis. With respect to dividend rights, the Series B Preferred Stock ranks evenly with our common stock and each other class or series of our equity securities not expressly provided as ranking senior to the Series B Preferred Stock. With respect to liquidation rights, the Series B Preferred Stock ranks evenly with each other class or series of our equity securities not expressly provided as ranking senior to the Series B Preferred Stock, and will rank senior to our common stock. In 2009, we accounted for the issuance of Series B Preferred Stock by recording a \$227,716 increase to additional paid-in capital for the amount of allocated proceeds received and an additional \$186,188 increase to paid-in capital for the beneficial conversion feature, which was recognized as a charge to retained earnings.

There were no shares of Preferred Stock, Series C Junior (the “Series C Junior Preferred Stock”), issued and outstanding as of December 31, 2010 and 2009. In 2009, our board of directors created and reserved for issuance in accordance with the Rights Plan (as described below) 9,000 shares of the Series C Junior Preferred Stock. The shares of Series C Junior Preferred Stock are not redeemable and rank, with respect to the payment of dividends and the distribution of assets, junior to all other series of our preferred stock, unless the terms of such series shall so provide.

Warrants

We have issued warrants to purchase shares of common stock in connection with distribution and programming agreements, satellite purchase agreements and certain debt issuances. As of December 31, 2010, approximately 42,421,000 warrants to acquire an equal number of shares of common stock with an average exercise price of \$2.66 per share were outstanding and fully vested. Warrants vest over time or upon the achievement of milestones and expire at various times through 2015. We incurred warrant related expense of \$0, \$2,522 and \$1,865 for the years ended December 31, 2010, 2009 and 2008, respectively.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	Average Exercise Price	Expiration Date	Number of Warrants Outstanding	
			December 31,	
			2010	2009
(Warrants in thousands)				
NFL	\$ 2.50	March 2015	16,718	16,718
DaimlerChrysler AG	1.04	May 2012	16,500	16,500
RadioShack	—	December 2010	—	4,000
Ford	3.00	October 2012	4,000	4,000
Lehman Warrants	15.00	March 2011 - April 2011	1,575	2,100
Warrants associated with XM Holdings Debt	—	March 2010	—	325
Space Systems/Loral	7.05	December 2011	1,840	1,840
Other distributors and programming providers	3.00	June 2014	1,788	1,788
Total	\$ 2.66		42,421	47,271

Rights Plan

In April 2009, our board of directors adopted a rights plan. The terms of the rights and the rights plan are set forth in a Rights Agreement dated as of April 29, 2009 (the “Rights Plan”). The Rights Plan is intended to act as a deterrent to any person or group acquiring 4.9% or more of our outstanding common stock (assuming for purposes of this calculation that all of our outstanding convertible preferred stock is converted into common stock) without the approval of our board of directors. The Rights Plan will continue in effect until August 1, 2011, unless it is terminated or redeemed earlier by our board of directors.

(13) Benefits Plans

We recognized share-based payment expense of \$54,585, \$65,607 and \$79,668 for the years ended December 31, 2010, 2009 and 2008, respectively. We did not realize any income tax benefits from share-based benefits plans during the year ended December 31, 2010, 2009 and 2008 as a result of the full valuation allowance that is maintained for substantially all net deferred tax assets.

2009 Long-Term Stock Incentive Plan

In May 2009, our stockholders approved the Sirius XM Radio Inc. 2009 Long-Term Stock Incentive Plan (the “2009 Plan”). Employees, consultants and members of our board of directors are eligible to receive awards under the 2009 Plan. The 2009 Plan provides for the grant of stock options, restricted stock, restricted stock units and other stock-based awards that the compensation committee of our board of directors may deem appropriate. Vesting and other terms of stock-based awards are set forth in the agreements with the individuals receiving the awards. Stock-based awards granted under the 2009 Plan are generally subject to a vesting requirement. Stock-based awards generally expire ten years from the date of grant. Each restricted stock unit entitles the holder to receive one share of common stock upon vesting. As of December 31, 2010, approximately 268,255,000 shares of common stock were available for future grants under the 2009 Plan.

Other Plans

We maintain four other share-based benefit plans — the XM 2007 Stock Incentive Plan, the Amended and Restated Sirius Satellite Radio 2003 Long-Term Stock Incentive Plan, the XM 1998 Shares Award Plan and the XM

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Talent Option Plan. No further awards may be made under these plans. Outstanding awards under these plans are being continued.

The following table summarizes the weighted-average assumptions used to compute the fair value of options granted to employees and members of our board of directors:

	For the Years Ended December 31,		
	2010	2009	2008
Risk-free interest rate	1.7%	2.5%	2.3%
Expected life of options — years	5.28	4.68	4.89
Expected stock price volatility	85%	88%	80%
Expected dividend yield	0%	0%	0%

The following table summarizes the range of assumptions used to compute the fair value of options granted to third parties, other than non-employee members of our board of directors:

	For the Years Ended December 31,	
	2009	2008
Risk-free interest rate	0.67-2.69%	0.37-3.34%
Expected life — years	2.33-6.19	1.25-4.08
Expected stock price volatility	83-130%	80%
Expected dividend yield	0%	0%

There were no options granted to third parties, other than non-employee members of our board of directors, during the year ended December 31, 2010.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes stock option activity under our share-based payment plans for the years ended December 31, 2010, 2009 and 2008 (shares in thousands):

	<u>Shares</u>	<u>Weighted-Average Exercise Price</u>	<u>Weighted-Average Remaining Contractual Term (Years)</u>	<u>Aggregate Intrinsic Value</u>
Outstanding, January 1, 2008	79,600	\$ 5.38		
Options exchanged for outstanding XM Holdings options	67,711	\$ 4.09		
Granted	24,358	\$ 2.12		
Exercised	(117)	\$ 1.74		
Forfeited, cancelled or expired	<u>(6,116)</u>	\$ 4.09		
Outstanding, December 31, 2008	165,436	\$ 4.42		
Granted	265,761	\$ 0.53		
Exercised	—	\$ —		
Forfeited, cancelled or expired	<u>(66,405)</u>	\$ 5.21		
Outstanding, December 31, 2009	364,792	\$ 1.44		
Granted	71,179	\$ 0.97		
Exercised	(19,360)	\$ 0.56		
Forfeited, cancelled or expired	<u>(14,741)</u>	\$ 3.58		
Outstanding, December 31, 2010	<u>401,870</u>	\$ 1.32	6.45	\$327,294
Exercisable, December 31, 2010	<u>123,479</u>	\$ 2.68	4.52	\$ 59,739

The weighted average grant date fair value of options granted during the years ended December 31, 2010, 2009 and 2008 was \$0.67, \$0.36 and \$1.27, respectively. The total intrinsic value of stock options exercised during the years ended December 31, 2010, 2009 and 2008 was \$13,261, \$0 and \$127.

We recognized share-based payment expense associated with stock options of \$44,833, \$46,080 and \$49,148 for the years ended December 31, 2010, 2009 and 2008, respectively.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes the nonvested restricted stock and restricted stock unit activity under our share-based payment plans for the years ended December 31, 2010, 2009 and 2008 (shares in thousands):

	<u>Shares</u>	<u>Weighted-Average Grant Date Fair Value</u>
Nonvested, January 1, 2008	3,623	\$ 3.70
Shares exchanged for non-vested XM holdings shares	33,339	\$ 2.93
Granted	3,208	\$ 2.87
Vested restricted stock awards	(15,342)	\$ 2.97
Vested restricted stock units	(2,793)	\$ 3.55
Forfeited	<u>(2,104)</u>	\$ 2.90
Nonvested, December 31, 2008	19,931	\$ 2.84
Granted	84,851	\$ 0.37
Vested restricted stock awards	(8,476)	\$ 2.98
Vested restricted stock units	(87,036)	\$ 0.46
Forfeited	<u>(2,351)</u>	\$ 1.92
Nonvested, December 31, 2009	6,919	\$ 2.65
Granted	—	\$ —
Vested restricted stock awards	(4,039)	\$ 2.85
Vested restricted stock units	(192)	\$ 2.92
Forfeited	<u>(291)</u>	\$ 2.72
Nonvested, December 31, 2010	<u>2,397</u>	\$ 2.57

The weighted average grant date fair value of restricted stock units granted during the years ended December 31, 2010, 2009 and 2008 was \$0, \$0.37 and \$2.87; no restricted stock units were granted during 2010. The total intrinsic value of restricted stock and restricted stock units that vested during the years ended December 31, 2010, 2009 and 2008 was \$3,927, \$45,827 and \$21,451, respectively.

We recognized share-based payment expense associated with restricted stock units and shares of restricted stock of \$7,397, \$16,632 and \$21,813 for the years ended December 31, 2010, 2009 and 2008, respectively.

Total unrecognized compensation costs related to unvested share-based payment awards for stock options and restricted stock units and shares granted to employees and members of our board of directors at December 31, 2010 and 2009, net of estimated forfeitures, was \$108,170 and \$114,068, respectively. The weighted-average period over which the compensation expense for these awards is expected to be recognized is three years as of December 31, 2010.

401(k) Savings Plan

We sponsor the Sirius XM Radio 401(k) Savings Plan (the “Sirius XM Plan”) for eligible employees.

The Sirius XM Plan allows eligible employees to voluntarily contribute from 1% to 50% of their pre-tax eligible earnings, subject to certain defined limits. We match 50% of an employee’s voluntary contributions, up to 6% of an employee’s pre-tax salary, in the form of shares of common stock. Employer matching contributions under the Sirius XM Plan vest at a rate of $33 \frac{1}{3}\%$ for each year of employment and are fully vested after three years of employment for all current and future contributions. Legacy XM Plan participants are fully vested for all current and future employer contributions. Share-based payment expense resulting from the matching contribution to the plans was \$2,356, \$2,895 and \$2,735 for the years ended December 31, 2010, 2009 and 2008, respectively.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

We may also elect to contribute to the profit sharing portion of the Sirius XM Plan based upon the total eligible compensation of eligible participants. These additional contributions in the form of shares of common stock are determined by the compensation committee of our board of directors. Employees are only eligible to receive profit-sharing contributions during any year in which they are employed on the last day of the year. Profit-sharing contribution expense was \$0, \$0 and \$6,610 for the years ended December 31, 2010, 2009 and 2008, respectively.

(14) Income Taxes

Our income tax expense consisted of the following:

	For the Years Ended December 31,		
	2010	2009	2008
Current taxes:			
Federal	\$ —	\$ —	\$ —
State	942	—	—
Foreign	1,370	1,622	—
Total current taxes	2,312	1,622	—
Deferred taxes:			
Federal	4,163	3,962	2,674
State	(1,855)	397	(198)
Total deferred taxes	2,308	4,359	2,476
Total income tax expense	\$ 4,620	\$ 5,981	\$ 2,476

The following table indicates the significant elements contributing to the difference between the federal tax benefit at the statutory rate and at our effective rate:

	For the Years Ended		
	December 31,		
	2010	2009	2008
Federal tax expense (benefit), at statutory rate	\$ 16,678	\$(117,883)	\$(1,858,784)
State income tax expense (benefit), net of federal benefit	1,620	(11,788)	(185,879)
State rate changes	(2,252)	—	17,307
Non-deductible expenses	4,130	1,849	1,930,650
Other, net	6,193	(4,945)	(477)
Change in valuation allowance	(21,749)	138,748	99,659
Income tax expense	\$ 4,620	\$ 5,981	\$ 2,476

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities are presented below:

	<u>December 31,</u>	
	<u>2010</u>	<u>2009</u>
Deferred tax assets:		
Net operating loss carryforwards	\$ 3,091,869	\$ 3,086,067
GM payments and liabilities	308,776	311,235
Deferred revenue	346,221	226,763
Severance accrual	266	1,821
Accrued bonus	16,599	16,130
Expensed costs capitalized for tax	44,149	59,999
Loan financing costs	1,568	17,288
Investments	62,742	61,643
Stock based compensation	118,507	155,754
Other	53,260	49,538
Total deferred tax assets	<u>4,043,957</u>	<u>3,986,238</u>
Deferred tax liabilities:		
Depreciation of property and equipment	(379,180)	(126,240)
FCC license	(773,850)	(771,407)
Other intangible assets	(209,489)	(251,360)
Other	—	(89,441)
Net deferred tax liabilities	<u>(1,362,519)</u>	<u>(1,238,448)</u>
Net deferred tax assets before valuation allowance	2,681,438	2,747,790
Valuation allowance	<u>(3,551,288)</u>	<u>(3,615,332)</u>
Net deferred tax liability	<u>\$ (869,850)</u>	<u>\$ (867,542)</u>

The difference in the net deferred tax liability of \$869,850 and \$867,542 at December 31, 2010 and 2009, respectively, is primarily the result of the amortization of the FCC license which is amortized over 15 years for tax purposes but not amortized for book purposes. This net deferred tax liability cannot be offset against our deferred tax assets under GAAP since it relates to indefinite-lived assets and is not anticipated to reverse in the same period.

At December 31, 2010, we had net operating loss (“NOL”) carryforwards of approximately \$8,052,000 for federal and state income tax purposes available to offset future taxable income. These NOL carryforwards expire on various dates beginning in 2014. We have had several ownership changes under Section 382 of the Internal Revenue Code, which may limit our ability to utilize tax deductions.

As a result of the Merger, both SIRIUS and XM had a Section 382 ownership change. The ownership change does not limit our ability to utilize future tax deductions and so no adjustments were made to gross deferred tax assets as a result of the Merger.

Future changes in our ownership may limit our ability to utilize our deferred tax assets. Realization of our deferred tax assets is dependent upon future earnings; accordingly, a full valuation allowance was recorded against the assets.

As of December 31, 2010 and 2009, we recorded \$942 and \$0, respectively, for uncertain state tax positions in other long term liabilities. We do not currently anticipate that our existing reserves related to uncertain tax positions as of December 31, 2010 will significantly increase or decrease during the twelve-month period ending

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

December 31, 2011; however, various events could cause our current expectations to change in the future. Should our position with respect to the majority of these uncertain tax positions be upheld, the effect would be recorded in the statement of operations as part of the income tax provision.

The impact of temporary differences and tax attributes are considered when calculating interest and penalty accruals associated with the tax reserve. The amount accrued for interest and penalties as of December 31, 2010 and December 31, 2009 was zero for both periods. Our policy is to recognize interest and penalties accrued on uncertain tax positions as part of income tax expense.

(15) Commitments and Contingencies

The following table summarizes our expected contractual cash commitments as of December 31, 2010:

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Thereafter</u>	<u>Total</u>
Long-term debt obligations(1)	\$196,332	\$ 1,558	\$ 816,321	\$550,182	\$1,057,000	\$700,000	\$3,321,393
Cash interest payments	299,518	292,463	290,271	186,935	113,433	160,125	1,342,745
Satellite and transmission	120,444	5,481	5,963	14,455	13,997	21,195	181,535
Programming and content	255,463	218,662	174,596	151,581	145,231	3,750	949,283
Marketing and distribution	44,657	20,155	12,956	8,590	7,000	8,000	101,358
Satellite incentive payments	9,767	12,071	12,790	12,632	12,165	86,123	145,548
Operating lease obligations	32,279	28,090	24,256	18,383	10,364	3,101	116,473
Other	30,527	9,679	298	2	—	—	40,506
Total(2)	<u>\$988,987</u>	<u>\$588,159</u>	<u>\$1,337,451</u>	<u>\$942,760</u>	<u>\$1,359,190</u>	<u>\$982,294</u>	<u>\$6,198,841</u>

(1) Includes capital lease obligations.

(2) The table does not include our reserve for uncertain taxes, which at December 31, 2010 totaled \$942, as the specific timing of any cash payments relating to this obligation cannot be projected with reasonable certainty.

Long-term debt obligations. Long-term debt obligations include principal payments on outstanding debt and capital lease obligations. Included in the chart above in 2013 is \$36,685 of the 11.25% Notes, which were repurchased in full in January 2011, for an aggregate purchase price of \$40,376, which includes consent payments and accrued and unpaid interest. Included in the chart above in 2011, is \$94,148 of the 3.25% Notes which was repurchased in February 2011 for a purchase price of \$96,041 which includes accrued and unpaid interest.

Cash interest payments. Cash interest payments include interest due on outstanding debt through maturity. The chart above does not give effect to the purchases of the 11.25% Notes in January 2011 or the 3.25% Notes in February 2011.

Satellite and transmission. We have entered into agreements with third parties to operate and maintain the off-site satellite telemetry, tracking and control facilities and certain components of our terrestrial repeater networks. We have also entered into various agreements to design and construct a satellite and related launch vehicle for use in our systems.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

We have an agreement with Space Systems/Loral to design and construct a sixth satellite, FM-6, for use in the SIRIUS system. In January 2008, we entered into an agreement with International Launch Services (ILS) to secure a satellite launch on a Proton rocket for this satellite.

Programming and content. We have entered into various programming agreements. Under the terms of these agreements, we are obligated to provide payments to other entities that may include fixed payments, advertising commitments and revenue sharing arrangements.

Marketing and distribution. We have entered into various marketing, sponsorship and distribution agreements to promote our brand and are obligated to make payments to sponsors, retailers, automakers and radio manufacturers under these agreements. Certain programming and content agreements also require us to purchase advertising on properties owned or controlled by the licensors. We also reimburse automakers for certain engineering and development costs associated with the incorporation of satellite radios into vehicles they manufacture. In addition, in the event certain new products are not shipped by a distributor to its customers within 90 days of the distributor's receipt of goods, we have agreed to purchase and take title to the product.

Satellite incentive payments. Boeing Satellite Systems International, Inc., the manufacturer of four of XM's in-orbit satellites, may be entitled to future in-orbit performance payments with respect to two of XM's satellites. As of December 31, 2010, we have accrued \$28,605 related to contingent in-orbit performance payments for XM-3 and XM-4 based on expected operating performance over their fifteen year design life. Boeing may also be entitled to an additional \$10,000 if XM-4 continues to operate above baseline specifications during the five years beyond the satellite's fifteen-year design life.

Space Systems/Loral, may be entitled to future in-orbit performance payments. As of December 31, 2010, we have accrued \$12,565 and \$21,450 related to contingent performance payments for FM-5 and XM-5, respectively, based on expected operating performance over their fifteen-year design life.

Operating lease obligations. We have entered into cancelable and non-cancelable operating leases for office space, equipment and terrestrial repeaters. These leases provide for minimum lease payments, additional operating expense charges, leasehold improvements and rent escalations that have initial terms ranging from one to fifteen years, and certain leases that have options to renew. The effect of the rent holidays and rent concessions are recognized on a straight-line basis over the lease term, including reasonably assured renewal periods. Total rent recognized in connection with leases for the years ended December 31, 2010, 2009 and 2008 was \$36,652, \$44,374 and \$40,378, respectively.

Other. We have entered into various agreements with third parties for general operating purposes. In addition to the minimum contractual cash commitments described above, we have entered into agreements with other variable cost arrangements. These future costs are dependent upon many factors, including subscriber growth, and are difficult to anticipate; however, these costs may be substantial. We may enter into additional programming, distribution, marketing and other agreements that contain similar variable cost provisions.

We do not have any other significant off-balance sheet arrangements that are reasonably likely to have a material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

Legal Proceedings

State Consumer Investigations. A Multistate Working Group of 28 State Attorneys General, led by the Attorney General of the State of Ohio, is investigating certain of our consumer practices. The investigation focuses on practices relating to the cancellation of subscriptions; automatic renewal of subscriptions; charging, billing, collecting, and refunding or crediting of payments from consumers; and soliciting customers.

A separate investigation into our consumer practices is being conducted by the Attorney General of the State of Florida. In addition, in September 2010, the Attorney General of the State of Missouri commenced an action against us in Missouri Circuit Court, Twenty-Second Judicial Circuit, St. Louis, Missouri, alleging violations of the

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Missouri Telemarketing No-Call List Act. The suit seeks a permanent injunction prohibiting us from making, or causing to be made, telephone solicitations to our subscribers in the State of Missouri who are on Missouri's no-call list, statutory penalties and reimbursement of costs. We believe our telemarketing activities to our subscribers in Missouri fully comply with applicable law.

We are cooperating with these investigations and believe our consumer practices comply with all applicable federal and state laws and regulations.

Carl Blessing et al. v. Sirius XM Radio Inc. A subscriber, Carl Blessing, filed a lawsuit against us in the United States District Court for the Southern District of New York. Mr. Blessing's lawsuit has been consolidated with substantially identical lawsuits brought by other subscribers. Mr. Blessing and 23 other plaintiffs purport to represent all subscribers who were subject to: an increase in the price for additional-radio subscriptions from \$6.99 to \$8.99; the imposition of the US Music Royalty Fee; and the elimination of our free streaming internet service. Based on these pricing changes, the suit raises four claims. First, the suit claims the pricing changes show that the Merger lessened competition or led to a monopoly in violation of the Clayton Act. Second, it claims that, for the same reason, the Merger led to monopolization in violation of the Sherman Act. Third, it claims that our subscriber service agreement misrepresents that the US Music Royalty Fee will be used exclusively to defray increases in royalty costs incurred since the filing of the merger application with the FCC (and as permitted by the FCC order) in violation of the consumer protection and unfair trade practice laws of 41 states and the District of Columbia. A fourth claim — that the alleged misrepresentation violates the implied duty of good faith and fair dealing we owe our subscribers under New York contract law — has been dismissed by the court. The complaint seeks monetary damages as well as treble damages under the Clayton Act. Discovery in this matter is substantially complete and a trial has been scheduled for May 2011. We believe that the plaintiffs' claims are without merit and we are vigorously defending ourselves in this litigation.

A stockholder, Mark Fialkov, also filed a shareholder derivative suit in the Supreme Court of the State of New York claiming that, by allowing the price increases that prompted the Blessing litigation, our board of directors breached its duty of loyalty to the corporation. The action names as defendants Sirius XM and fifteen individuals — all directors or former directors of Sirius XM. This lawsuit has been stayed pending resolution of the Blessing litigation.

Other Matters. In the ordinary course of business, we are a defendant in various lawsuits and arbitration proceedings, including actions filed by subscribers, both on behalf of themselves and on a class action basis; former employees; parties to contracts or leases; and owners of patents, trademarks, copyrights or other intellectual property. None of these actions are, in our opinion, likely to have a material adverse effect on our business, financial condition or results of operations.

(16) Subsequent Events

Merger of XM Satellite Radio Inc. and Sirius XM Radio Inc.

On January 12, 2011, XM Satellite Radio Inc., our wholly-owned subsidiary, merged with and into Sirius XM Radio Inc. Prior to January 12, 2011, we operated XM Satellite Radio Inc., together with its subsidiaries, as an unrestricted subsidiary under the agreements governing our indebtedness.

Repurchase of 11.25% Notes

The remainder of the 11.25% Notes of \$36,685 was purchased in January 2011, for an aggregate purchase price of \$40,376. A loss from extinguishment of debt of \$4,891 will be recorded in the first quarter of 2011.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Repurchase of 3.25% Notes

In February 2011, \$94,148 of the 3.25% Notes was purchased, for an aggregate purchase price of \$96,041. A loss from extinguishment of debt of \$1,079 will be recorded in the first quarter of 2011.

Canada Merger

Canadian Satellite Radio Holdings Inc. (“CSR”), parent company of XM Canada, and SIRIUS Canada announced in November 2010 that they have entered into a definitive agreement to combine the companies (the “Canada Merger”). Under the terms of the agreement, SIRIUS Canada shareholders will be issued shares of CSR representing a 58.0% equity interest in CSR immediately following closing of the transaction. Our approximate ownership interest in CSR following closing of the Canada Merger will be a 37.1% equity interest (25.0% voting interest) representing approximately 45.5 million shares and will be accounted for under the equity method. The Canada Merger is anticipated to close during the second quarter of 2011. We are still evaluating the impact of the Canada Merger on our financial statements.

(17) Quarterly Financial Data — Unaudited

Our quarterly results of operations are summarized below:

	For the Three Months Ended			
	March 31	June 30	September 30	December 31
2010:				
Total revenue	\$ 663,784	\$ 699,761	\$ 717,548	\$ 735,899
Cost of services	\$(260,867)	\$(266,121)	\$ (280,545)	\$ (291,699)
Income from operations	\$ 125,140	\$ 125,634	\$ 143,069	\$ 71,571
Net income (loss)	\$ 41,598	\$ 15,272	\$ 67,629	\$ (81,444)
Net income (loss) per common share — basic(1)	\$ 0.01	\$ —	\$ 0.02	\$ (0.02)
Net income (loss) per common share — diluted(1)	\$ 0.01	\$ —	\$ 0.01	\$ (0.02)
2009:				
Total revenue	\$ 586,979	\$ 590,829	\$ 618,656	\$ 676,174
Cost of services	\$(268,947)	\$(254,432)	\$ (266,888)	\$ (273,741)
Income from operations	\$ 41,061	\$ 37,235	\$ 66,355	\$ 83,675
Net (loss) income	\$ (52,648)	\$(159,644)	\$ (151,527)	\$ 11,781
Net loss per common share — basic and diluted(1)	\$ (0.07)	\$ (0.04)	\$ (0.04)	\$ —

(1) The sum of the quarterly net loss per share applicable to common stockholders (basic and diluted) does not necessarily agree to the net loss per share for the year due to the timing of our common stock issuances.

SIRIUS XM RADIO INC. AND SUBSIDIARIES

Schedule II — Schedule of Valuation and Qualifying Accounts

<u>Description</u>	<u>Balance January 1,</u>	<u>Charged to Expenses</u>	<u>Write-offs/ Payments/ Other</u>	<u>Balance December 31,</u>
		(In thousands)		
2008				
Allowance for doubtful accounts	\$ 4,608	21,589	(15,337)	\$ 10,860
Deferred tax assets — valuation allowance	\$1,426,092	99,659	1,950,832(1)	\$ 3,476,583
2009				
Allowance for doubtful accounts	\$ 10,860	30,602	(32,795)	\$ 8,667
Deferred tax assets — valuation allowance	\$3,476,583	138,749	—	\$ 3,615,332
2010				
Allowance for doubtful accounts	\$ 8,667	32,379	(30,824)	\$ 10,222
Deferred tax assets — valuation allowance	\$3,615,332	(21,749)	(42,295)	\$ 3,551,288

(1) Adjustments to reflect allocation of the purchase price in connection with the Merger.

EXHIBIT INDEX

<u>Exhibit</u>	<u>Description</u>
2.1	Agreement and Plan of Merger, dated as of February 19, 2007, among the Company, Vernon Merger Corporation and XM Satellite Radio Holdings Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K dated February 21, 2007).
3.1	Amended and Restated Certificate of Incorporation of the Company, dated March 4, 2003 (incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002).
3.2	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company, dated July 28, 2008 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated August 1, 2008).
3.3	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company, dated December 18, 2008 (incorporated by reference to Exhibit 3.3 to the Company's Registration Statement on Form S-3 dated December 30, 2008).
3.4	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company, dated May 29, 2009 (incorporated by reference to Exhibit 4.4 to the Company's Registration Statement on Form S-8 dated July 1, 2009).
3.5	Amended and Restated By-Laws of the Company (incorporated by reference to Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001).
3.6	Certificate of Amendment of the Amended and Restated By-Laws of the Company, dated July 28, 2008 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K dated August 1, 2008).
3.7	Certificate of Designations of Series B-1 Convertible Perpetual Preferred Stock of the Company, dated March 5, 2009 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated March 6, 2009).
3.8	Certificate of Ownership and Merger, dated August 5, 2008 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated August 5, 2008).
3.9	Certificate of Ownership and Merger, dated January 12, 2011 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated January 12, 2011).
4.1	Form of certificate for shares of the Company's Common Stock (incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-1 (File No. 33-74782)).
4.2	Amended and Restated Warrant Agreement, dated as of December 27, 2000, between the Company and United States Trust Company of New York, as warrant agent and escrow agent (incorporated by reference to Exhibit 4.27 to the Company's Registration Statement on Form S-3 (File No. 333-65602)).
4.3	Common Stock Purchase Warrant granted by the Company to Ford Motor Company dated October 7, 2002 (incorporated by reference to Exhibit 4.16 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2002).
4.4	Indenture, dated as of May 23, 2003, between the Company and The Bank of New York, as trustee (incorporated by reference to Exhibit 99.2 to the Company's Current Report on Form 8-K dated May 30, 2003).
4.5	Third Supplemental Indenture, dated as of October 13, 2004, between the Company and The Bank of New York, as trustee, relating to the Company's 3.25% Convertible Notes due 2011 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated October 13, 2004).
4.6	Common Stock Purchase Warrant granted by the Company to DaimlerChrysler AG dated October 1, 2007 (incorporated by reference to Exhibit 4.13 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007).
4.7	Written instrument, dated July 28, 2008, among the Company, XM Satellite Radio Holdings Inc. and Vernon Merger Corporation relating to the Warrant Agreement with Space Systems / Loral, dated June 3, 2005 (incorporated by reference to Exhibit 4.69 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).

Exhibit	Description
4.8	Indenture, dated as of July 31, 2008, among XM Escrow LLC and The Bank of New York Mellon, as trustee, relating to the 13% Senior Notes due 2013 (incorporated by reference to Exhibit 4.77 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).
4.9	Supplemental Indenture, dated as of July 31, 2008, among XM Satellite Radio Holdings Inc., XM Satellite Radio Inc., XM Equipment Leasing LLC, XM Radio Inc., and The Bank of New York Mellon, as trustee, relating to the 13% Senior Notes due 2013 (incorporated by reference to Exhibit 4.78 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).
4.10	Supplemental Indenture, dated as of July 31, 2008, among XM Satellite Radio Holdings Inc., XM Escrow LLC and The Bank of New York Mellon, as trustee, relating to the 13% Senior Notes due 2013 (incorporated by reference to Exhibit 4.79 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).
4.11	Indenture, dated as of August 1, 2008 among XM Satellite Radio Inc., XM Satellite Radio Holdings Inc., XM Equipment LLC, XM Radio Inc., the Company and The Bank of New York Mellon, as trustee, relating to the 7% Exchangeable Senior Subordinated Notes due 2014 (incorporated by reference to Exhibit 4.80 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).
4.12	Registration Rights Agreement, dated August 1, 2008, among XM Satellite Radio Inc., XM Satellite Radio Holdings Inc., XM Equipment Leasing LLC, XM Radio Inc., the Company, J.P. Morgan Securities Inc., Morgan Stanley & Co. Incorporated and UBS Securities LLC, relating to the 7% Exchangeable Senior Subordinated Notes due 2014 (incorporated by reference to Exhibit 4.81 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).
4.13	Form of Media-Based Incentive Warrant, dated as of January 27, 2009, issued by the Company to NFL Enterprises LLC (incorporated by reference to Exhibit 4.48 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008).
4.14	Investment Agreement, dated as of February 17, 2009, among the Company and Liberty Radio LLC (incorporated by reference to Exhibit 4.55 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008).
4.15	Rights Agreement, dated as of April 29, 2009, between the Company and The Bank of New York Mellon, as Rights Agent, which includes the Form of Certificate of Designation as Exhibit A, Form of Right Certificate as Exhibit B and the Summary of Rights as Exhibit C (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on April 29, 2009).
4.16	Indenture, dated as of August 24, 2009, between the Company and U.S. Bank National Association relating to the 9.75% Senior Secured Notes due 2015 (incorporated by reference to Exhibit 4.61 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009).
4.17	Indenture, dated as of March 17, 2010, among the Company, the guarantors thereto and U.S. Bank National Association, as trustee, relating to the 8.75% Senior Notes due 2015 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated March 19, 2010).
4.18	Third Supplemental Indenture, dated April 14, 2010, among XM Satellite Radio Inc., certain subsidiaries thereof and The Bank of New York Mellon, as trustee, relating to the 13% Senior Notes due 2013 (incorporated by reference to XM Satellite Radio Inc.'s Quarterly Report on Form 10-Q filed on May 7, 2010).
4.19	Supplemental Indenture, dated April 14, 2010, among XM Satellite Radio Inc., certain subsidiaries thereof and The Bank of New York Mellon, as trustee, relating to the 7% Exchangeable Senior Subordinated Notes due 2014 (incorporated by reference to XM Satellite Radio Inc.'s Quarterly Report on Form 10-Q filed on May 7, 2010).
4.20	Indenture, dated as of October 27, 2010, among XM Satellite Radio Inc., the guarantors thereto and U.S. Bank National Association, as trustee, relating to the 7.625% Senior Notes due 2018 (incorporated by reference to Exhibit 4.1 to XM Satellite Radio Inc.'s Current Report on Form 8-K filed on October 28, 2010).
4.21	Supplemental Indenture, dated January 12, 2011, by and among XM Satellite Radio Inc., the Company, certain subsidiaries thereof and The Bank of New York Mellon, as trustee, relating to the 13% Senior Notes due 2013 (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on January 12, 2011).

Exhibit	Description
4.22	Supplemental Indenture, dated January 12, 2011, by and among XM Satellite Radio Inc., the Company, certain subsidiaries thereof and The Bank of New York Mellon, as trustee, relating to the 7% Exchangeable Senior Subordinated Notes due 2014 (incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on January 12, 2011).
4.23	Supplemental Indenture, dated January 12, 2011, by and among XM Satellite Radio Inc., the Company, certain subsidiaries thereof and U.S. Bank National Association, as trustee, relating to the 7.625% Senior Notes due 2018 (incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on January 12, 2011).
4.24	Supplemental Indenture, dated January 12, 2011, by and among the Company, certain subsidiaries thereof and U.S. Bank National Association, as trustee, relating to the 8.75% Senior Notes due 2015 (filed herewith).
4.25	Supplemental Indenture, dated January 12, 2011, by and among the Company, certain subsidiaries thereof and U.S. Bank National Association, as trustee, relating to the 9.75% Senior Secured Notes due 2015 (filed herewith).
4.26	Collateral Agreement, dated January 12, 2011, by and among the Company, certain subsidiaries thereof and U.S. Bank National Association, as collateral agent, relating to the 9.75% Senior Secured Notes due 2015 (incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K filed on January 12, 2011).
10.1	Lease Agreement, dated as of March 31, 1998, between Rock-McGraw, Inc. and the Company (incorporated by reference to Exhibit 10.1.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 1998).
**10.2	Operational Assistance Agreement, dated as of June 7, 1999, between XM Satellite Radio Inc. and Clear Channel Communications, Inc. (incorporated by reference to Exhibit 10.10 to Amendment No. 1 to XM Satellite Radio Holdings Inc.'s Registration Statement on Form S-1, File No. 333-83619).
**10.3	Technology Licensing Agreement among XM Satellite Radio Inc., XM Satellite Radio Holdings Inc., WorldSpace Management Corporation and American Mobile Satellite Corporation, dated as of January 1, 1998, amended by Amendment No. 1 to Technology Licensing Agreement, dated June 7, 1999 (incorporated by reference to Exhibit 10.3 to XM Satellite Radio Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007).
***10.4	Third Amended and Restated Distribution and Credit Agreement, dated as of February 6, 2008, among General Motors Corporation, XM Satellite Radio Holdings Inc. and XM Satellite Radio Inc. (incorporated by reference to Exhibit 10.63 to XM Satellite Radio Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007).
10.5	Supplemental Indenture, dated as of March 22, 2000, between Rock-McGraw, Inc. and the Company (incorporated by reference to Exhibit 10.1.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2000).
**10.6	Third Amended and Restated Satellite Purchase Contract for In-Orbit Delivery, dated as of May 15, 2001, between XM Satellite Radio Inc. and Boeing Satellite Systems International Inc. (incorporated by reference to Exhibit 10.36 to Amendment No. 1 to XM Satellite Radio Holdings Inc.'s Registration Statement on Form S-3, File No. 333-89132).
10.7	Assignment and Novation Agreement, dated as of December 5, 2001, between XM Satellite Radio Holdings Inc., XM Satellite Radio Inc. and Boeing Satellite Systems International Inc. (incorporated by reference to Exhibit 10.3 to XM Satellite Radio Holdings Inc.'s Current Report on Form 8-K filed on December 6, 2001).
**10.8	Amendment to the Satellite Purchase Contract for In-Orbit Delivery, dated as of December 5, 2001, between XM Satellite Radio Inc. and Boeing Satellite Systems International Inc. (incorporated by reference to Exhibit 10.4 to XM Satellite Radio Holdings Inc.'s Current Report on Form 8-K filed on December 6, 2001).
10.9	Amended and Restated Assignment and Use Agreement, dated as of January 28, 2003, between XM Satellite Radio Inc. and XM Radio Inc. (incorporated by reference to Exhibit 10.7 to XM Satellite Radio Holdings Inc.'s Current Report on Form 8-K filed on January 29, 2003).

Exhibit	Description
**10.10	Amended and Restated Amendment to the Satellite Purchase Contract for In-Orbit Delivery, dated May 23, 2003, among XM Satellite Radio Inc. and XM Satellite Radio Holdings Inc. and Boeing Satellite Systems International, Inc. (incorporated by reference to Exhibit 10.53 to XM Satellite Radio Holdings Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2003).
**10.11	Amendment to the Satellite Purchase Contract for In-Orbit Delivery, dated July 31, 2003, among XM Satellite Radio Inc. and XM Satellite Radio Holdings Inc. and Boeing Satellite Systems International, Inc. (incorporated by reference to Exhibit 10.54 to XM Satellite Radio Holdings Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2003).
10.12	Amendment No. 1 to Amended and Restated Director Designation Agreement, dated as of September 9, 2003, among XM Satellite Radio Holdings Inc. and the shareholders and noteholders named therein (incorporated by reference to Exhibit 10.56 to XM Satellite Radio Holdings Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
10.13	December 2003 Amendment to the Satellite Purchase Contract for In-Orbit Delivery, dated December 19, 2003, among XM Satellite Radio Inc., XM Satellite Radio Holdings Inc. and Boeing Satellite Systems International, Inc. (incorporated by reference to Exhibit 10.57 to XM Satellite Radio Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2003).
10.14	Share Lending Agreement, dated July 28, 2008, among the Company and Morgan Stanley Capital Services, Inc. (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).
10.15	Share Lending Agreement, dated July 28, 2008, among the Company and UBS AG, London Branch (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).
*10.16	Form of Option Agreement between the Company and each Optionee (incorporated by reference to Exhibit 10.16.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 1998).
*10.17	Form of Director Non-Qualified Stock Option Agreement (incorporated by reference to Exhibit 10.25 to Amendment No. 5 to XM Satellite Radio Holdings Inc.'s Registration Statement on Form S-1, File No. 333-83619).
*10.18	CD Radio Inc. 401(k) Savings Plan (incorporated by reference to Exhibit 4.4 to the Company's Registration Statement on Form S-8 (File No. 333-65473)).
*10.19	Employment Agreement, dated as of June 3, 2003, between the Company and David J. Frear (incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003).
*10.20	Amended and Restated Sirius Satellite Radio 2003 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.10 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2004).
*10.21	Employment Agreement dated November 18, 2004 between the Company and Mel Karmazin (incorporated by reference to Exhibit 10.2 to the Company's Annual Report on Form 10-K for the year ended December 31, 2004).
*10.22	Restricted Stock Unit Agreement, dated as of August 9, 2005, between the Company and James E. Meyer (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K dated August 12, 2005).
*10.23	First Amendment, dated as of August 10, 2005, to the Employment Agreement, dated as of June 3, 2003, between the Company and David Frear (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated August 12, 2005).
*10.24	Form of Non-Qualified Stock Option Agreement (incorporated by reference to Exhibit 10.2 to XM Satellite Radio Holdings Inc.'s Current Report on Form 8-K filed June 1, 2007).
*10.25	Form of Restricted Stock Agreement (incorporated by reference to Exhibit 10.3 to XM Satellite Radio Holdings Inc.'s Current Report on Form 8-K filed June 1, 2007).
*10.26	XM Satellite Radio Holdings Inc. 2007 Stock Incentive Plan (incorporated by reference to Exhibit 10.5 to XM Satellite Radio Holdings Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2007).

Exhibit	Description
*10.27	Sirius XM Radio 401(k) Savings Plan, as amended and restated effective January 1, 2009 (incorporated by reference to Exhibit 10.30 to the Company's Annual Report on Form 10-K for the year ended December 31, 2009).
*10.28	Second Amendment, dated as of February 12, 2008, to the Employment Agreement, dated as of June 3, 2003, between the Company and David J. Frear (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated February 13, 2008).
*10.29	Employment Agreement, dated as of September 26, 2008, between the Company and Dara F. Altman (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated October 1, 2008).
*10.30	Agreement to Forfeit Non-Qualified Stock Options, dated as of May 13, 2009, between Mel Karmazin and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed May 13, 2009).
*10.31	Letter Agreement dated June 30, 2009 amending the Employment Agreement dated November 18, 2004 between Mel Karmazin and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed July 1, 2009).
*10.32	Sirius XM Radio Inc. 2009 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 4.9 to the Company's Registration Statement on Form S-8 dated July 1, 2009).
*10.33	Employment Agreement, dated as of July 28, 2009, between the Company and Scott A. Greenstein (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed July 29, 2009).
*10.34	Employment Agreement, dated as of October 14, 2009, between the Company and James E. Meyer (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed October 16, 2009).
*10.35	Separation Agreement and Release of Claims, dated as of November 12, 2009, between the Company, XM Satellite Radio Holdings Inc., XM Satellite Radio Inc, and Gary Parsons (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed November 12, 2009).
*10.36	Employment Agreement, dated as of January 14, 2010, between the Company and Patrick L. Donnelly (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed January 15, 2010).
*10.37	First Amendment, dated as of February 14, 2011, to the Employment Agreement, dated as of October 14, 2009, between the Company and James E. Meyer (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed February 15, 2011).
21.1	List of Subsidiaries (filed herewith).
23.1	Consent of KPMG LLP (filed herewith).
31.1	Certificate of Mel Karmazin, Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
31.2	Certificate of David J. Frear, Executive Vice President and Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
32.1	Certificate of Mel Karmazin, Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith).
32.2	Certificate of David J. Frear, Executive Vice President and Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith).

* This document has been identified as a management contract or compensatory plan or arrangement.

** Pursuant to the Commission's Orders Granting Confidential Treatment under Rule 406 of the Securities Act of 1933 or Rule 24(b)-2 under the Securities Exchange Act of 1934, certain confidential portions of this Exhibit were omitted by means of redacting a portion of the text.

*** Confidential treatment has been requested with respect to portions of this Exhibit that have been omitted by redacting a portion of the text.

SUPPLEMENTAL INDENTURE, dated as of January 12, 2011, among SIRIUS XM RADIO INC., a Delaware corporation (the “Company”), XM EQUIPMENT LEASING LLC, a Delaware limited liability company and indirect wholly-owned subsidiary of the Company (“Equipment Leasing”), XM 1500 ECKINGTON LLC, a Delaware limited liability company and indirect wholly-owned subsidiary of the Company (“Eckington”), XM INVESTMENT LLC, a Delaware limited liability company and indirect wholly-owned subsidiary of the Company (“Investment”), XM RADIO INC., a Delaware corporation and indirect wholly-owned subsidiary of the Company (“XM Radio”), XM EMALL INC., a Delaware corporation and indirect wholly-owned subsidiary of the Company (“EMall”), XM CAPITAL RESOURCES INC., a Delaware corporation and indirect wholly-owned subsidiary of the Company (“Capital Resources”), XM INNOVATIONS INC., a Delaware corporation and indirect wholly-owned subsidiary of the Company (“Innovations”), EFFANEL MUSIC, INC., a New York corporation and indirect wholly-owned subsidiary of the Company (with Equipment Leasing, Eckington, Investment, XM Radio, EMall, Capital Resources and Innovations, each an “Additional Guarantor”), the other Guarantors and U.S. BANK NATIONAL ASSOCIATION, as trustee (the “Trustee”). Capitalized terms used herein without definition will have the meanings assigned to them in the Indenture (defined below).

WHEREAS, the Company has heretofore executed and delivered to the Trustee an indenture (as amended or supplemented from time to time, the “Indenture”), dated as of March 17, 2010, in connection with the issuance of 8.75% Senior Notes due 2015 (the “Notes”);

WHEREAS, Section 10.06 of the Indenture provides that certain Persons shall execute and deliver to the Trustee a supplemental indenture pursuant to which such Person shall become a Guarantor and unconditionally guarantee the Company’s Obligations under the Notes and the Indenture on the terms and conditions set forth herein (the “Note Guarantee”);

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, each Guarantor, each Additional Guarantor and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders as follows:

1. AGREEMENT TO GUARANTEE. Each Additional Guarantor hereby agrees to provide an unconditional Guarantee on the terms and subject to the conditions set forth in the Note Guarantee and in the Indenture including but not limited to Article 10 thereof.

2. NO RECOURSE AGAINST OTHERS. No past, present or future director, officer, employee, incorporator, stockholder or agent of each Guarantor or Additional Guarantor, as such, will have any liability for any obligations of the Company or any Guarantor or any Additional Guarantor under the Notes, any Note Guarantees, the Indenture or this Supplemental Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of the Notes by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes.

3. GOVERNING LAW. This Supplemental Indenture and the Notes shall be governed by, and construed in accordance with, the laws of the State of New York.

4. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy will be an original, but all of them together represent the same agreement.

5. EFFECT OF HEADINGS. The Section headings herein are for convenience only and will not affect the construction hereof.

6. THE TRUSTEE. The Trustee will not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by each Guarantor, each Additional Guarantor and the Company.

[remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed all as of the date first above written.

XM EQUIPMENT LEASING LLC

By /s/ David J. Frear
David J. Frear
Treasurer

XM 1500 ECKINGTON LLC

By /s/ David J. Frear
David J. Frear
Treasurer

XM INVESTMENT LLC

By /s/ David J. Frear
David J. Frear
Treasurer

XM RADIO INC.

By /s/ David J. Frear
David J. Frear
Treasurer

XM EMALL INC.

By /s/ David J. Frear
David J. Frear
Treasurer

XM CAPITAL RESOURCES INC.

By /s/ David J. Frear

David J. Frear
Treasurer

XM INNOVATIONS INC.

By /s/ David J. Frear

David J. Frear
Treasurer

EFFANEL MUSIC, INC.

By /s/ David J. Frear

David J. Frear
Treasurer

SIRIUS XM RADIO INC.

By /s/ David J. Frear

David J. Frear
Executive Vice President and Chief
Financial Officer

**SIRIUS ASSET MANAGEMENT COMPANY
LLC**

By /s/ David J. Frear

David J. Frear
Treasurer

SATELLITE CD RADIO, INC.

By /s/ David J. Frear
David J. Frear
Treasurer

U.S. BANK NATIONAL ASSOCIATION , as
Trustee

By /s/ Thomas E. Tabor
Thomas E. Tabor
Vice President

SUPPLEMENTAL INDENTURE, dated as of January 12, 2011, among SIRIUS XM RADIO INC., a Delaware corporation (the “Company”), XM EQUIPMENT LEASING LLC, a Delaware limited liability company and indirect wholly-owned subsidiary of the Company (“Equipment Leasing”), XM 1500 ECKINGTON LLC, a Delaware limited liability company and indirect wholly-owned subsidiary of the Company (“Eckington”), XM INVESTMENT LLC, a Delaware limited liability company and indirect wholly-owned subsidiary of the Company (“Investment”), XM RADIO INC., a Delaware corporation and indirect wholly-owned subsidiary of the Company (“XM Radio”), XM EMALL INC., a Delaware corporation and indirect wholly-owned subsidiary of the Company (“EMall”), XM CAPITAL RESOURCES INC., a Delaware corporation and indirect wholly-owned subsidiary of the Company (“Capital Resources”), XM INNOVATIONS INC., a Delaware corporation and indirect wholly-owned subsidiary of the Company (“Innovations”), EFFANEL MUSIC, INC., a New York corporation and indirect wholly-owned subsidiary of the Company (with Equipment Leasing, Eckington, Investment, XM Radio, EMall, Capital Resources and Innovations, each an “Additional Guarantor”), the other Guarantors and U.S. BANK NATIONAL ASSOCIATION, as trustee (the “Trustee”). Capitalized terms used herein without definition will have the meanings assigned to them in the Indenture (defined below).

WHEREAS, the Company has heretofore executed and delivered to the Trustee an indenture (as amended or supplemented from time to time, the “Indenture”), dated as of August 24, 2009, in connection with the issuance of 9.75% Senior Secured Notes due 2015 (the “Notes”);

WHEREAS, Section 10.06 of the Indenture provides that certain Persons shall execute and deliver to the Trustee a supplemental indenture pursuant to which such Person shall become a Guarantor and unconditionally guarantee the Company’s Obligations under the Notes and the Indenture on the terms and conditions set forth herein (the “Note Guarantee”);

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, each Guarantor, each Additional Guarantor and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders as follows:

1. AGREEMENT TO GUARANTEE. Each Additional Guarantor hereby agrees to provide an unconditional Guarantee on the terms and subject to the conditions set forth in the Note Guarantee and in the Indenture including but not limited to Article 10 thereof.

2. NO RECOURSE AGAINST OTHERS. No past, present or future director, officer, employee, incorporator, stockholder or agent of each Guarantor or Additional Guarantor, as such, will have any liability for any obligations of the Company or any Guarantor or any Additional Guarantor under the Notes, any Note Guarantees, the Indenture or this Supplemental Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of the Notes by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes.

3. GOVERNING LAW. This Supplemental Indenture and the Notes shall be governed by, and construed in accordance with, the laws of the State of New York.

4. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy will be an original, but all of them together represent the same agreement.

5. EFFECT OF HEADINGS. The Section headings herein are for convenience only and will not affect the construction hereof.

6. THE TRUSTEE. The Trustee will not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by each Guarantor, each Additional Guarantor and the Company.

[remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed all as of the date first above written.

XM EQUIPMENT LEASING LLC

By /s/ David J. Frear
David J. Frear
Treasurer

XM 1500 ECKINGTON LLC

By /s/ David J. Frear
David J. Frear
Treasurer

XM INVESTMENT LLC

By /s/ David J. Frear
David J. Frear
Treasurer

XM RADIO INC.

By /s/ David J. Frear
David J. Frear
Treasurer

XM EMALL INC.

By /s/ David J. Frear
David J. Frear
Treasurer

XM CAPITAL RESOURCES INC.

By /s/ David J. Frear
David J. Frear
Treasurer

XM INNOVATIONS INC.

By /s/ David J. Frear
David J. Frear
Treasurer

EFFANEL MUSIC, INC.

By /s/ David J. Frear
David J. Frear
Treasurer

SIRIUS XM RADIO INC.

By /s/ David J. Frear
David J. Frear
Executive Vice President and Chief
Financial Officer

**SIRIUS ASSET MANAGEMENT COMPANY
LLC**

By /s/ David J. Frear
David J. Frear
Treasurer

SATELLITE CD RADIO, INC.

By /s/ David J. Frear

David J. Frear

Treasurer

U.S. BANK NATIONAL ASSOCIATION , as
Trustee

By /s/ Thomas E. Tabor
Thomas E. Tabor
Vice President

SIRIUS XM RADIO INC. AND SUBSIDIARIES
Subsidiaries

Satellite CD Radio, Inc.	State of Delaware
Sirius Asset Management Company LLC	State of Delaware
Sirius Entertainment Promotions LLC	State of Delaware
Spend LLC	State of Maryland
Earth Station Ecuador Cia. Ltda.	Quito, Ecuador
XM Equipment Leasing LLC	State of Delaware
XM EMall Inc.	State of Delaware
XM Radio Inc.	State of Delaware
XM Innovations Inc.	State of Delaware
XM Capital Resources Inc.	State of Delaware
XM 1500 Eckington LLC	State of Delaware
XM Investment LLC	State of Delaware
Effanel Music, Inc.	State of New York
Interoperable Technologies LLC	State of Delaware
Satellite Public Radio Inc.	Washington, D.C.

Consent of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Sirius XM Radio Inc.:

We consent to the incorporation by reference in the registration statements (No. 333-158135, No. 333-152548, No. 333-139869, No. 333-130949, No. 333-127169, No. 333-115695, No. 333-108387, No. 333-104406, No. 333-85847, No. 333-65602, and No. 333-64344) on Form S-3, in the registration statement (No. 333-144845) on Form S-4, and in the registration statements (No. 333-169309, 333-166699, 333-160386, No. 333-159206, No. 333-158156, No. 333-156441, No. 333-152574, No. 333-149186, No. 333-142726, No. 333-139214, No. 333-133277, No. 333-125118, No. 333-119479, No. 333-111221, No. 333-106020, No. 333-101515, No. 333-100083, No. 333-81914, No. 333-74752, No. 333-65473, No. 333-62818, No. 333-47954, No. 333-31362, and No. 333-15085), on Form S-8 of Sirius XM Radio Inc. of our reports dated February 16, 2011, with respect to the consolidated balance sheets of Sirius XM Radio Inc. and subsidiaries as of December 31, 2010 and 2009, and the related consolidated statements of operations, stockholders' equity (deficit) and comprehensive income (loss), and cash flows for each of the years in the three-year period ended December 31, 2010, and the related financial statement schedule for each of the years in the three-year period ended December 31, 2010, and with respect to the effectiveness of internal control over financial reporting as of December 31, 2010, which reports appear in the December 31, 2010 annual report on Form 10-K of Sirius XM Radio Inc.

As discussed in Note 3 to the consolidated financial statements, Sirius XM Radio Inc. changed its method of accounting for share lending arrangements on January 1, 2010.

/s/ KPMG LLP

New York, New York
February 16, 2011

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Mel Karmazin, the Chief Executive Officer of Sirius XM Radio Inc., certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2010 of Sirius XM Radio Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any changes in the registrant's internal controls over financial reporting that occurred during the registrant's most recent fiscal quarter (the Company's fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ MEL KARMAZIN

Mel Karmazin
Chief Executive Officer
(Principal Executive Officer)

February 16, 2011

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, David J. Frear, the Executive Vice President and Chief Financial Officer of Sirius XM Radio Inc., certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2010 of Sirius XM Radio Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any changes in the registrant's internal controls over financial reporting that occurred during the registrant's most recent fiscal quarter (the Company's fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ DAVID J. FREAR

David J. Frear
Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)

February 16, 2011

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY
ACT OF 2002**

In connection with the Annual Report of Sirius XM Radio Inc. (the "Company") on Form 10-K for the fiscal year ended December 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Mel Karmazin, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ MEL KARMAZIN

Mel Karmazin
Chief Executive Officer
(Principal Executive Officer)

February 16, 2011

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY
ACT OF 2002**

In connection with the Annual Report of Sirius XM Radio Inc. (the "Company") on Form 10-K for the fiscal year ended December 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David J. Frear, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ DAVID J. FREAR

David J. Frear
Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)

February 16, 2011

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

**Before the
COPYRIGHT ROYALTY BOARD
LIBRARY OF CONGRESS
Washington, D.C.**

In the Matter of)	
)	
Adjustment of Rates and Terms for Preexisting Subscription and Satellite Digital Audio Radio Services	)	Docket No. 2006-1 CRB DSTRA
)	
)	
)	

WRITTEN DIRECT TESTIMONY OF MEL KARMAZIN

Introduction and Witness Background

1. I am the Chief Executive Officer of Sirius Satellite Radio Inc. ("Sirius"). I submit this statement in support of Sirius' direct case. As I describe below, Sirius is a provider of a satellite digital audio radio service ("SDARS"). The Sirius SDARS offers a wide variety of digital radio programming. The Sirius service is available to subscribers in their vehicles, homes, offices and via portable devices.

2. I joined Sirius in November 2004 as Chief Executive Officer. I am responsible for all aspects of Sirius' business, including its operations and strategic planning.

3. I offer this testimony to provide an overview of Sirius and its business and to discuss, qualitatively, the extraordinary investment, costs and risks that Sirius has incurred over an extended period of time in order to create from scratch and offer to the public a new audio entertainment service. I will also discuss the competition we face, as well as the critical importance to our success of providing compelling audio content that

includes sports and entertainment radio programming, and high quality original programming not found elsewhere. Specifically:

- Sirius was required to create an entirely new means of providing audio programming. The company first had to convince the FCC to authorize a satellite radio service. The company then had to win an auction for its license and pay more than \$83 million to the government for that license, design, build and launch dedicated satellites, build an extensive system of terrestrial repeaters to enhance reception in cities and other areas where our satellite transmissions would be blocked, obtain FCC approval for the terrestrial repeaters, invent the world's smallest satellite antenna, develop an entirely new line of radios capable of receiving our transmissions and the integrated circuits to be used in those radios, convince automakers to include Sirius radios in their vehicles, and convince retailers to sell new radios for use in existing cars that did not have factory installed Sirius radios;
- Sirius is, in effect, many businesses in one, each of which faces fierce competition, strong opposition or huge challenges, in one or more forms. Sirius is:
 - a provider of compelling audio content, including both non-music content and music content, to which we add significant value. In this role, Sirius must compete with terrestrial radio and with emerging media for programming talent and for the ear of the listener. Sirius also faces ongoing efforts by the recording and broadcasting industries to create barriers to our success through changes to applicable laws and regulations;
 - a satellite and terrestrial transmission business, which has faced regulatory opposition from the terrestrial radio industry;
 - a consumer electronics business and an automotive electronics business, which has had to compete for the talent and attention of commercial sources for our radios and chip sets (such as Lucent, Agere), that had no experience in designing satellite radios; to overcome the automakers' reluctance to include Sirius radios in their cars and to sell Sirius to their customers; and to compete for shelf space and sales efforts at major retailers;
 - a consumer brand, which has had to start as an unknown company offering an unheard of service to compete for the consumer's attention against far better established names; and
 - a sales, marketing and customer service company, which has had to build an infrastructure capable of handling millions of accounts;
- Sirius had to assume extraordinary risk in all facets of its business, including risks inherent in the development of a new technology; risks

inherent in the launch and deployment of satellites; regulatory risks related to obtaining U.S. and international approvals in the face of staunch opposition from competitors, including the terrestrial radio industry; investment risk that we could not finance the many years between the inception and profitability (16½ years and counting), including the long delay inherent in developing our technologies, building our infrastructure, and securing the necessary approvals; and market risks that our service might not be acceptable to consumers at a price that would support the costs and provide a reasonable return on investment;

- As we tried to market our service, Sirius discovered that music programming would not drive a sufficient number of people to pay the subscription fees to keep our service alive and to provide a return on our investment. Music, and the right to play music, is ubiquitous, and we discovered that the public generally is not willing to pay substantial subscription fees for programming it can obtain for free. Rather, we have had to invest large sums in compelling content, particularly talk, entertainment and sports, and on radio personalities. Even when we program music, we incur substantial costs to add significant value to that music.
- In the sixteen years since the formation of Sirius, we have not yet made a profit. In fact, we have accumulated losses of \$3.4 billion through June 30, 2006. Nevertheless, by the end of 2006, we will have paid the recording industry and its artists statutory performance royalties of millions of dollars. In other words, we have borne all of the risk; the recording industry and its artists have received, and will continue to receive, the return.

4. Prior to joining Sirius, I was the President and Chief Operating Officer of Viacom Inc., one of the world's largest entertainment and media companies, from May 2000 until June 2004. Viacom's business units included the Infinity group of radio stations; the CBS-owned television stations; the CBS and Paramount television networks; cable television networks, including MTV, BET, and Showtime; Paramount Pictures; Paramount Theme Parks; Simon & Schuster publishing; and theatrical exhibition operations. Before that, I served as President and CEO of CBS Corporation from January 1999 to May 2000, and President and COO of CBS Corporation from April 1998 to January 1999.

5. I have a long history in the radio industry. I was President and CEO of Infinity Broadcasting, a major radio group, from 1981 until it became a wholly owned subsidiary of Viacom in February 2001. Following the 1997 merger of Infinity and CBS Corporation, I also served as Chairman and CEO of CBS Radio. I was named Chairman and CEO of the CBS Station Group (radio and television) in May 1997. Prior to Infinity, I spent 10 years with Metromedia Corporation, another major radio group.

6. I have served on the Board of Directors of the Westwood One Radio Network, Blockbuster, Inc., and the New York Stock Exchange. I am Vice Chairman of the Board of Trustees of the Museum of Television & Radio. I have been inducted into the Broadcasting Hall of Fame, and I have received the National Radio Award from the National Association of Broadcasters.

Overview of Sirius' Business

7. In order to create an entirely new platform for the creation and transmission of audio programming, Sirius has been required to operate as many businesses in one. Each of these businesses requires highly specific skills, and places its own call on Sirius' financial and human resources and revenues. I can think of no other audio programming service that has had to invest the kinds of resources we have been required to invest, or that operates in as many different spheres as we do. No other service, perhaps since terrestrial radio many years ago, has had to invent and build its entire distribution platform, and not even terrestrial radio was required to pay the Federal government tens of millions of dollars for the right to broadcast. Internet radio certainly did not invent the Internet, did not need to create and build it, did not need to build receivers, and did not need to subsidize the inclusion of audio circuitry in personal

computers or convince consumers to put home computers in their homes. Digital cable radio services did not invent and build the cable and satellite television distribution systems to whom they sell their services, and certainly did not need to convince consumers to put television sets in their homes.

8. Sirius began as a technology company. Technology, and the development of technology, has remained an important part of Sirius. Sirius went to the FCC and convinced it to create a satellite radio service. That was 16 years ago, and Sirius has yet to turn a profit or achieve positive cash flow. Our multi-billion dollar investment has far outstripped our revenues to date.

9. “Satellite” is part of our name, and Sirius very much operates a satellite business. We have had to (i) design, (ii) contract for the building of, (iii) launch, (iv) maintain, and (v) track and control three orbiting satellites in a unique elliptical orbit that maximizes their angle over the United States. We purchased a fourth ground spare, and have recently entered into a contract for a new-generation satellite.

10. Sirius also operates a radio technology business and two distinct consumer electronics businesses. We have had to finance and supervise the development of more than three generations of application-specific integrated circuits, or chip sets, for use in a new type of radio that had never existed—an S-band satellite radio. To accomplish this we had to convince others to take on the task of working in this new field to address issues they had never encountered. We also developed the world’s smallest non-directional satellite antenna, to make sure our service could be received in vehicles, without requiring a large dish on top. Imagine the consumer acceptance of a service that required even the “pizza” size dishes used by satellite television companies. These chip

sets and antennas are used in conjunction with radios engineered in two decidedly different electronics market—the retail consumer electronics market and the automotive market. The testimony of John Douglas Wilsterman and Robert Law describes the important and unique characteristics of each of these businesses, the extent of investment in each that Sirius has been required to make, the difficulties of convincing automakers to include a new radio at added cost in their cars, the difficulties of convincing retailers to carry and sell Sirius radios and the Sirius service, and the costly incentives that Sirius has been required to provide to ensure that its radios will be available to potential subscribers.

11. Sirius is, of course, also a radio programming business. We have the unique challenge of convincing consumers not only to buy a radio, but also to convince them to pay for our service. As I discuss more fully below, to accomplish this, we must do far more than provide programmed music. We must provide exclusive, compelling content for which a subscriber is willing to shell out hard earned cash each month.

12. Finally, we must market to potential subscribers, and bill and collect from our subscribers and keep them satisfied. Sirius has developed an extensive customer care business, with billing and collection functions, service activation, hardware servicing, all capable of servicing millions of subscribers. Among our most significant costs are those incurred in acquiring subscribers, which includes the subsidies we must pay to automakers and retailers, among other costs. Those are described more fully in the testimony of John Douglas Wilsterman, Robert Law and David Frear.

Sirius' History

13. It has taken more than sixteen years for Sirius to reach where it is today, and we still have not earned a single dollar in profit.

14. Sirius began life on May 17, 1990, as Satellite CD Radio, Inc.

15. In 1990, the company proposed that the FCC establish a satellite radio service in the S-band, and applied for a license. The application was opposed by the National Association of Broadcasters, the trade association representing the terrestrial radio industry. In the fall of 1992, the FCC called for license applications from others interested in establishing a satellite radio service. The FCC required applications to be filed by December 1992. Five applications were filed, two of which were subsequently withdrawn.

16. The company changed its name to CD Radio Inc. in 1992. The time between 1992 and 1996 were spent in technology development, demonstrating and testing the transmission of S-band signals to prototype radios, extensive regulatory activity involved in the creation of the rules governing the new service, strategic planning, research into the radio broadcasting consumer market, the consumer electronics market, and the automobile market, discussions with consumer electronics manufacturers, negotiating satellite and launch contracts, and developing programming plans.

17. Sirius originally intended to deliver 50 channels of digital audio programming, 30 channels of commercial-free music and 20 talk channels, using its satellites and satellite radio technology. The central concept was to provide nationwide programming to motorists and truckers in their vehicles.

18. By 1996, the company was one of the remaining applicants for a satellite radio license. The FCC adopted satellite radio licensing rules in March 1997 to allow two national licenses, and scheduled an auction for April 1 of that year. The auction occurred on April 1 and 2, 1997. The winning bidders were American Mobile Radio

Corporation (the predecessor to XM Satellite Radio, Inc.), which bid approximately \$89 million, and Sirius, which bid \$83.3 million. Full payments for the spectrum was made on October 10, 1997.

19. In 1997 and 1998, the company recruited personnel, started work on its terrestrial repeater network, entered into contracts for the design, development and manufacture of its chip sets, an essential element of all Sirius radios, began construction of its national broadcast studio, and obtained additional financing for its activities. We also sought FCC approval for our terrestrial repeater network under a rulemaking commenced by the FCC in March 1997. As with virtually all of our efforts to obtain regulatory approval for the many parts of our service, we faced opposition and attempts to limit our activities. On the programming side, Sirius expanded its planned offering to 100 channels (50 music, 50 talk) and entered into agreements with news, talk and special-interest program providers, including Bloomberg News Radio and C-SPAN.

20. On November 18, 1999, the company changed its name to Sirius Satellite Radio Inc. The years 1999 and 2000 saw the launch of its three satellites (in July, September and December, 2000), entry into critical exclusive alliances with Ford, DaimlerChrysler and BMW to install Sirius radios in their vehicles, and with consumer electronics retailers to sell Sirius radios for existing cars. Work continued on Sirius' terrestrial repeater network and Sirius completed construction of its national broadcasting studio. Sirius entered into agreements for several news, talk, sports and entertainment brands, including CNBC, NPR and Discovery. In addition, Sirius entered into an agreement for operation of its customer care call center, and deployed a subscriber

management system. Unfortunately, challenges in the development of chip sets delayed the commencement of service.

21. In 2001 and 2002, Sirius continued to develop its radios, deploy terrestrial repeaters, expanded its alliances with automakers, including Nissan and Volkswagen, entered into programming agreements with news and talk brands, including Fox News, CNN Headline News, ABC, The Weather Channel, and Court TV, and entered into an agreement with Hertz for inclusion of Sirius radios in select Hertz cars.

22. Sirius finally launched its service in select markets on February 14, 2002. Nationwide launch occurred on July 1, 2002, more than 12 years after the founding of Sirius and more than 5 years after Sirius won its FCC license.

23. In the sixteen years that the Company has existed we have accumulated net losses of \$3.4 billion through June 30, 2006. Nevertheless, by the end of 2006, we will have paid the recording industry and its artists statutory performance royalties of millions of dollars. In other words, we have borne all of the risk; the recording industry and its artists have received the return.

24. Between capital investment, and net losses (after adjustment for interest, depreciation and amortization), Sirius has more than \$4 billion invested in its enterprise. Of course, this investment is not finished. We expect to invest more than \$1 billion in coming years to replace our satellites and build additional terrestrial repeaters. In addition, we are still accumulating losses.

The Risks Sirius Has Faced and Still Faces

25. Sirius has faced extraordinary risks in bringing its business to the public. These risks include new technology risks, satellite risks, regulatory risks, financial risk, the market risk related to consumer acceptance of a new, untested service, and competitive risks. It is important to take these risks (and the return necessary to generate investment in the face of these risks) into account in determining how to set an appropriate royalty rate for sound recording performances.

26. Sirius remains a risky venture. The material risks to Sirius are described in the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2005, a copy of which is attached as SIR Ex. 1.

27. Sirius based its business plan upon a new, untested technology that required the development of a means of transmitting and receiving with reliability relatively low power satellite transmissions in vehicles, with an antenna small enough to be acceptable to consumers. Moreover, Sirius had to rely on third parties that had never dealt with this technology to develop the radios and chip sets to accomplish this task. This led to delays in the introduction of Sirius' radios.

28. As Roger Rusch testifies, satellite ventures are inherently risky. Launch vehicles fail. Launches impose enormous stresses upon precise electronics. Any mistake in trajectory can render a satellite worthless. Space is a unique and unforgiving environment. Satellites cannot be economically repaired once they are launched.

29. Before we could get off the ground, Sirius needed to convince the FCC to create an entirely new radio service that never before existed. Sirius filed a detailed application with the FCC. The application was followed, five years later, by an auction

among bidders for two satellite radio licenses. Sirius was also required to obtain U.S. regulatory approval for terrestrial repeaters and uplink facilities, and international coordination for its satellites and possible interference from our transmissions. In virtually every case, our regulatory efforts were opposed by the terrestrial broadcasting industry, which long ago perceived satellite radio as a threat and now views satellite radio as a major competitor. Failure to obtain the necessary regulatory approvals would have prevented us from commencing or operating our business.

30. Sirius has faced significant financial risks as well. Obtaining capital in the face of the risks we face has been expensive and requires the prospect of huge returns. If investors at any time had decided that Sirius would not provide those returns, there would be no Sirius.

31. Sirius has faced and continues to face enormous market risks. When the Company began, it made an enormous gamble that consumers would be willing to spend between \$10 and \$13 dollars a month to replace a service that they could receive for free. As described in the Company's 2000 Annual Report on Form 10-K (at 14-15),

Currently no one offers a commercial satellite radio service such as Sirius in the United States. As a result, our proposed market is new and untested, and we cannot reliably estimate the potential demand for this service or the degree to which our service will meet that demand. We cannot assure you that there will be a sufficient demand for Sirius to enable us to achieve significant revenues or cash flow or profitable operations. Sirius will achieve or fail to gain market acceptance depending upon many factors beyond our control, including: the willingness of consumers to pay subscription fees to obtain satellite radio broadcasts; the cost, availability and consumer acceptance of radios capable of receiving our broadcasts; our marketing and pricing strategies and those of XM, our direct competitor; the development of alternative technologies or services; and general economic conditions.

The market risks were magnified by the fact that the relevant market conditions were not those that existed when enormous investments were made, or even when those words

were written, but the conditions that would exist years in the future. As I discuss below, Sirius soon discovered that programmed music could not sustain the business. Thus, we were required to invest heavily in exclusive non-music content.

32. Sirius has faced and continues to face significant competitive risks. We have been required to build our business against fierce competition. As I discuss in the next section, we compete at every turn. We continue to face intense competition from one of the largest and most powerful industries in the country, terrestrial radio. New competition is being developed as we speak, in the form of services such as such as mobile Internet through technologies such as Wi-Max. Moreover, we cannot know what new technologies and services may emerge as competitors in the near term. As our 2005 10-K states (at 21):

The satellite industry and the audio entertainment industry are both characterized by rapid technological change, frequent new product innovations, changes in customer requirements and expectations, and evolving industry standards. . . . Products using new technologies, or emerging industry standards, could make our technologies obsolete or less competitive in the marketplace.

Our Primary Competition Is Terrestrial and Satellite Radio

33. From the beginning, Sirius has understood that it would face intense competition from terrestrial radio and from other services authorized by the FCC. That understanding has proven to be correct.

34. As Sirius disclosed in 1996, and as I know from experience,

The AM/FM radio broadcasting industry is very competitive, and certain of the Company's competitors in this industry have substantially greater financial, management and technical resources than the Company. Unlike the Company, the radio industry has a well established market for its services and generally offers "free" reception paid for by commercial advertising rather than a subscription fee. In addition, certain AM and FM stations, such as National Public Radio, offer programming without commercial interruption.

1996 Annual Report on Form 10-K at 8.

35. Sirius has faced continued opposition from the terrestrial radio industry since its inception. The radio industry opposed Sirius' efforts to create a satellite radio service, has opposed and sought to impose conditions on our use of terrestrial repeaters, and has fought our efforts to better serve our subscribers with our local traffic and weather channels.

36. Terrestrial radio has competed vigorously with us in the marketplace as well. Traditional radio continually reminds its listeners that it is "Free FM." Some broadcasters have begun to decrease the number of commercials per hour and have experimented with new formats to compete with us more directly. Several major radio companies recently banded together to launch an advertising campaign designed to present the benefits of terrestrial radio over satellite radio.

37. The radio industry has been working for several years on a digital radio, an initiative that it calls "HD Radio." The terrestrial digital initiative will increase the number and variety of channels available over the air and will provide digital sound. The intent to compete with satellite radio is clear—the "HDRadio" website describes terrestrial digital radio as "New Music, New Sounds with No Subscription Fee."¹ Indeed, the largest radio companies in the United States have joined into the HD Radio Alliance in order to enhance terrestrial radio's ability to compete with us. The members of the Alliance include ABC Radio, Beasley Broadcast Group, Bonneville International, CBS Radio, Citadel Broadcasting, Clear Channel, Cumulus, Emmis, Entercom and Greater Media.² The Alliance has launched what it describes as a "Massive Marketing

¹ SIR Ex. 2-A

² SIR Ex. 2-B

Campaign” to which it has devoted \$200 million.³ Many of the terrestrial digital channels will be aired without commercials for the foreseeable future.

38. Of course, this major competitor has a tremendous competitive advantage. Terrestrial radio gets to play sound recordings for free.

39. We also compete with XM every day. We compete for subscribers, for advertisers, for retail radio space, for promotion by automakers, on issues of radio design, and for exclusive programming.

Music and Talk/Sports Roles in Sirius’ Programming

40. Sirius originally attempted to market itself as the world’s best music service. The company discovered that was not and would not be a successful strategy. Simply programming music does not drive people to pay \$12.95 per month.

41. Music is ubiquitous. Performances of music are everywhere, and are available to the public for free (or for no perceived cost), on terrestrial radio, through their television sets, at Starbucks, and in restaurants. Sirius discovered that the public generally is not willing to pay substantial subscription fees for programming it can obtain for free.

42. Sirius recognized that, to be successful, it needed to develop compelling programming that people were willing to pay for, programming that in many cases they could not get anywhere else. Thus, Sirius began to expand its focus on non-music programming, including important deals for sports, talk and entertainment, and channels produced by Sirius exclusively for Sirius.

- On January 8, 2003, Sirius announced the debut of its two political talk channels, Sirius Right and Sirius Left;

³ *Id.*

- On January 21, 2003, Sirius announced that it would offer live broadcasts of professional basketball games in a deal with the National Basketball Association;
- On September 22, 2003, Sirius announced that its ESPN Radio channel would cover the entire Major League Baseball playoff schedule and the World Series, live; and
- On October 2, 2003, Sirius announced that it would air up to 40 live National Hockey League games each week, continuing throughout the NHL season.

See SIR Ex. 3.

43. Then, on December 16, 2003, Sirius announced a blockbuster deal that put it firmly on the radio map. Sirius and the National Football League announced a seven-year exclusive satellite radio agreement for Sirius to broadcast all NFL games live, nationwide. On August 2, 2004, Sirius NFL Radio, a 24/7 radio channel devoted entirely to the NFL, debuted. *See* SIR Ex. 4.

44. Major talk and entertainment programming announcements continued throughout 2004, as reflected in the press releases in SIR Ex. 5.

- On January 5, 2004, Sirius announced that it would air two channels of EWTN Global Catholic Radio, one in English and one in Spanish;
- On February 27, 2004, Sirius announced the commencement of its traffic and weather report channels;
- On July 7, 2004, Sirius Patriot joined the lineup, replacing Sirius Right; and
- On August 24, 2004, an exclusive package of college football games on Sirius debuted and, on August 31, Sirius announced the creation of Sirius College Sports Radio, featuring a package of play-by-play programming from topped-ranked colleges.

45. On October, 6, 2004, Sirius shocked the radio world when it announced “The Most Important Deal in Radio History,” bringing the leading personality in radio, Howard Stern, exclusively to satellite radio, beginning January 1, 2006. SIR Ex. 6.

Although the deal was expensive, it has proven to be the single most important action

taken by Sirius to attract and maintain subscribers and to ensure that Sirius became the leader in satellite radio. The announcement that Howard Stern would join the Company's programming lineup created a significant increase in brand awareness for Sirius.

46. Of course, the Stern deal was not the end of Sirius' move towards talk, sports and entertainment programming.

- On November 29, 2004, Sirius announced that it would carry every game in the NCAA Men's Basketball Tournament ("March Madness") live in 2005, an agreement for 2006 and 2007 followed;
- On January 21, 2005, Sirius agreed to a multi-year extension of its agreement with the NBA which is exclusive for satellite radio;
- On February 22, 2005, Sirius and NASCAR announced that Sirius would become the exclusive satellite radio home of NASCAR starting in 2007;
- On April 18, 2005, Sirius announced its exclusive four-year agreement with lifestyle personality Martha Stewart to create a 24/7 branded Martha Stewart channel;
- In September 2005, Sirius announced an exclusive agreement with Cosmopolitan Magazine to create COSMO Radio, a 24/7 channel geared to Cosmopolitan Magazine readers;
- On January 5, 2006, Sirius announced the addition of a new Playboy Radio channel; and
- On September 26, 2006, The Catholic Channel, featuring talk, live daily Mass from St. Patrick's Cathedral in New York, Notre Dame football and other lifestyle features, debuted on Sirius;

See SIR Ex. 7. And these are just some of the major deals for news, talk and sports programming Sirius announced.

47. Our strategy has paid off. When Sirius tried to sell the music we were a second class brand, with limited brand awareness, trailing significantly in the marketplace. That all changed with our focus on high-profile news, sports and entertainment programming.

48. As of December 2003, only 8% of adults aged 18-55 could identify Sirius when asked to identify satellite radio companies, and only 20% responded that they had heard of Sirius when specifically asked. By December 2004, those numbers had risen to 32% unaided and 47% aided; by December 2005, the numbers had risen to 47% unaided and 67% aided; and by September, 2006, the numbers were 54% unaided and 75% aided.

49. In 2003, only 32% of satellite radio purchases at retail were Sirius. That number increased to 45% in 2004, 53% in 2005, and 57% by September, 2006.

50. This trend and focus has continued. Our most recent earnings release (on August 1, 2006) featured a number of programming initiatives, all news, talk, sports, and entertainment, including: The Catholic Channel; a radio news bureau with Variety, the "show business bible," originating from Variety's Los Angeles offices; a weekly two-hour series featuring dynamic and compelling interviews by broadcasting icon Barbara Walters from her 30-year archive of interviews; a live, weekly three hour health and wellness call-in talk show on Saturday mornings hosted by Deepak Chopra, the best-selling author and leader in the field of mind and body medicine; and new talk shows featuring leading sports personalities Jerry Rice, Tiki Barber, and Tony Stewart. SIR Ex. 8.

51. Even our music programming is characterized by our need to provide a compelling experience that is not available elsewhere. As Steven Blatter testifies, it is not just about playing programmed music in sequence, like some cable radio services and most Internet webcasters provide. The goal is for each channel to have its own "personality" and sound that draws listeners, with a combination of music, information, discussion, and other features. Among other things,

- On September 20, 2006, we announced a groundbreaking deal with the Metropolitan Opera to create “Metropolitan Opera Radio,” which will broadcast live performances (including opening nights), and archival performances from the Met’s 75-year history.
- Our Faction channel has sought out leading personalities from the action sports world, including Lance Armstrong, Tony Hawk, Bode Miller and Johnny Mosely, to program and appear on our Faction channel, a “music” channel that also features interviews, discussions, call-ins and other talk programming.
- We seek out exclusive branded music channels, such as Radio Margaritaville, featuring Jimmy Buffett; Shade 45, programmed by hip-hop megastar Eminem; E Street Radio, featuring the music of Bruce Springsteen; Rolling Stones Radio, and The Who Channel.
- These channels feature more than just recorded music. For example, the Who Channel features interviews with the band’s members, historic performances, behind the scenes tour access, fan-based recordings, and broadcasts of the shows on their current tour; Rolling Stones Radio features interviews with the band; and Radio Margaritaville includes live concerts, backstage access and interviews.

See SIR Ex. 9.

52. In short, the right to perform music under the statutory license is just one of many inputs into our music programming, which itself is only a part of our overall programming line-up. We do not believe that the right to perform music is what separates Sirius from the many other outlets of music performances available to our subscribers and potential subscribers.

Conclusion

53. Sirius has built an entirely new audio service for the public. Sirius has been required to carve out and pay for space in a crowded regulated field, the company has created its own transmission network, from broadcast studio, to uplink, to satellite, to terrestrial repeater, to antennas, chip sets and radios designed specifically for Sirius, all at huge costs. Sirius has had to convince (often for a steep price) automakers to put Sirius

radios in their cars and retailers to carry Sirius radios in their stores. At every step, Sirius has faced and assumed enormous risks.

54. Sirius has paid millions of dollars, and is willing to pay millions of dollars more, to the record companies for a performance right for which our primary competition—terrestrial radio—does not have to pay. However, any fee must account for the enormous costs incurred, risks faced and investments made by Sirius, and for the fact that our revenues must cover a host of functions that other licensees do not perform. The fee must also recognize the relative value of the many programming inputs we use, for both our music and non-music channels, and properly account for those that attract and keep listeners. Sound recording performances are available everywhere, for free. The right to make those performances, at issue in this proceeding, does not drive our revenues.

55. I have reviewed the fee proposal made by Sirius and XM in this case. I believe it is a reasonable proposal that this Court should adopt.

Before the
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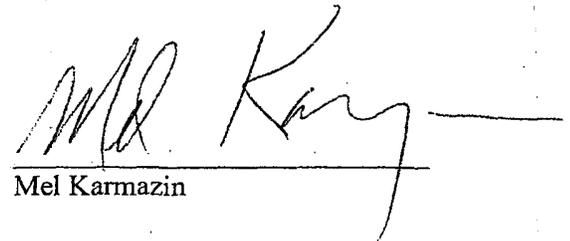
In the Matter of)
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Adjustment of Rates and Terms for)
Preexisting Subscription and Satellite)
Digital Audio Radio Services)
_____)

Docket No. 2006-1 CRB DSTRA

DECLARATION OF MEL KARMAZIN

I, Mel Karmazin, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 30th day of October 2006 at New York, New York.



Mel Karmazin

Before the
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LIBRARY OF CONGRESS
Washington, D.C.

In the Matter of)
)
Adjustment of Rates and Terms for)
Preexisting Subscription and Satellite)
Digital Audio Radio Services)
_____)

Docket No. 2006-1 CRB DSTRA

WRITTEN REBUTTAL TESTIMONY OF MEL KARMAZIN

1. My name is Mel Karmazin. I am the Chief Executive Officer of Sirius Satellite Radio Inc. (“Sirius”). I offered written and oral testimony in the direct phase of this proceeding on behalf of Sirius. SIR Ex. 1.1; June 6, 2007 Transcript (“Tr.”) 247:9 - 365:11; June 7, 2007 Tr. 5:3 - 36:2. My background, and the history and background of Sirius, and the satellite digital audio radio service (“SDARS”) that Sirius provides, are set forth in that testimony.

2. I offer this testimony to rebut several propositions proffered by SoundExchange during the direct phase of the proceeding, and to provide further information in response to questions posed by the Judges during the hearing on the parties’ direct cases. Specifically, I will discuss:

- the significant value that Sirius obtains from certain non-music programming, beyond what was described in my written direct testimony, that Sirius does not obtain from the right to perform sound recordings, including:
 - the value of non-music audio content that listeners cannot obtain anywhere else;
 - the many benefits Sirius has received from its association with brands like Howard Stern, the NFL, NASCAR, Martha Stewart and Fox News, among others; and
 - the opportunity to earn advertising revenue, which is foregone with Sirius’ music channels;

- the impact of Sirius' non-music content deals on some of its key business metrics;
- the current financial picture for Sirius;
- the impact that competitors and new products are having on the retail market for satellite radio, and new developments in the retail marketplace for audio entertainment consumer electronic products; and
- the desirability of a license fee that is based on our actual use of sound recordings so that Sirius has the ability to make rational business judgments about its use of copyrighted sound recordings in order to ensure the company's long-term viability.

The Value of Sirius' Non-Music Content

3. In the direct case, other Sirius officers and I described the importance of non-music programming to Sirius' satellite radio service. Certainly, the value of that programming goes beyond the fact that Sirius has such content as part of its service offering. Indeed, Sirius derives value from non-music content in a number of ways that it does not and cannot derive from the right to perform sound recordings.

Exclusivity

4. One of the most valuable aspects of Sirius' non-music content is programming exclusivity. In my forty years in the media industry, my experience has been that exclusive programming is more valuable than non-exclusive programming, such as music, which is ubiquitous and available to consumers for free. If a consumer can only obtain desired programming from one outlet, then the consumer is more likely to pay to receive that programming and other programming from that outlet. Further, advertisers trying to reach that consumer are likely to pay more to advertise on that platform during that programming. I discussed this aspect of the value of our non-music content both in my Written Direct Testimony (SIR Ex. 1.1 ¶¶ 42-47, 50) and in my oral testimony on June 6, 2007 (June 6, 2007 Tr. 297-304). As I also testified, the right to perform sound recordings is not exclusive. SIR Ex. 1.1 ¶ 41.

5. Although it is difficult to quantify the value of exclusivity, Sirius' agreement with the NFL provides some indication of the value of exclusive content. Under that agreement, [REDACTED]

[REDACTED] SIR Ex. 43 at SIR00048957-59. [REDACTED]

[REDACTED] Certainly, Sirius would pay far less for the non-exclusive rights to particular programming than it would for the exclusive rights to that programming (to the extent we would consider entering into a non-exclusive relationship at all).

6. With respect to the NFL agreement, Sirius' exclusive arrangement to offer home-and-away broadcasts of every game was important in expanding Sirius' relationship with automakers because it was the first concrete means of distinguishing Sirius' satellite radio service from the terrestrial radios that are standard in all cars and trucks. For example, several months after announcing the NFL deal, Chrysler agreed to a factory-installation program with Sirius. SIR Exs. 44 and 45.

Brand Association and Promotion

7. Another valuable aspect of Sirius' non-music programming is the many benefits Sirius obtains from the well-known brands that provide exclusive programming to us. These benefits, which include association with powerful brands, advertising and active promotion of Sirius, are critical to Sirius both in its efforts to attract subscribers as well as in its efforts to develop and maintain business relationships with automakers, retailers and other distributors. Although I detail some of the promotional benefits Sirius has obtained from these relationships

below, SIRIUS and XM's joint expert witnesses provide information about the value of those benefits.

8. The self-proclaimed "King of All Media," Howard Stern is one of the most popular personalities in America, in same class as talk show hosts such as David Letterman and Conan O'Brien. As I indicated in my oral testimony on June 6, 2007, the announcement that Mr. Stern would be moving to Sirius was front page news around the country. June 6, 2007 Tr. 301. Moreover, Mr. Stern promoted his move to Sirius continuously during the fifteen months prior to his first broadcast on Sirius. June 6, 2007 Tr. 302 (discussing promotion on his terrestrial radio show); June 12, 2007 Tr. (Testimony of David Frear) 16-17 (discussing appearances and promotion on The Late Show with David Letterman, 60 Minutes, Larry King Live, and in other media outlets). This publicity was not required by Mr. Stern's contract, and Sirius received the benefits of this publicity without paying any additional fees. Notably, when CBS sued Mr. Stern and Sirius, CBS claimed to be entitled to \$100 million as compensation for the free promotion of Sirius that Mr. Stern had provided during his radio broadcasts during 2005. And, as noted in my oral testimony, CBS estimates that it loses over \$100 million annually as a result of losing Mr. Stern's programming. June 6, 2007 Tr. 302-03; see also SIR Ex. 46.

9. In addition to this pre-broadcast promotion, Sirius' agreement with Mr. Stern authorizes Sirius to use Mr. Stern's name and likeness in promoting Sirius Satellite Radio. SX Trial Ex. 27. Sirius has the right to use Mr. Stern's name, likeness and brand in its point-of-sale materials at retail outlets and in car dealerships, as well as in print advertising and television commercials.

10. The impact of Sirius' relationship with the powerful Howard Stern brand has been substantial. Due at least in part to Mr. Stern's pre-2006 efforts, Sirius' subscribers increased

from approximately 675,000 subscribers one day before announcing the deal with Mr. Stern to 3.5 million subscribers by the time his show first aired on Sirius on January 9, 2006. Before Mr. Stern aired a single minute of content on Sirius, Sirius' subscriber base had increased by over 2.8 million subscribers, and the number of total subscribers at the end of 2005 exceeded consensus Wall Street analysts' pre-Stern estimates for 2005 year-end subscribers by over 1.2 million subscribers. Compare SX Trial Ex. 27 at SIR00010476 with SIR Ex. 47 at 31. Sirius' subscribers have continued to grow, and at the end of the 2006 totaled 6.025 million subscribers, exceeding consensus Wall Street analysts' pre-Stern estimates for 2006 year-end subscribers by almost 2.5 million subscribers. Compare SX Trial Ex. 27 at SIR00010476 with SIR Ex. 47 at 31.

11. Another indicator of the value of the relationship with Howard Stern is the impact on Sirius' market value. Under the terms of the agreement with Mr. Stern, Sirius was obligated to deliver to Mr. Stern and his agent 34,375,000 shares of stock [[either at the end of the contract or earlier, if Sirius' total subscribers at the end of a year exceeded estimates of year-end subscribers agreed upon at the time (included as an Exhibit to Mr. Stern's contract) by [REDACTED] subscribers]]. The value of the stock at the time the contract was entered into was \$110 million (including Mr. Stern's agent's share). [[Because the number of subscribers at the end of 2005 exceeded the estimate by over [REDACTED] subscribers, Mr. Stern was entitled to receive the stock compensation in January 2006]]. At the time that compensation was paid to Mr. Stern and his agent in January 2006, the total value of the Sirius stock awarded was \$224.8 million. The value of the Sirius stock granted to Mr. Stern and his agent therefore increased over \$114 million during the time in which Mr. Stern was promoting Sirius and before he ever aired a single minute of programming on Sirius. During this time, Sirius' stock price increased by 95%, adding over

\$4 billion in market capitalization. In addition, Sirius' market capitalization increased by approximately \$1 billion in the days immediately surrounding the Stern announcement.

12. Adding the Howard Stern brand also played an important role in advancing Sirius' relationships with automakers and retailers. Howard Stern was and is the number one radio personality in morning drive time, creating an incentive for automakers to include Sirius radios in their vehicles. Moreover, Howard Stern has enormous appeal with 18-49 year-old males, not only a large demographic for auto buyers and consumers of electronics, but also a defining characteristic of those in management positions at automobile manufacturers and dealerships and in large retail chains that sell consumer electronics who would be making the decision on whether to include Sirius radios in their cars and on their shelves.

13. Less than two weeks after Sirius announced its deal with Howard Stern (See SIR Ex. 6), Ford Motor Company announced that it would be expanding its availability of Sirius as a dealer-installed option and would be targeting up to 20 vehicle lines for factory installations beginning in 2005. SIR Ex. 48. In January 2005, Ford expanded the number of proposed factory installations to 21 models, six months later extended its exclusive relationship with Sirius, and two months later, in August 2005, began selling vehicles with Sirius radios installed. SIR Exs. 49, 50, and 51.

14. Sirius' relationship with the NFL also has significant promotional value. The NFL is one of the most recognized brands in entertainment. In return for its payments to the NFL, [REDACTED]

[REDACTED]

[REDACTED] SIR Ex. 43 at SIR00048946-47; SIR Ex. 52. As a result, Sirius

has the right to use the NFL brand in all of its promotional materials and advertisements, including point-of-sales materials at retail and car dealerships for no additional fees. A significant part of the value Sirius pays under the NFL agreement is to secure those valuable rights. In addition to those rights, [REDACTED]

[REDACTED]

15. Like the deal with Howard Stern, Sirius' association with the NFL had a significant impact on Sirius' business – in the eight months between the announcement of the deal with the NFL and the launch of Sirius NFL programming as well as since that programming has been offered. Indeed, Sirius subscriber numbers, brand awareness and retail share all increased after that deal was announced. See ¶ 26 below.

16. Sirius receives similar value from its agreement with NASCAR. SX Trial Ex. 23. As the exclusive satellite radio partner for NASCAR, Sirius has the right to use the NASCAR brand, logo and drivers in its promotional materials. [REDACTED]

[REDACTED]

[REDACTED] Moreover, Sirius' association with the NASCAR brand has been integral in strengthening Sirius' relationships with automobile manufacturers, and [REDACTED]

[REDACTED]

17. Sirius deal with Martha Stewart (“MSO”) provides another example of the brand association value Sirius obtains from its non-music content programming. SX Trial Ex. 32. **[[As part of the deal with MSO, Sirius has the right to use Ms. Stewart’s name, likeness and voice in promotional materials.]]** In addition, Ms. Stewart has promoted Sirius and her Sirius channel during personal appearances in other media outlets, such as by including a “Radio” button on the main page of her website, which provides programming schedules and links to the Sirius site so that fans can subscribe to Sirius. See SIR Ex. 54. Ms. Stewart also regularly promotes Sirius on her television program, which once featured a segment where she demonstrated how to install a Sirius radio. June 7, 2007 Tr. 215:1-10. Finally, Ms. Stewart regularly promotes Sirius in her print publications. SIR Ex. 55.

18. Even non-exclusive content brands provide value beyond the programming alone. For example, Fox News is a well-known brand, and one that is popular with a significant portion of Sirius’ audience. Under the terms of Sirius’ deal with Fox News, **[[Sirius has the right to use the Fox News logos, as well as audio samples, to promote the programming. Sirius also obtains promotion of Sirius on the Fox’s cable channels through Fox News’s promotion of its availability on Sirius.]]** SX Trial Ex. 22.

19. Sirius’ ability to associate with these brands contributed significantly to its credibility since, at the time Sirius began relationships with these brands, it was a new company. Having a relationship with these brands provided Sirius more value than these brands could provide to an established company like CBS or NBC.

20. One other aspect of the value Sirius obtains from content brands is the stable of advertisers already associated with those brands that now advertise on Sirius. Howard Stern brought a number of advertisers with him from terrestrial radio. The NFL, NASCAR and

Martha Stewart also provided Sirius with an entrée to those brands' core advertisers, including Home Depot, Geico, Sprint-Nextel, Proctor & Gamble, Shell, General Motors, 3M Scotch Brite, Advanced Auto Parts, Jack-in-the-Box, Paramount, Phillips-Norelco, and Vermont Teddy Bear/Pajamagram.

21. In contrast to the promotional benefits these and other Sirius non-music content deals provide, the sound recording performance right has no added promotional benefit. Sirius' right to play recordings by Waylon Jennings, Rihanna, Led Zeppelin, Linkin Park, Tony Bennett, Jay-Z or Madonna does not confer any ability for Sirius to use those artists names or likenesses to promote its music channels or service. Instead, Sirius must contract separately for such branding and promotion rights, and has done so both in offering specialty channels (such as Elvis Radio, Siriusly Sinatra, The Rolling Stones Channel, The Who Channel, Jimmy Buffet's Margaritaville Channel, Eminem's Shade 45, and, soon, the Grateful Dead Channel) and special programs (such as 50 Cent's program on Shade 45, Little Steven Van Zandt's Underground Garage, and Tony Hawk's and Lance Armstrong's programs on Faction).

Advertising Revenue

22. One attractive aspect of Sirius' business model is the dual revenue streams from subscriptions and from advertising. Our revenue from advertising has increased significantly over the past three years, as we have added more well-known brands to our programming line-up. In 2004, Sirius generated approximately \$906,000 of revenues from advertising net of agency fees. In 2005, the year after Sirius announced its deal with Howard Stern and after its first season with NFL programming, Sirius' revenues from advertising net of agency fees increased to \$6.131 million. In 2006, after adding Howard Stern, Martha Stewart and announcing that NASCAR programming would begin in 2007, Sirius' revenues from advertising

net of agency fees totaled \$31.044 million, a 406% increase over 2005 advertising revenues. SIR Ex. 47 at F-4.

Complete Programming

23. One final benefit of Sirius' non-music content deals is that they provide actual programming. Sirius' deals with the NFL and NASCAR include the rights to live game/race feeds, and pre- and post-game/race shows. Similarly, Sirius' deals with Howard Stern and Martha Stewart do not simply afford the right to put those celebrities on the air. Instead, those deals also require the creation of programming to be broadcast on those channels. The sound recording performance right, by contrast, is not programming. It is just one piece of what goes into each Sirius music channel, which features more than just recorded music, as Steven Blatter described in detail in his written and oral testimony in the direct phase of this proceeding. SIR Ex. 36 (Blatter WDT); June 11, 2007 Tr. 91:19-97:7 (Blatter testimony).

The Impact of Sirius' Major Content Deals

24. As discussed above, there are aspects of Sirius' non-music agreements that provide value for which there is no comparable benefit from the right to perform sound recordings. Sirius' growth over the past five years indicates that those agreements have had a substantial impact on Sirius' continued viability.

25. The following chart lists several key dates related to Sirius' non-music programming and corresponding business metrics as of those dates:

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Date	Event	Total Subs Day Prior	NPD Retail Market Share (Month Before/Month of/ Month After)	Unaided Brand Awareness Month Before and After
12/16/03	NFL deal Announced	214,499	31%; 36%; 36%	10% of adults 11/03; 9% of adults 1/04
8/2/04	NFL Programming launch	530,083	39%; 43%; 40%	14% of adults 7/04; 16% of adults 9/04
10/6/04	Howard Stern deal announced	674,459	40%; 46%; 51%	16% of adults 9/04; 29% of adults 11/04
2/22/2005	NASCAR deal announced	1,325,154	39%; 37%; 39%	33% of adults 1/05; 39% of adults 3/05
4/18/05	Martha Stewart deal announced	1,498,579	39%; 37%; 46%	39% of adults 3/05; 42% of adults 5/05
1/9/06	Howard Stern first broadcast	3,491,779	59%; 65%; 54%	47% of adults 12/05; 54% of adults 2/06
12/31/06	End of FY 2006	6,024,555	59%; 66%; 55%	52% of adults 11/06; Research suspended 1/07
3/31/07	End 1Q 2007	6,581,045	56%; 53%; 55%	Research suspended 1/07

See also SIR Ex.56.

26. Although it is impossible to measure the incremental number of subscribers that any of this programming contributed, given Sirius' performance prior to these deals—when its programming was focused on commercial-free music—it is apparent that this non-music content, especially the NFL and Howard Stern, has had an enormous impact on Sirius' business. SoundExchange's rate proposal, among other things, asks to participate in the revenues generated by Sirius' substantial investment in non-music programming.

Sirius' Current Financial Condition

27. Since submitting my written direct testimony in October 2006, Sirius has reported its financial results for the year ended December 31, 2006, as well as its financial results for the quarter ended March 31, 2007. Copies of Sirius' Annual Report on Form 10-K for the year

ended December 31, 2006 and Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, which report those results. SIR Ex. 47 and SIR Ex. 57. Those results are discussed in more detail in the rebuttal testimony of Sirius' Executive Vice President and Chief Financial Officer, David Frear. Suffice it to say, that while Sirius is continuing to grow and obtain greater penetration, the company will lose a substantial sum of money in 2007—our 17th consecutive year without achieving free cash flow or turning a profit.

The Current Marketplace for Satellite Radio

28. Since the time I submitted my written direct testimony, the landscape of the marketplace in which Sirius sells its products and services has changed. The market for our service is fiercely competitive, and is only becoming moreso as the radio industry expands its roll-out of HD radio. First, there has been a continuing decline in sales of satellite radios in the retail marketplace. In the first quarter of 2007, Sirius added 192,978 net subscribers through retail channels. In contrast, in the first quarter of 2006, Sirius added 534,958 subscribers through retail channels. Although that number was particularly high because of the launch of Howard Stern's channels in January 2006, the net subscriber additions for the first quarter of 2007 were also lower than the second and third quarters of 2006, despite the fact that, in the past, Sirius' first quarter retail subscriber net additions have always been higher than in the second and third quarters of the prior year. Certainly, the first quarter 2007 retail subscriber net additions were well below our expectations at the beginning of the year. These results suggest that the retail market for satellite radio is stagnating. The disappointing retail results also prove the difficulty of projecting Sirius' performance during the balance of 2007 and beyond, casting doubts on the company's long range plans.

29. Part of this decline in retail sales is likely due to new competition. As discussed in my written direct testimony, terrestrial broadcasters have made a substantial investment in marketing HD radio. There are now more than 1,350 terrestrial stations broadcasting digital radio. HD radio receivers are becoming increasingly available in retail outlets, and the price of receivers is dropping.

30. There are also new products entering the retail market. Apple's iPhone hit stores in June, providing users with telephone, Internet access and iPod downloadable music capabilities all in one portable device. This and other devices compete with Sirius in the retail market for consumer spending on consumer electronics devices.

Alternative Per-Transmitted Performance Rate Proposal

31. The exorbitant fee proposal put forward by SoundExchange heightened my sensitivity to the problems with a percentage of revenue based fee. While a percentage of revenue fee at the levels proposed by Sirius and XM was appealing initially because of its simplicity, a percentage-of-revenue-based fee limits our ability to make rational business decisions about the right mix of music and non-music programming, about the right mix of copyrighted sound recordings and other music (such as live performances), and about the right mix of major label and independent label sound recordings. If we decide that a certain amount of music is costing us too much for the value it provides, a percentage-of-revenue-based fee would not allow us to save money by cutting back on music use. If a record company really wants us to play its music for the promotional benefit we provide, we save nothing by obtaining the right to make the performance from that record company. While a use-based fee is particularly important for fees above the levels we have been paying, the same benefits of a use-based fee are provided at any fee level.

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32. For this reason, Sirius and XM are proposing a fee based on a price per transmitted performance. Based on Dr. Woodbury's analysis, we are proposing a fee equal to \$1.20 for each time that Sirius broadcasts a copyrighted sound recording that is subject to the statutory license at issue in this proceeding.

Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.

In the Matter of)	
)	
)	
	)	Docket No. 2006-1 CRB DSTRA
Adjustment of Rates and Terms for)	
Preexisting Subscription and Satellite)	
Digital Audio Radio Services)	

DECLARATION OF MEL KARMAZIN

I, Mel Karmazin, declare under penalty of perjury that the statements contained in my Written Rebuttal Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 24th day of July 2007.

Mel Karmazin

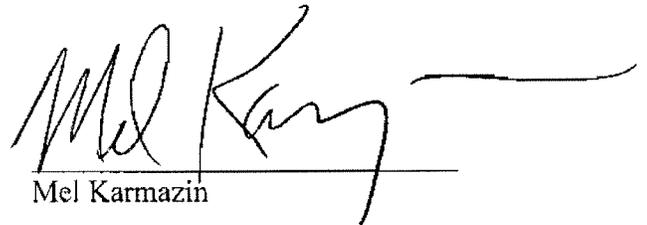
**RESTRICTED – Subject to Protective Order
in Docket No. 2006-1 CRB DSTRA**

**Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.**

_____)
In the Matter of)
)
)
) **Docket No. 2006-1 CRB DSTRA**
Adjustment of Rates and Terms for)
Preexisting Subscription and Satellite)
Digital Audio Radio Services)
_____)

DECLARATION OF MEL KARMAZIN

I, Mel Karmazin, declare under penalty of perjury that the statements contained in my Written Rebuttal Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 24th day of July 2007.



Mel Karmazin

Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 In the matter of: °
 Adjustment of Rates and Terms ° Docket No.
 for Preexisting Subscriptions ° 2006-1
 Services, ° CRB DSTRA
 and °
 Satellite Digital Audio Radio °
 Services °
 Room LM-408
 Library of Congress
 First and Independence
 Avenue, S.E.
 Washington, D.C. 20540
 Wednesday,
 June 6, 2007

The above-entitled matter came on
 for hearing, pursuant to notice, at 9:30
 a.m.

BEFORE:
 THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES: (cont'd)
 On Behalf of Music Choice:
 PAUL M. FAKLER, ESQ.
 of: Moses & Singer LLP
 406 Lexington Avenue
 New York, New York 10174-1299
 (212) 554-7800
 pfakler@mosessinger.com

APPEARANCES:
 On Behalf of SoundExchange:
 DAVID A. HANDZO, ESQ.
 MICHAEL B. DeSANCTIS, ESQ.
 JARED O. FREEDMAN, ESQ.
 THOMAS J. PERRELLI, ESQ.
 MARK D. SCHNEIDER, ESQ.
 of: Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 (202) 639-6060
 dhandzo@jenner.com
 On Behalf of XM Satellite Radio Inc.:
 BRUCE RICH, ESQ.
 JONATHAN BLOOM, ESQ.
 TODD LARSON, ESQ.
 BENJAMIN MARKS, ESQ.
 BRUCE S. MEYER, ESQ.
 RALPH MILLER, ESQ.
 of: Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 (212) 310-8238
 On Behalf of Sirius Satellite Radio
 Inc.:
 BRUCE G. JOSEPH, ESQ.
 KARYN K. ABLIN, ESQ.
 MATT J. ASTLE, ESQ.
 JENNIFER L. ELGIN, ESQ.
 THOMAS W. KIRBY, ESQ.
 MICHAEL L. STURM, ESQ.
 of: Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 (202) 719-7528
 bjoseph@wileyrein.com

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1 speed as the Earth, right?
 2 A That's correct.
 3 Q And why was it important
 4 technically to XM to have as much fuel as
 5 possible in the satellites when they reach
 6 their station?
 7 A Because one of the determining
 8 factors of a satellite's life is how much
 9 onboard fuel there is, again for station
 10 keeping, maneuvering, things that are going to
 11 be necessary during the life of the satellite
 12 to keep it stable.
 13 MR. MILLER: I have no further
 14 redirect.
 15 CHIEF JUDGE SLEDGE: Any questions
 16 from the bench? Thank you, sir.
 17 THE WITNESS: Thank you, your
 18 Honor.
 19 CHIEF JUDGE SLEDGE: Mr. Miller, I
 20 think I've missed something. What's the
 21 purpose of Mr. Masiello's testimony?
 22 MR. MILLER: Your Honor, Mr.

1 JUDGE WISNIEWSKI: Mr. Miller,
 2 would you collect Mr. Masiello's exhibits?
 3 Thank you.
 4 JUDGE ROBERTS: Mr. Joseph, before
 5 you begin, the respective sides may be
 6 interested to know, now that we've completed
 7 the initial portion of XM, that SoundExchange,
 8 of the 50 hours allotted for direct case, five
 9 hours and 45 minutes. And the services have
 10 consumed nine hours and 45 minutes.
 11 MR. JOSEPH: Thank you, your
 12 Honor.
 13 CHIEF JUDGE SLEDGE: Are we ready?
 14 Please proceed.
 15 MR. JOSEPH: Your Honor, I'd like
 16 to introduce my partner, John Wyss, who
 17 unfortunately wasn't here for the opening but
 18 was here yesterday, so he's observed the
 19 proceedings and is familiar with the rules,
 20 and he will call our first witness.
 21 CHIEF JUDGE SLEDGE: Mr. Wyss?
 22 MR. WYSS: May I approach, your

1 Masiello is dealing with the technical
 2 innovation aspect of the 801(b) factor, which
 3 deals with the relative contribution of
 4 technological innovation. We believe he also
 5 is explaining -- well, I think that's the
 6 central focus, your Honor, is technological
 7 innovation. I might also add, your Honor,
 8 that his testimony, I think, on broadcasting
 9 goes to the issue of the addition that is made
 10 to the music besides simply playing the
 11 recorded music, what's done in the studios for
 12 example, your Honor. And it also goes, I
 13 believe, to disruptive effects, the fact that
 14 this business has many benefits besides simply
 15 delivery of entertainment, for example, and
 16 should things be done that threaten the
 17 business in its future, then that would have
 18 considerable disruptive effects, including
 19 disruptive effects, for example, in emergency
 20 services. And that was one of the reasons for
 21 his testimony.
 22 CHIEF JUDGE SLEDGE: Thank you.

1 Honor? Thank you. I bring my water with me,
 2 as well.
 3 CHIEF JUDGE SLEDGE: So far, we're
 4 allowing that.
 5 MR. WYSS: Thank you. Your Honor,
 6 our first witness is Mel Karmazin who we would
 7 call. Could Mr. Karmazin please come forward?
 8 WHEREUPON,
 9 MEL KARMAZIN
 10 was called as a witness by Counsel for Sirius
 11 Satellite Radio and, having been first duly
 12 sworn, assumed the witness stand, was examined
 13 and testified as follows:
 14 DIRECT EXAMINATION
 15 BY MR. WYSS:
 16 Q Would you please state your name
 17 for the record?
 18 A My name is Melvin Karmazin. I go
 19 by the name of Mel.
 20 Q And what is your current position
 21 with Sirius?
 22 A I'm President and CEO of Sirius

1 Satellite Radio.
 2 Q How long have you held that
 3 position?
 4 A I joined in November of 2004, so
 5 it's just over two and a half years.
 6 Q Prior to coming to Sirius, how
 7 many years have you been involved in the radio
 8 and TV broadcasting industry?
 9 A About 40 years.
 10 Q And could you just briefly
 11 describe, very briefly, when you first started
 12 in the industry up to, say, about the 1970s,
 13 just to give the Court some of your
 14 background?
 15 A I started in radio in 1967 with
 16 CBS. I went to a company called Metromedia,
 17 which was a very large company in the radio
 18 business in 1970. I stayed there until 1981,
 19 when I was part of joining Infinity
 20 Broadcasting.
 21 Q And would you briefly describe
 22 your years with Infinity? You joined in 1981.

1 Q And that was in 1997 that you
 2 joined?
 3 A Yes.
 4 Q Okay. And during the period of
 5 time we're going to talk about your years with
 6 CBS, approximately how big did that radio
 7 group grow in terms of number of stations
 8 during your time that you were there?
 9 A It grew to approximately 185 radio
 10 stations.
 11 Q All right. So after you became
 12 the Chairman and CEO of CBS Radio in 1997,
 13 what happened to your title?
 14 A I was asked to take over the
 15 television stations shortly thereafter, had
 16 responsibility for the radio and the
 17 television stations. Shortly after that, I
 18 became President and Chief Operating Officer
 19 of the corporation. And shortly after that,
 20 the Board asked me to become CEO of CBS, and
 21 I became CEO of CBS.
 22 Q Okay. What year did you become

1 Could you just briefly tell the Court what
 2 happened when you were with Infinity.
 3 A I joined Infinity. They owned
 4 three radio stations prior to me joining. It
 5 was concurrent with acquiring three additional
 6 radio stations in New York, and I was there
 7 from 1981 until we sold Infinity to CBS.
 8 Q And how many stations at the time
 9 you sold to CBS were a part of the Infinity
 10 group that you were President and CEO?
 11 A We had 44 radio stations at the
 12 time of the sale.
 13 Q Okay. And what happened when
 14 Infinity was sold to CBS as far as you were
 15 concerned?
 16 A I joined the company and CBS had
 17 just completed a merger with Westinghouse, and
 18 they owned a little bit over 40 radio
 19 stations, as well. So I joined as, I believe
 20 it was Chairman of the radio group and had
 21 responsibility for all of the radio stations
 22 of the combined company.

1 CEO, the Chief Executive Officer, of CBS?
 2 A This is in 1998 time frame.
 3 Q And as President and CEO of the
 4 CBS Corporation, did you still have overall
 5 responsibility for the CBS radio business?
 6 A I did.
 7 Q Okay. And what additional
 8 responsibilities did you pick up as CEO of
 9 CBS?
 10 A Well, I had all the
 11 responsibilities of a CEO, but, as far as
 12 reporting to me, I had CBS News and CBS
 13 Sports, the cable business that they had, the
 14 interactive internet business they had, along
 15 with the television and radio.
 16 Q Okay. What is the next event in
 17 your career?
 18 A I then, I think they called it a
 19 merger, but I sold CBS to Viacom in 1999. I
 20 think it was closed in 2000.
 21 Q Okay. And at the time of the
 22 merger or the sale of CBS to Viacom, was there

1 a value on the radio business that you had
2 built up and were in charge of?

3 A The radio piece was worth \$20
4 billion.

5 Q And after the CBS - Viacom merger,
6 what did you do?

7 A When I joined Viacom, my title was
8 President and Chief Operating Officer. My
9 responsibilities were delineated in a
10 shareholder agreement, and the shareholder
11 agreement provided for the duties and the
12 responsibilities to be that of the CEO, but
13 the title was CLO. So I was CLO of the
14 company with more responsibility than a COO
15 when I joined.

16 Q And could you just briefly
17 summarize the pieces of Viacom that you were
18 in charge of?

19 A So in addition to the pieces that
20 I mentioned that were CBS, Viacom also owned
21 MTV and Nickelodeon and Paramount Pictures and
22 Simon & Shuster book publishing company, and

1 service, the satellite radio services that
2 were trying to be launched at that time?

3 A Yes. I can't tell you
4 specifically what year, you know, I became
5 aware, but obviously I was aware of satellite
6 radio during that period of time.

7 Q And what was your view from the
8 radio side, terrestrial radio side, looking at
9 Sirius?

10 A I was not a particularly bullish
11 person about what the outcome of Sirius would
12 be. I remember referring everybody, when they
13 would ask me my opinion of it, I would say,
14 "Look at their annual report and take a look
15 at the risk factors." I didn't think there
16 was a particularly good business model and
17 didn't think it would be that good a
18 competitor to terrestrial radio.

19 Q And did there come a time when you
20 were still at Viacom and CBS that your view of
21 Sirius and its business model changed?

22 A Yes. I mean, you know, somewhere

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1 we had theme parks. And we were doing
2 business in about 150 countries, and there
3 were about 125,000 employees working for me at
4 Viacom.

5 Q How long were you with Viacom?

6 A I was there four years, until June
7 of 2004.

8 Q Now, in your written statement in
9 paragraph six, you indicate that you've
10 received a number of awards for your work in
11 the broadcast industry. If you could give the
12 Court just a couple of examples of the ones --

13 A I've got a bunch of awards from
14 the NAB, the Radio Hall of Fame, the
15 International Radio and Television Society,
16 Most Influential Radio Executive Award. A
17 bunch of radio awards.

18 Q I'd like to focus now on your
19 years when you were at CBS from, say, about
20 1990s up through the early 2000s, you're
21 sitting at CBS, you have radio under your
22 responsibility. Were you aware of the new

1 around 2003, there was an event that made me
2 feel differently, you know, not totally
3 convinced but differently about their
4 prospects.

5 Q And would you describe what that
6 event was for the Court?

7 A While I was at CBS, we had the NFL
8 rights to an awful lot of games. So we had
9 the Washington Redskins, the New York Giants,
10 the New York Jets. We had the radio rights.
11 And our lawyers had crafted the agreement to
12 give us the rights for any audio service that
13 existed at the time or would ever exist in the
14 future. And the NFL was interested in taking
15 away from us those rights, willing to buy
16 those rights from us. And I was at that time
17 not the CEO of the radio group, but the CEO of
18 the radio group reported to me, and he decided
19 against my recommendation, that he wanted to
20 do a deal with the NFL to give them the rights
21 so that they can now do a separate deal with
22 XM or Sirius. And shortly after that

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1 happened, there was an announcement that the
2 NFL had made a deal with Sirius, and that, to
3 me, was a very substantial, very significant
4 event that occurred.

5 Q And why did you view that as
6 significant, from your position in terrestrial
7 radio?

8 A Well, I viewed the model of pay
9 radio to be questionable. And I've been in
10 radio a long time, and the idea that somebody
11 would pay for radio was something that I was
12 skeptical about. And as the content was being
13 offered at the time, there was nothing that I
14 believed, in my judgment, that somebody would,
15 in large numbers, pay \$12.95, which was the
16 price, to hear.

17 Once they got some content, like
18 the NFL, that, to me, was a seismic change in
19 the ability to give consumers something that
20 they couldn't get before. And if I'm going on
21 too long, just cut me off. But one of the
22 things is that, as an example, here in

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1 Sirius and its long-term prospects, what made
2 you interested in joining them at that time?

3 A Well, I was blown away by the fact
4 that Howard Stern was recruited away from
5 terrestrial radio and was going to be on
6 exclusively on satellite radio. Howard worked
7 with me for over 20 years, and I was aware of
8 how significant a performer he was and the
9 kind of money that we had made as a result of
10 Howard. And I know a lot of people believe,
11 because of our closeness, that I had some
12 information or knowledge about it, and I'm
13 under oath, and I had no idea that this was
14 happening, and I learned about it when he, you
15 know, did his press conference. And that, to
16 me, was, oh, man, you know, this is it. And
17 part of the reason is that, in radio, prime
18 time is the morning. You know, we know in
19 television it's in the evening. But in the
20 radio it's morning drive time, when people are
21 commuting. And Howard was the single biggest
22 radio personality probably in history in prime

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1 Washington, and the same thing is true in New
2 York, if you want the Washington Redskins, you
3 know, you were able to listen to the
4 Washington Redskins, but you really weren't
5 able to listen to every single game that was
6 going on. And what the deal with satellite
7 radio was going to do was enable people who
8 aren't necessarily only interested in the
9 Redskins to be able to listen to football, no
10 matter what team they wanted to, and to be
11 able to get all of the games. And it
12 demonstrated something that terrestrial radio
13 was not doing, and I thought that was a huge,
14 huge event.

15 Q Now, your written statement
16 indicates that you left Viacom, I believe, in
17 May of 2004. When were you approached by
18 Sirius about joining them?

19 A In October of that same year.

20 Q Okay. October of 2004?

21 A Yes.

22 Q Given your prior skeptical view of

1 time. And the fact that Sirius had stepped up
2 to bring him to their service exclusively
3 indicated to me that they were serious about
4 growing their business and had a business
5 model that was different than the business
6 model that I had known before the NFL and
7 before Howard.

8 Q Okay. Basically, finishing up
9 your background, Mr. Karmazin, there's one
10 issue I need to clear up that came up during
11 the opening arguments, which, your Honor, I
12 was not here for, but I do have one of the
13 charts that was used, and I would like to
14 clear this up with Mr. Karmazin if I could and
15 pass out a copy of the chart that has redacted
16 out of it any information relating to XM and
17 only has information relating to Sirius. This
18 is the chart I would propose to use, with the
19 Court's permission.

20 JUDGE ROBERTS: You need to mark
21 this, if you're going to be handing this out
22 to us.

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1 MR. WYSS: I'm not going to be
2 introducing it into evidence. But I would be
3 happy to mark it, and I will mark it as --

4 CHIEF JUDGE SLEDGE: Only if
5 you're going to show it to the witness. If
6 you're not going to show it to the witness,
7 you don't have to mark it.

8 MR. WYSS: I do need to show it to
9 the witness, your Honor, just to focus him on
10 one number in his name.

11 CHIEF JUDGE SLEDGE: Then why
12 would you not be marking it?

13 MR. WYSS: Then I will mark it,
14 your Honor. And this will be Sirius --

15 CHIEF JUDGE SLEDGE: It's going to
16 be 2 because you put 1 on the testimony.

17 MR. WYSS: All right. This is
18 Sirius number 2.

19 (Whereupon, the above-
20 referred to document was
21 marked as Sirius Exhibit
22 No. 2 for

1 as some \$31 million on the chart?

2 A I see that.

3 Q Is that number accurate?

4 A Well, I see that it was taken from
5 an SEC proxy statement filing that if, in
6 fact, all of the footnotes were included, it
7 might be accurate, but it certainly doesn't
8 reflect what my compensation was in 2006.

9 Q All right. Let's do it right now.
10 What is your compensation this year, in 2007?

11 A My salary is exactly the same as
12 it was the year before, which was \$1,250,000.

13 Q Okay. Are you entitled to a
14 bonus, a guaranteed bonus of any sort?

15 A I am not. There's no guaranteed
16 bonus. The Board has complete discretion.

17 Q All right. And let's talk now
18 about last year. What was your salary last
19 year, and what was your bonus last year, if
20 any, awarded by the Board?

21 A My salary was \$1,250,000, the same
22 as it currently is; and my bonus was \$3

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1 identification.)

2 MR. WYSS: And could I ask for
3 other people to help me mark it so they get
4 more copies?

5 CHIEF JUDGE SLEDGE: Sure.

6 MR. WYSS: May I approach the
7 witness, your Honor?

8 CHIEF JUDGE SLEDGE: Yes.

9 BY MR. WYSS:

10 Q Mr. Karmazin, have you had a
11 chance to look at this chart that talks, the
12 title of the chart is "The SDARS have Proposed
13 a Royalty Rate for Music that is Dwarfed by
14 What They Pay Other Content Providers (and
15 Themselves)." Do you see that?

16 A Yes.

17 Q And you see the reference to and
18 themselves. Do you see a reference to
19 yourself on this chart?

20 A I do.

21 Q Do you see where they list your
22 compensation purportedly for 2006, I believe,

1 million.

2 Q Okay. And this \$31 million
3 number, can you explain to the Court what that
4 relates to in terms of stock options and
5 warrants?

6 A I think, and I'm not an expert on
7 this, but I think under the Sarbanes-Oxley and
8 trying to get more disclosure, what this
9 number reflects is, in recruiting me to come
10 to Sirius, I received a significant amount of
11 stock options. At the time and still are,
12 those options are at \$4.72, which are
13 significantly higher than what the market
14 price is, and all of those options are
15 underwater, and some restricted shares, of
16 which 600,000 shares vest. And I believe that
17 the way, if the footnotes were included to
18 give a clearer picture, it would say whether
19 that was a Black Scholls formula or some basis
20 for reporting it. But it was all compensation
21 that I got prior to joining the company or,
22 you know, commiserate with joining the company

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1 in 2004.
2 Q Okay. And particularly the
3 warrants and all those, those are underwater.
4 Those have a value of zero today; is that
5 correct?

6 A Well, no. I don't think that's
7 fair. I believe that if I have the option to,
8 be able to have an option that says within a
9 certain number of years I can buy something at
10 \$4.72, even though the stock is at \$2.80
11 today, it's probably worth something. I would
12 not want to give it up, so I do believe it is
13 worth it. But, certainly, today, I cannot
14 make any money on those options.

15 Q Right. Now, there's another bar
16 on the chart called Howard Stern's manager,
17 and I'm referring, again, to Sirius 2. Do you
18 believe that that accurately reflects the
19 amounts that were paid and negotiated as part
20 of that deal?

21 A Part of Howard's contract provides
22 for his agent to get compensation, and the

1 came after that deal was done, but that was
2 the basis of the negotiation with the prior
3 management.

4 Q Mr. Karmazin, I'd now like to turn
5 to your witness statement, which is Sirius
6 Exhibit number 1, and I guess we should hand
7 that out, your Honor, to make sure that that
8 is available for everyone.

9 (Whereupon, the above-
10 referred to document was
11 marked as Sirius Exhibit
12 No. 1 for
13 identification.)

14 MR. WYSS: May I approach the
15 witness, your Honor? Thank you, your Honor.

16 BY MR. WYSS:

17 Q Mr. Karmazin, at paragraphs 13 to
18 24 of your witness statement, you don't need
19 to look at them, but there you've set forth
20 the background and the history of Sirius; is
21 that correct?

22 A Correct.

1 compensation here is ten percent. So in
2 essence, it was part of the Howard Stern deal.
3 If, in fact, Howard chose not to have his
4 agent get that ten percent, then one might
5 think that Howard could have gotten ten
6 percent more. But it was all crafted as part
7 of the same negotiation and the same agreement
8 with Howard.

9 Q Okay.

10 JUDGE ROBERTS: Mr. Karmazin, who
11 is Howard Stern's manager?

12 THE WITNESS: Don Buchwald.

13 JUDGE ROBERTS: Thank you.

14 BY MR. WYSS:

15 Q Okay. So you didn't negotiate
16 separately for Mr. Buchwald's services? This
17 was all a part of the compensation that was
18 negotiated for Mr. Stern coming to Sirius,
19 correct?

20 A I think I have to be clear about
21 it. I didn't negotiate Howard Stern's deal.
22 In other words, you asked me if I did it. I

1 Q Okay. Is that information that
2 you became aware of after you became CEO of
3 the company?

4 A Yes.

5 Q And is all of that information in
6 your written statement an accurate compilation
7 of information that is available to you from
8 the company records?

9 A Yes.

10 Q Okay. I don't want to repeat what
11 is in there. We'll rest on that. But I just
12 want to focus on a few highlights for the
13 Court, looking particularly at the period of
14 time from when Sirius was formed in about 1990
15 up through the earliest years. What was
16 Sirius' role in establishing the new satellite
17 radio service?

18 A Well, when the company was founded
19 in 1990, a lot of the time was spent in
20 lobbying the FCC to create an industry of
21 satellite radio, as well as dealing with the
22 theoretical technology that works with it, as

1 well as raising money and doing other things
2 that a start-up company does.

3 Q Okay. And were you --

4 JUDGE WISNIEWSKI: I take it this
5 is based on your general knowledge since you
6 weren't there?

7 THE WITNESS: You're correct, your
8 Honor, but it's based on my diligence of the
9 people who were there and understanding. I
10 believe that, as a CEO, it was important to
11 know the history of the company so it was --
12 yes, sir.

13 JUDGE WISNIEWSKI: Thank you.

14 BY MR. WYSS:

15 Q I think in your statement you
16 indicate that Sirius filed its application in
17 1992 and then participated in a spectrum
18 auction in 1997. Briefly, just describe for
19 the Court, during that five-year period or so,
20 what was the company doing during that time
21 period?

22 A Well, I mean, again, during that

1 done on creating the satellites, you know.

2 None of these satellites are satellites that

3 you can buy off the shelf, so they needed to
4 design satellites. They needed to design

5 radios that were going to work with those
6 satellites because existing radios didn't

7 receive that service. They needed to work

8 with antennas because, principally, radio,

9 you're listening to, you can listen to it

10 anywhere, but the car is real important, and

11 it's important to be able to have an antenna

12 that's on the car that when you're going 60

13 miles an hour there's not the size of a pizza

14 box but a small antenna. So they were

15 designing the antenna. They were designing

16 the chip set. They were raising money. They

17 were working on getting content to be part of

18 the service. They were putting in

19 infrastructure in place, getting office space,

20 you know, doing all of the things you need to

21 create a business, in addition to working with

22 the car companies about trying to get them to

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1 period of time, it was, you know, competing
2 with the existing broadcasting industry that
3 was doing everything in its power to stop
4 satellite radio from ever becoming a reality.
5 It was, again, working on winning the license
6 to be able to get it. It was, again, you
7 know, refining everything it needed to do as
8 part of that license process.

9 Q Okay. Now, did you successfully
10 participate in the spectrum auction in 1997?

11 A Sirius did.

12 Q Yes. And what did Sirius have to
13 pay just to get the rights to use that
14 spectrum?

15 A \$83.3 million.

16 Q Now, between winning your spectrum
17 in the auction and when you launched service
18 in 2002, again, would you just briefly
19 summarize the types of activities that the
20 company had to undertake to launch its
21 service?

22 A Well, obviously, work needed to be

1 put satellite radio, working with retailers to
2 be able to put satellite radio there, as well.

3 Q Now, in your written statement --

4 CHIEF JUDGE SLEDGE: You failed to
5 mention recruiting talented people like you.

6 THE WITNESS: Well, they didn't

7 recruit me at that time. They should have

8 been spending their time in that, but thank

9 you for that.

10 BY MR. WYSS:

11 Q In your written statement you give
12 us certain key financial numbers in paragraphs

13 23 and 24. I'd just like to update some of

14 those numbers for the Court so we have them up

15 currently.

16 CHIEF JUDGE SLEDGE: We

17 are a little past our normal time. Before you

18 go into another subject would be a good time

19 to break.

20 MR. WYSS: This would be an

21 excellent time.

22 CHIEF JUDGE SLEDGE: All right.

We'll recess ten minutes.

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1 (Whereupon, the foregoing matter
 2 went off the record at 3:04 p.m. and went back
 3 on the record at 3:16 p.m.)
 4 CHIEF JUDGE SLEDGE: Mr. Wyss.
 5 BY MR. WYSS:
 6 Q Mr. Karmazin, I want to just
 7 update some of the financial figures in your
 8 statement. Have you been able to update the
 9 total capital expenditure investment that
 10 Sirius has made to-date?
 11 CHIEF JUDGE SLEDGE: What
 12 paragraph?
 13 MR. WYSS: These are paragraphs 23
 14 and 24, I think have all this information in
 15 it, Your Honor.
 16 THE WITNESS: We spent about
 17 \$1,400,000,000 in capital expenditures.
 18 BY MR. WYSS:
 19 Q That's up to today?
 20 A Yes.
 21 Q And does Sirius continue to have
 22 to make capital investments going into the

1 think it's beyond the scope.
 2 CHIEF JUDGE SLEDGE: Overruled.
 3 BY MR. WYSS:
 4 Q And could you update for the
 5 Court, what is your current estimate of what
 6 you're going to be spending in capital
 7 expenditures going forward over the next four
 8 to five years, six years?
 9 A A billion dollars.
 10 Q And what is Sirius' cumulative
 11 deficit up to today?
 12 A A little over \$4 billion.
 13 Q And then, finally, what is the
 14 amount of invested capital that you now have
 15 in the business as of today?
 16 A Over \$5 billion.
 17 Q Is Sirius making money now?
 18 A No.
 19 Q And have you indicated to your
 20 investors when Sirius will become positive
 21 from a cash flow basis?
 22 A We had previously had some

1 future?
 2 A Absolutely.
 3 Q And have you projected what your
 4 capital expenditures are going to be over the
 5 next four, five, six years?
 6 MR. HANDZO: Your Honor, I object
 7 to that. Projections are not part of his
 8 written testimony, and certainly not something
 9 I've had any information on.
 10 CHIEF JUDGE SLEDGE: Mr. Wyss.
 11 MR. WYSS: His written testimony
 12 does talk about the anticipated capital
 13 expense in the years ahead, I believe.
 14 CHIEF JUDGE SLEDGE: Where is
 15 that?
 16 MR. WYSS: Paragraph 24, Your
 17 Honor.
 18 CHIEF JUDGE SLEDGE: Mr. Handzo?
 19 MR. HANDZO: If all he's going to
 20 do is repeat, address that one number that's
 21 in the last line, I don't have a problem with
 22 that. If he's going any further than that, I

1 guidance out there that we withdrew, so there
 2 currently is no information out there.
 3 Q What was the previous guidance
 4 that you gave?
 5 A Our previous guidance was that we
 6 would be free cash flow positive in 2007.
 7 Q Okay. And that has been
 8 withdrawn?
 9 A Yes.
 10 Q What is your personal view as to
 11 when you expect to become cash flow positive?
 12 A I would expect that it would be
 13 over the next couple of years, but I would
 14 hope that it's 2008, as compared to 2009, but
 15 I'm not prepared to issue that as guidance.
 16 Q And how soon does Sirius expect to
 17 become EBITDA positive?
 18 A Generally, that would be about a
 19 year after that, so if we were to look at 8 or
 20 9 for free cash flow, we would look at 9 or 10
 21 for EBITDA positive.
 22 Q And then, again, the next question

1 is, when would Sirius -- I guess you have no
2 firm guidance that you've issued, but in your
3 own view, how long would it be before you
4 would expect, given those assumptions, Sirius
5 to become profitable on a going forward basis?

6 A Probably on a GAAP earnings basis,
7 that if we were going to be EBITDA profitable
8 in 2010 or '11, it would probably be just the
9 way the numbers work, 2011 or 2012.

10 Q Okay. And even when you do become
11 profitable, you still have your accumulated
12 deficit to have to chip away at that point.

13 Correct?

14 A Correct. That would be that we
15 would just be starting to make a profit, would
16 have nothing to do with the deficit.

17 Q Okay. And as compared to the
18 record companies, what is your knowledge of
19 their profitability?

20 MR. HANDZO: Objection, Your
21 Honor. Maybe counsel can point me to where
22 that is in the statement, but I don't recall

1 time it was the December 2005 10-K statement.

2 Correct?

3 A Correct.

4 Q Okay. Has there been a more
5 recent 10-K statement since that time?

6 A Yes. We're a public company that
7 has to file with the SEC a 10-K, and we filed
8 a 10-K that covered the period of the full
9 year of 2006.

10 Q And have you also filed a more
11 recent 10-Q? You do that on a quarterly basis
12 that updates the financial numbers and risk
13 factors, and that sort of thing.

14 A Yes, we filed our first quarter
15 10-Q.

16 MR. WYSS: With the Court's
17 permission, I would like to hand the witness
18 and distribute Sirius Exhibits 30 and 31,
19 which are -- Sirius Exhibit 30 is the form 10-
20 K for Sirius Satellite Radio, Inc., for the
21 period ending 12/31/2006. Sirius Exhibit 31
22 is the form 10-Q for the same company, for the

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1 it.

2 CHIEF JUDGE SLEDGE: Mr. Wyss?

3 MR. WYSS: That's not in his
4 statement, Your Honor, that's just based on
5 his own personal experience.

6 CHIEF JUDGE SLEDGE: Sustained.

7 BY MR. WYSS:

8 Q How much money -- you talked about
9 your position, your losses, and where you are.
10 How much money has Sirius, roughly, just in
11 ranges, paid to SoundExchange and the record
12 labels up through today for sound recording
13 rights?

14 A I don't know the exact number, but
15 it's tens of millions of dollars.

16 Q I would now like to focus, Mr.
17 Karmazin, on the various risk factors that
18 Sirius has faced, and is still continuing to
19 face today. This is discussed in your written
20 statement at paragraphs 25 to 32. In your
21 written statement you reference the risk
22 factors discussion in Sirius', I think at that

1 period ending March 31, 2007. These were
2 exchanged with the other side last night, Your
3 Honor.

4 CHIEF JUDGE SLEDGE: You don't
5 need my permission to proceed.

6 MR. WYSS: Could we please
7 distribute those both to the Court, and to the
8 witness.

9 (Whereupon, Sirius
10 Exhibit Nos. 30 and 31
11 were marked for
12 identification.)

13 JUDGE ROBERTS: Mr. Wyss, is there
14 any particular reason why we jumped from
15 Sirius Exhibit 2 to Sirius Exhibit 31 and 32?
16 Mr. Joseph?.

17 MR. JOSEPH: If I may address
18 that, Your Honor. Yes, sir. It had to do
19 with the fact that we actually have some other
20 numbers in the written direct testimony. This
21 goes back to the question of whether they're
22 actually in evidence already or not, so we

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1 continued with the original numbering scheme
2 with these exhibits, which I probably should
3 have done with the first two, and I take
4 responsibility for not having done, but that's
5 the reason.

6 BY MR. WYSS:

7 Q Mr. Karmazin, would you look at
8 Sirius Exhibit 30, which is the 10-K form.
9 And the simple question is, is it a true and
10 accurate copy of Sirius' 10-K for 2006?

11 A Yes.

12 Q And would you please look at
13 Sirius Exhibit 31. And is this a true and
14 accurate copy of Sirius' Form 10-Q for the
15 period ending March 31, 2007?

16 A Yes.

17 MR. WYSS: Okay. Your Honor, we
18 would offer Sirius Exhibit 31 and 30, at this
19 time.

20 CHIEF JUDGE SLEDGE: Any objection
21 to Exhibit 30?

22 MR. HANDZO: I'm sorry. Which one

1 351.4(b), which reads: "The written direct
2 statement shall include all testimony,
3 including each witness' background and
4 qualifications, along with all exhibits."

5 CHIEF JUDGE SLEDGE: Mr. Wyss?

6 MR. WYSS: Obviously, Your Honor,
7 this exhibit did not exist back in October.
8 This is in response to our understanding the
9 Court wanted current updated information.
10 This is a judicially noticeable document.
11 This is what we file with the SEC, which would
12 hopefully provide the Court with the most
13 recent information.

14 CHIEF JUDGE SLEDGE: Mr. Wyss,
15 some would be relieved to hear that the Court
16 feels bound by its own regulations. The
17 objection is sustained.

18 MR. WYSS: Thank you, Your Honor.

19 BY MR. WYSS:

20 Q Mr. Karmazin, within your written
21 statement, you discuss some of the satellite
22 risk-related factors that Sirius faced and

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1 is that, Your Honor? Is that the --

2 MR. WYSS: 10-K.

3 MR. HANDZO: Okay. Yes, Your
4 Honor. The Court's regulations require that
5 exhibits with direct testimony be submitted
6 with the written testimony; that is the
7 Court's Regulation 351.4. And, moreover, I
8 would just note that in Mr. Karmazin's written
9 testimony, the recent 10-K 2005 was cited in
10 only one place, and only for the risk factor.
11 I haven't had a chance to go through this
12 document to see if there's even a change with
13 respect to the one thing that they cited that
14 for in his written testimony, so I would
15 object that, number one, it's not permitted by
16 the regulations. But, number two, I think
17 with respect to prejudice, it seems to me
18 they're just submitting numbers that weren't
19 even in his testimony.

20 CHIEF JUDGE SLEDGE: And to what
21 regulation are you referring?

22 MR. HANDZO: Your Honor, it's

1 faces. Could you briefly describe some of the
2 historic risks, very briefly, that Sirius had
3 to overcome in that respect?

4 A Well, I think the idea of
5 historically designing satellites, and once
6 again, creating satellites that are going to
7 work in a vehicle that's going significantly
8 fast on the roads, and also get into the
9 homes, and not be able to buy one off-the
10 shelf, I mean, I think that there was
11 significant risks then. But the one thing I
12 learned in the two and a half years that I
13 have been in the satellite business, is that
14 there's just lots and lots of risks associated
15 with satellites.

16 Q And do those risks continue even
17 today?

18 A The risks, absolutely, continue
19 today. When you have a satellite up in the
20 air, if something goes wrong, you really don't
21 have anybody, or at least I haven't found a
22 person that I can send up there to fix it.

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1 And, obviously, things go wrong with
2 satellites. I noted that probably about a
3 week or two, XM had a failure on one of their
4 satellites that caused the service to be
5 interrupted for a couple of days. We had
6 difficulties with satellites a couple of weeks
7 ago, that got my angst going, so it's a great
8 risk, and it's a great concern, and something
9 that I discovered when I joined the company.

10 Q Based on your years of experience,
11 does terrestrial radio face any sort of
12 similar risks?

13 A No, not at all.

14 Q Okay. And in your written
15 statement, you discuss some of the regulatory
16 risks that Sirius faced in the past. And can
17 you briefly describe what some of those risks
18 are, and whether or not they continue even
19 today?

20 A When you're part of a regulated
21 industry, you have, obviously, great concern,
22 so we're currently working on a new satellite.

1 that are associated with the equipment design,
2 particularly of the receiving end of the
3 equipment, and the repeaters, and that sort of
4 thing. Could you briefly describe the
5 historic risks that you faced in that respect?

6 A Well, the historic risk was in
7 creating an antenna that was going to work and
8 function, that was creating a chipset that
9 goes into the receivers that's going to work.
10 Again, synching everything up with the
11 satellites and with the terrestrial repeater
12 network, so there was lots of risks at that
13 time.

14 Q Okay. How about today, do you
15 still continue to have risks associated with
16 the products that you are selling and going to
17 bring to market in the future?

18 A We do, and those risks rear their
19 head currently. We just learned a couple of
20 weeks ago, also, that one of our antennas,
21 when it got rained on, caused it not to
22 function properly. And, again, we designed

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1 We've just gotten the license. It's not yet
2 a final order. There are people who are
3 petitioning against us, as to whether or not
4 we should be allowed to get a new satellite.
5 We are currently working with other
6 jurisdictions, like Mexico, in so far as
7 making sure that we don't have interference.

8 We also have to deal with our
9 repeater network. As part of our
10 infrastructure, we have repeaters that are
11 there, and making sure that we work with
12 those, so there's great regulatory risks any
13 time you're dealing with a regulator.

14 Q And those continue even today.
15 Those aren't all over with, by any means.

16 A They will continue forever. I
17 mean, as long as -- the satellite risks will
18 continue as long as you have satellites, and
19 the regulatory risk will continue as long as
20 you're regulated.

21 Q Now in your written statement, you
22 also discuss the issue of technological risks

1 our own antenna. We have new products, new
2 generation of radios that we're continuing to
3 work on.

4 One of the things -- we're a
5 relatively new industry, and what we need to
6 do is to come up with new versions of products
7 that will bring the cost down, so our existing
8 chipset is far too expensive for us to be able
9 to ever make a profit, so we're designing and
10 making new chipsets so that they could be
11 cheaper. And the same thing will be true of
12 all of the components of our setup, so it's
13 not like we're mature, and we have the exact
14 same product. We need to evolve our products,
15 and as we evolve our products, we have risks
16 associated with whether or not they're going
17 to function and work properly.

18 Q Okay. And does terrestrial radio
19 face any kind of similar risks with respect to
20 their radio receivers?

21 A I wasn't there in the 1920s when
22 terrestrial radio first started, but 80 years

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1 later, the consumer electronics industry is
2 the ones that are making the radios and
3 dealing with the risks. And terrestrial radio
4 is not dealing with the kinds of things that
5 we're dealing with today.

6 Q In your written statement, you
7 discuss some of the financial risks. Could
8 you briefly describe both the historic and the
9 continuing financial risks that Sirius faces
10 today?

11 A I'm not proud of the fact that our
12 company has never made a profit. Last year,
13 we lost \$1 billion. I mentioned how much we
14 lost in cumulative, but in 2006, GAAP earnings
15 --

16 JUDGE WISNIEWSKI: What was that
17 number again, Mr. Karmazin?

18 THE WITNESS: It's hard for me to
19 say, \$1 billion was what we lost.

20 JUDGE WISNIEWSKI: No, I meant the
21 cumulative number.

22 THE WITNESS: The cumulative

1 JUDGE WISNIEWSKI: Okay. I'll
2 wait. I'll hold my question until then, raise
3 it again.

4 MR. WYSS: All right.

5 BY MR. WYSS:

6 Q I'm sorry. You were -- did you
7 have more to say about the --

8 A Well, I just wanted to make it
9 clear because there's two different numbers.
10 One is GAAP earnings, and the other was cash.
11 And last year, we used \$500 million of cash,
12 so instead of making money, we lost -- we
13 ended the year with \$500 million less than we
14 started the year with.

15 Q And does the financial risks
16 continue into the future?

17 A Sure. Obviously, our stock has
18 been adversely effected lately, but obviously
19 there's great risk on a company that's never
20 made money, or an industry that's never made
21 money.

22 Q And does terrestrial radio face

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1 number of our losses was about \$4 billion.
2 And a cash basis, what we lost last year was
3 \$500 million.

4 JUDGE WISNIEWSKI: I know you
5 asked the question, but I can't seem to find
6 it.

7 THE WITNESS: I don't know where
8 you're looking, sir, but --

9 JUDGE WISNIEWSKI: In your
10 testimony.

11 MR. WYSS: In his testimony, he
12 just updated the cumulative loss figure from
13 the one in his statement. I'm sorry, Your
14 Honor. We earlier updated it to the over \$4
15 billion as of today for the cumulative loss.

16 JUDGE WISNIEWSKI: But what I was
17 looking for was not his verbal statement.
18 What I was looking for is something in terms
19 of the backup for that, if you will.

20 MR. WYSS: And I think that would
21 be in the 10-K, if I'm not incorrect.

22 THE WITNESS: Correct.

1 similar risks?

2 A Our competitors are very
3 profitable companies at this point in their
4 maturity.

5 Q In your written statement, you
6 also mention some of the risks you face in
7 terms of consumer awareness, or the market
8 risks of getting people to learn about you.
9 Could you describe some of those risks that
10 you have faced, and continue to face?

11 A Well, you're starting with a new
12 industry, I mean, pay radio. Well, everybody
13 sort of knows that you turn on the radio, and
14 it's there, and it's free, and you probably
15 got four or five radios in your home, and you
16 don't have to pay for it, so why on earth
17 would somebody pay for radio? And dealing
18 with the awareness, and having to compete on
19 mass media to try to talk to people about
20 satellite radio is a very expensive
21 proposition, and something that we continue to
22 have to do. We have a very small number of

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1 people relative to any of the numbers in the
 2 United States of subscribers. There's about
 3 14-1/2 million people who have decided that
 4 they want to pay for radio, and that's out of
 5 about 300 million people, 109 million homes,
 6 so we have certainly not begun to penetrate
 7 the market in any serious way, and still have
 8 the risks of having to try to become a mass
 9 medium.

10 Q And does terrestrial radio face
 11 any sort of consumer awareness risk compared
 12 to what you have to face?

13 A I know there's different numbers
 14 around, let me give you mine; 97 percent of
 15 all the people in the United States listen to
 16 radio. Every single car, virtually every
 17 single car has an AM-FM radio that's built in
 18 it, and I think everybody is aware of radio.
 19 And I don't think that anybody on the planet
 20 is not aware of radio.

21 Q Now your written statement also
 22 refers to the risks that you face from the

1 difficult for you to be able to listen to any
 2 kind of content that is out there, where you
 3 want it, when you want it. And we need to be
 4 competitive to those technologies.

5 I was with the CEO of BMW a few weeks
 6 ago, and talking to him about the fact that he
 7 is putting in a device in his vehicles that
 8 you can plug you MP3 player in and listen to
 9 your music for free in the car. You don't
 10 need to pay for satellite radio. So in
 11 addition to the traditional radio, there's
 12 just constant technology, and there's risks
 13 that we need to be competitive, and we need to
 14 keep up with it.

15 Q I would now like to go on and
 16 address the subject of the competitive risks,
 17 which is another areas of risks that you
 18 talked about in your written statement. Would
 19 you please tell the Court who is your primary
 20 competitor or competitors?

21 A Well, I guess I touched on it a
 22 little while ago, so, of course, we compete

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1 rapidly changing technological environment,
 2 particularly as with respect to the delivery
 3 of musical sound recordings to the public.
 4 Could you just very briefly discuss some of
 5 these new emerging risks that are on the
 6 horizon?

7 A Sure. I mean, one of the great
 8 things for the consumer these days is that
 9 technology is wonderful, and people are able
 10 to get all kinds of new devices. So if you
 11 just think about name, I mean, our name is
 12 Sirius Satellite Radio, so we're in the radio
 13 business. And we compete with not only
 14 terrestrial radio, but there is now this
 15 digital radio called HD Radio. And what that
 16 is, is that there's now the ability to be able
 17 to get commercial-free music for free. And
 18 there are almost 1,500 radio stations
 19 throughout the United States today that are
 20 offering that service, so in addition to
 21 having terrestrial radio, there's also this
 22 new technology with WiFi. It's not very

1 with XM, which is the other company that's in
 2 the satellite radio business. But the 600
 3 pound gorilla, the company that -- the
 4 industry that we compete with is terrestrial
 5 radio. It's a \$21 billion industry. It has
 6 very successful companies, making billions of
 7 dollars in it, and they're the ones that have
 8 the audience, they're the ones that have the
 9 advertisers, and they're the ones that we want
 10 to penetrate.

11 There was a research study done that
 12 said that we have - and I'm not endorsing the
 13 research, I'm just sort of telling you this is
 14 what it says - and I'm not proud of it,
 15 either, but that XM and Sirius combined only
 16 have 3.4 percent of the audience listening to
 17 radio, which means that terrestrial radio has
 18 this over 96 percent of the audience. So I
 19 certainly look at XM as a competitor, I saw
 20 them in this room and I growled at them, but
 21 the one that I think more about who's a
 22 competitor, is the terrestrial radio people.

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1 Q You mentioned the size of the
2 terrestrial radio industry. Do they have
3 other advantages, as compared to what you
4 have?

5 A Well, I mean, certainly they are
6 everywhere. Certainly, they are in your home,
7 they are in your car, everybody -- they don't
8 have to make their own radios. The consumer
9 electronics industry has decided that they
10 want to make their radios. They don't have to
11 worry about putting up satellites. They put
12 up an antenna, not nearly as expensive as a
13 \$300 million satellite. Their economic model
14 is better. They have 50 percent profit
15 margins at many of the companies, or at least
16 the company that I was running. They have
17 benefits that they don't have to pay for sound
18 recordings. They have that benefit, and it's
19 good to be around for a long time, and have
20 all of the legacies.

21 Q How does Sirius compete against
22 those advantages that are sort of stacked

1 the Metropolitan Opera. And we have a 24-hour
2 a day, seven day a week Metropolitan Opera
3 channel. As I understand it, you can't get
4 classical music here in Washington, D.C., so
5 the fact that we have a 24-hour station. We
6 did a deal with the Catholic church, Cardinal
7 Egan gave us the rights to have a 24-hour
8 Catholic church channel; whereas, in
9 terrestrial radio, you tend to get that
10 content on Sunday mornings. We're providing
11 it 24 hours a day, seven days a week. So the
12 way we choose to deal with that competition is
13 by offering content that can't be available
14 anywhere else, or enhancing that content and
15 making it different than they can get anywhere
16 else.

17 Q Just on that last point, because
18 you mentioned the NFL. We can listen to the
19 Redskins here in Washington. How are you
20 different, or what do you offer to people with
21 your exclusive deal with the NFL?

22 A I think I mentioned, but I think

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1 against you?

2 A I think the idea is - and I've
3 sort of been clarifying this as I'm there, is
4 that in order to compete with free, that's a
5 pretty tough proposition. And the American
6 public is smart, and they need to be able to
7 get something that they feel they can't get
8 for free. And our strategy has been,
9 particularly in the last two and a half years
10 that I've been there, is to compete with them
11 by offering them something that is not
12 available to them. And, again, I'll be quick,
13 that gets back to my point about the NFL. So
14 the way you compete with terrestrial radio,
15 sure, Dan Snyder's radio station is running
16 the Washington Redskins, but the way we
17 compete with that is that we run all of the
18 games. When we hired Howard Stern, the way we
19 compete is that we have Howard Stern
20 exclusively, so the more content that we have
21 that's exclusive and desirable - we just did
22 a deal in the last 12 months, I did it, with

1 instead of you're here in Washington maybe
2 having one or two games available to you,
3 we're making all of the games available to
4 you. And not only are we making the games
5 available to you, we're making the visiting
6 and home-team version of the games, so not
7 that there's a bias in the announcers, but if
8 you -- the New England Patriots are playing
9 the Chicago Bears, you have a choice of
10 listening to the Bears' version of it, or the
11 New England Patriot version of it. And I
12 think a good example of why that was
13 significant is, if you take the Super Bowl,
14 you can listen to the -- I mean, everybody is
15 watching it on television, so I understand
16 that. But if you're in your car, you're out,
17 you want to listen to the Super Bowl. You
18 don't have satellite radio, you get the game.
19 We had 10 different versions of the game, so
20 not only did we have each team's announcers,
21 we had a Mandarin Chinese version, we had a
22 German version, we had a Hispanic version, so

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1 we've demonstrated why it's worth paying
2 \$12.95 for something that they can't get for
3 free.

4 Q And what about -- I know you have
5 a deal with NASCAR. Correct?

6 A Yes.

7 Q Isn't it true that you can get
8 NASCAR races on terrestrial radio?

9 A Yes, but you can't get it the way
10 we do it, and a couple of things. Number one,
11 we have a 24-hour, seven day a week NASCAR
12 channel, so you might be able to get the race,
13 but you can't get the 24-hour, seven day a
14 week channel. But even on the race, what we
15 have done is that we have enhanced it by
16 allowing you to listen to - and I'm not an
17 expert on NASCAR - but there's a lot of people
18 who are interested in the pit crew
19 conversation with the driver, and on any given
20 race day, we have 10 channels where someone
21 could pick which driver they want to listen
22 to, and listen to the communication between

1 that was created for Sirius as a result of
2 that. Howard continued on his CBS radio
3 stations after he announced it for another 15
4 months, and during that 15-month period was
5 talking and promoting Sirius. Just as an
6 side, CBS sued us for a little over \$100
7 million claiming that they gave us over \$100
8 million of publicity. That suit was
9 withdrawn, they changed their mind, but the
10 idea was that we got a tremendous amount of
11 publicity.

12 Howard also was a leader, and at
13 this point, it's made satellite radio, and
14 Sirius, in particular, the company that stands
15 out. And Howard had millions of people who
16 were listening to him, that we believed, at
17 the time though it wasn't me, but shortly
18 after when I arrived, believed that we were
19 going to attract an audience that was not --
20 no one was able to do it. And the fact is,
21 that CBS in its earnings report after Howard
22 left, continues to talk about how it's under-

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1 the pit crew and that driver, in addition to
2 being able to get the race. Again, an
3 enhancement of something that's not available
4 on terrestrial radio.

5 Q And you have the exclusive rights
6 to that. Correct?

7 A Correct.

8 Q Is Howard Stern another example of
9 the type of exclusive deal that was entered I
10 guess just before you came with the company?

11 A Yes. I mean, Howard is a huge,
12 and a big example of that.

13 Q Could you explain to the Court the
14 significance, in your own view and experience,
15 of that content deal with Howard Stern?

16 A Well, okay. So not only was it
17 that I described earlier how big and
18 significant he was, but when Howard announced
19 that he was coming to Sirius, that sent a
20 shockwave. I mean, that was front page news
21 in most of the papers across the country.
22 There was a tremendous amount of awareness

1 performing, and not doing well because of
2 Howard Stern. And they've estimated that the
3 impact of Howard on them was well over \$100
4 million so far for them. So Howard - not only
5 do we have Howard exclusively, but we have him
6 promotionally, and it's morning drive talk.

7 Q And in terms of the effect on the
8 company before and after Howard, can you just
9 summarize some of the key comparisons?

10 A Well, yes. I mean, start with our
11 most important metric, which is subscribers,
12 so that when Howard announced that he was
13 coming to Sirius, Sirius had 600,000
14 subscribers, 600,000. And today, we have 6-
15 1/2 million subscribers, and we started our
16 service in 2002, so from the period of time
17 from 2002 until October of 2004, we grew to
18 600,000 subscribers. And since that time,
19 we've grown to where we are today.

20 Our market share has increased
21 significantly, our brand awareness has
22 increased significantly, and he has been a

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1 transforming - is a brilliant hire, cost a lot
2 of money, there's no question about it, but it
3 was money that was well spent.

4 Q How about the area of music
5 programming, where you cannot get exclusive
6 rights as a matter of law against terrestrial
7 radio. How do you compete in that area?

8 A Well, we believe that we enhance
9 all of our music programming. One of the
10 things that we have been forced to do in the
11 area of music has been to present our music
12 commercial-free. And the reason we do that is
13 because you can get music all day long, any
14 place you want it on terrestrial radio for
15 free. So why, again, would somebody pay us
16 \$12.95 to be able to hear music, if they can
17 get music for free? So, number one, we had to
18 make it commercial-free.

19 We like our business model that
20 enables us to have two streams of revenue,
21 advertising, as well as subscription. In the
22 case of our music, we forego that advertising

1 hire our DJs; it, obviously, costs us money to
2 do the research; it, obviously, costs us money
3 to deal with our program directors. And even
4 on our special channels, as an example, so we
5 just announced that we have a channel 24-
6 hours, seven days a week called Siriusly
7 Sinatra. And what we need to do is we had to
8 pay the Sinatra family. We pay Nancy Sinatra
9 to do programs with us. We pay other people
10 to be host there. Obviously, we have the same
11 royalties, the ASCAP, BMI, and, obviously,
12 it's factored into what we pay the recording
13 industry overall. But we're, obviously,
14 paying a significant amount of money for our
15 music content beyond the SoundExchange issue.

16 Q Okay. How compelling is the music
17 programming to Sirius' business?

18 A Well, I mean, we hope that the
19 subscribers love it. We think that -- we're
20 in the business of making sure that they like
21 our programming offering.

22 JUDGE WISNIEWSKI: Mr. Karmazin, I

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1 revenue because of the fact that we can't do
2 it. In addition to that, we enhance the music
3 with our production, our programming. We
4 believe that we have the best radio on radio.
5 As a matter of fact, our advertising line says
6 that we are the best radio on radio. We've
7 also enhanced that music programming with
8 specialty stations. So, as an example, this
9 week we did an announcement with the Grateful
10 Dead that says that we will now have a 24-
11 hour, seven day a week channel featuring the
12 Grateful Dead. We have a Elvis Presley 24-
13 hour, seven day a week channel. We have a
14 Frank Sinatra 24-hour a day, seven day a week
15 channel, so we just can't just play the music.
16 Right? I mean, that's sort of what free gets
17 you. We need to make it worth more than free.

18 Q And are you required to make
19 substantial financial investments into your
20 music programming to get this enhanced value?

21 A Well, sure. I mean, obviously,
22 everything -- it, obviously, costs us money to

1 don't think you heard your counsel's question.
2 Would you like to repeat your question?

3 MR. WYSS: No. The question is,
4 what role does music play in your business?

5 JUDGE WISNIEWSKI: Then I misheard
6 the question.

7 MR. WYSS: And I apologize. It
8 was inartfully phrased, but that's what I
9 meant to ask.

10 THE WITNESS: So we offer 135
11 channels. We want to make sure that the
12 people become a subscriber, pay us \$12.95, and
13 then they stay a subscriber, and that they
14 don't cancel, and they don't cancel out. So
15 the more satisfied we can make you by having
16 a whole programming offer, the better. And
17 music is an important part of that
18 programming.

19 BY MR. WYSS:

20 Q Before the NFL deal, and before
21 Howard Stern, were you offering music
22 programming?

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1 A Yes.

2 Q And how was the company doing back

3 at that time?

4 A Well, I mean, certainly, it wasn't

5 doing anywhere nearly as well as it was. And

6 I think that everybody there realized that the

7 model of just continuing to offer music and

8 charging \$12.95 was not something that was

9 going to work as a business model, so the

10 addition of the content that we've done has

11 made the difference. I can give you just one

12 example, there's many, but in the most recent

13 quarter, in the first quarter of 2007, Sirius'

14 share of net ads, so the people who have

15 decided to leave terrestrial radio, the ones

16 who wanted to become subscribers and stayed

17 subscribers, we had a 76 percent share of that

18 market. In the first quarter of 2004, so that

19 would be the most recent - the quarter before

20 Howard was announced, we had a 33 percent

21 share, so we've gone from 33 percent share, to

22 a 76 percent share, and we played music when

1 become even profitable, that the SoundExchange

2 is asking for 23 percent of our revenues, I

3 mean, almost a quarter of our revenues. And

4 I mentioned, and the information is there, as

5 to how much money we're losing. And, at this

6 point, the idea of us paying such a large

7 percentage, when our competitor is paying

8 nothing is, in my judgment, characterized as

9 I started. I mean, I think it's just crazy.

10 Q Could you afford to pay the rates

11 that SoundExchange is asking this Court to

12 impose?

13 A Well, I don't know -- we can.

14 Certainly, we would not. That could not

15 happen. I mean, at this point, if you took

16 the SoundExchange first year proposal, we

17 would go to where we would probably go from

18 paying what we're paying now, to \$100 million.

19 There would be an increase in cost of \$80

20 million. I don't know where that money comes

21 from, I mean, other than the fact that we

22 would have greater losses.

1 we had the 33 percent.

2 Q Have you had a chance to review

3 the SoundExchange proposal that was submitted

4 after your written statement was prepared?

5 A I have.

6 Q And what is your reaction to their

7 proposal?

8 A It's bizarre. It's outrageous.

9 Q Too high, too low?

10 MR. HANDZO: Your Honor, I'm going

11 to object. Obviously, it is beyond the scope

12 of his written testimony. There's certainly

13 nothing in his written testimony that

14 addresses the impact of SoundExchange's rate

15 proposal.

16 CHIEF JUDGE SLEDGE: Perhaps that

17 question is -- the objection is overruled.

18 BY MR. WYSS:

19 Q Could you explain why you believe

20 --

21 A As I understand the SoundExchange

22 proposal, in some number of years before we

1 Q What would be the impact on Sirius

2 if the SoundExchange proposal was adopted?

3 A Well, I think it would be

4 unbelievably disruptive for us to do this, but

5 I think what would happen, would be that we

6 would just have to dramatically scale back on

7 the music programming that we offer. And that

8 we would replace the music with content that

9 would not be as easily available anywhere

10 else, and that, though it would be disruptive

11 for us, we would -- I would feel at Sirius

12 that I would have to make those changes.

13 JUDGE ROBERTS: One question, Mr.

14 Wyss.

15 MR. WYSS: Yes.

16 JUDGE ROBERTS: Mr. Karmazin, what

17 kind of exclusive content would you use to

18 replace the music?

19 THE WITNESS: Well, it's

20 interesting. I had not thought about it until

21 I saw the SoundExchange proposals. I will

22 tell you that when I saw it, it certainly

1 started triggering discussions internally as
 2 to what we would do to replace it. And there
 3 are things that we would do to replace it, so
 4 as an example, and I know I'm testifying under
 5 oath, so don't hold me to any of these
 6 specific channels, but the kinds of things
 7 that we would do, is that we would probably
 8 start adding a whole bunch of channels aimed
 9 are core groups, so we would probably put on
 10 more ethnic programming, because we have a lot
 11 of people who feel that that market is
 12 undisturbed. Right now we only have one Asian
 13 channel, we'd like to put on more.

14 We have Cosmopolitan Magazine, we
 15 have Playboy Magazine, we have Maxim Magazine,
 16 we have Martha Stewart doing radio shows.
 17 There are an awful lot of magazines out there
 18 that we don't have in the way of radio
 19 programming, so think Sports Illustrated,
 20 think Time Magazine, and what we would do is
 21 say to the audience that, you know what you,
 22 you got this HD Radio, you got this

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1 know, because we ran -- we had some issues
 2 with them, but we can put on CSPAN, we could
 3 put on MSNBC that's not on our air, so I
 4 believe, though it's not my preference, I
 5 mean, again, that's not what I want to do, but
 6 that's sort of along the lines of thinking
 7 that me and my team have been doing when we
 8 saw the SoundExchange proposal.

9 JUDGE ROBERTS: Would you attempt
 10 to negotiate with individual record companies?

11 THE WITNESS: We would, and I
 12 would be remiss to say that if, in fact, we
 13 didn't have music that was part of it, in
 14 other words, the Metropolitan Opera channel I
 15 mentioned, the pre-1972 period of time that
 16 SoundExchange is not covered. And we might be
 17 interested along the lines that we do right
 18 now with the Grateful Dead, and we do with
 19 Elvis, and we do with Sinatra, and have some
 20 of those specialty channels that we would
 21 have.

22 JUDGE ROBERTS: Thank you.

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1 terrestrial radio, that's the guys that have
 2 this music. Okay? And that if you want to
 3 get content that you're going to pay for,
 4 you're going to be able to get it from us.

5 We would begin to talk to, as an
 6 example, different groups, so first
 7 responders, teachers. Why shouldn't there be
 8 a channel that would be programmed to
 9 teachers? Why shouldn't Wal-Mart want to have
 10 a channel that would enable them to
 11 communicate with their employees? Why
 12 wouldn't we want to be able to go to a
 13 pharmaceutical company and say to them, how
 14 would you like to have a channel on Sirius to
 15 communicate to doctors? And, again, all of
 16 these things would generate subscribers that
 17 would be because of the fact that the
 18 pharmaceutical company would provide the
 19 radios and the subscriptions to the doctors,
 20 or the pharmacist. So I think that there are
 21 a number of things.

22 We had to take off CSPAN, you

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1 BY MR. WYSS:

2 Q Finally, I'd just like to turn to
 3 - are you familiar with the Sirius, excuse me,
 4 not Sirius, but the proposal put forward by
 5 Sirius and XM in this proceeding by the
 6 services?

7 A I am.

8 Q And do you believe that that rate
 9 is fair?

10 A I believe that is very fair.

11 Q And why do you believe that the
 12 rate they have proposed is fair?

13 A Because, once again, I've said it
 14 earlier, that we're competing with free, and
 15 that that's our competition. Those are the
 16 people that are making a ton of money, we're
 17 not making any of it. And they're not paying
 18 for it. And I thought that the fact that we
 19 had a proposal there that was providing the
 20 industry, the music industry with what might
 21 be \$100 million or more from the satellite
 22 radio industry, for something that's available

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1 everywhere, that isn't really being done for
2 us. I mean, it just is basically taking the
3 music that they have, and giving it to us, I
4 think that's very fair.

5 Q And in your view, having come from
6 the radio industry, and knowing about
7 promotion and records, do the record companies
8 attain some promotional value from --

9 A Well, yes. I think there's no
10 question. I mean, my days at terrestrial
11 radio, the record companies were very anxious
12 to get music played on radio stations. To
13 this day, they are servicing us. I mean,
14 they're providing us with free CDs, because
15 they want us to play it. And I must tell you,
16 and this is a pet peeve of mine, and --

17 JUDGE WISNIEWSKI: Mr. Karmazin, I
18 don't want to interrupt you -- I won't
19 interrupt you. Go ahead.

20 THE WITNESS: One of the things
21 that was even more bizarre to me was that not
22 only do the record companies let terrestrial

1 stations that had music programming, and we
2 didn't pay them. And why they didn't choose
3 to try to change that rule, or try to lobby is
4 not for me to decide, but, I mean, there were
5 things they could have done.

6 JUDGE WISNIEWSKI: The question
7 that your counsel raised with you, however,
8 had to do with promotional value. And I take
9 it the gist of your answer with respect to how
10 much promotional value they get for the music
11 that's played on Sirius is what?

12 THE WITNESS: I believe that it's
13 extensive. I think discovery --

14 JUDGE WISNIEWSKI: But what is it,
15 how much?

16 THE WITNESS: Well, there's no way
17 of being able to quantify it. When we play --

18
19 JUDGE WISNIEWSKI: Well, that is a
20 crucial point here, Mr. Karmazin. And I don't
21 mean to scold you about that. Your counsel
22 who is currently conducting the questioning

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1 radio get their music for free, but they were
2 involved in paying these radio stations to
3 play their music, so it's hard to believe that
4 somebody doesn't want you to play music, when
5 the industry had been trying to get people to
6 pay for the disc jockeys to get them to play
7 for the music.

8 CHIEF JUDGE SLEDGE: Let me
9 caution you, you didn't mean to say that
10 terrestrial radio - I mean, that the copyright
11 owners let terrestrial radio play their music
12 for free, did you?

13 THE WITNESS: Well, I'm not saying
14 they -- Congress allowed that to happen. And
15 I'm saying that's just the way it is.

16 CHIEF JUDGE SLEDGE: Right. They
17 chose.

18 THE WITNESS: Well, no, I guess
19 they didn't. I shockingly don't think that
20 they have been over the years as aggressive --
21 I mean, we -- as terrestrial radio, I made -
22 my company made billions of dollars on

1 wasn't present here for some earlier testimony
2 when this issue arose.

3 One of our difficulties here is,
4 we have to have some quantifiable factors in
5 order to make some determination here for
6 rates. The fact that you may say it's
7 extensive, frankly, doesn't mean a whole lot
8 to us in those terms. We need to have some
9 quantifiable factors, so I'm assuming that you
10 have some witnesses that will give us those
11 quantifiable factors.

12 THE WITNESS: Your Honor, all I
13 can answer at my level is that I could tell
14 you that discovery of music is a very
15 important -- there's lots of ways you can
16 discover music. One of the way you discover
17 music is you hear something on the radio that
18 you might like; and, therefore, you buy it.
19 But I can't -- I'm sorry. I'm not the expert
20 to be able to do that. I wish I was, but I
21 can't.

22 CHIEF JUDGE SLEDGE: And if it

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1 turns out that you're correct in your
2 statement that there is no way to quantify
3 promotional value of air play, then that means
4 that promotional value has no role whatsoever
5 in setting rates, which is our job.

6 THE WITNESS: Your Honor, I
7 wouldn't begin to tell you what you should
8 factor in, at all. I mean, that's not for me
9 to say what should -- it just strikes me --

10 CHIEF JUDGE SLEDGE: No, I think
11 you've misphrased what I said. Should is a
12 different matter than could. And if there is
13 no way to quantify promotional value of air
14 play, then you cannot include that factor in
15 setting rates.

16 THE WITNESS: I'd be telling you
17 what you -- in my opinion, if you had a --
18 does it help that radio, satellite radio
19 plays music and introduces artists? It helps.
20 It helps a little, helps a lot, I can't
21 answer. It helps.

22 CHIEF JUDGE SLEDGE: Thank you.

1 the exaggerated term of ubiquitous coverage.
2 And that certainly cannot be true, but his
3 point was that there's widespread coverage
4 nationally. And you mentioned in your
5 challenges that face your company, are things
6 like negotiating a license with Mexico. What
7 is the geographic coverage of Sirius radio?

8 THE WITNESS: Well, our
9 constellation covers principally the
10 continental United States, but we have
11 satellites flying down over the equator and
12 back, so in order for us to get a license for
13 our satellites which are going to be flying
14 over Mexico, even though they are not turned
15 on while they're over that part of the
16 equator, we need to have a working -- the
17 United States has a working relationship with
18 Canada and with the other countries where
19 you're flying a satellite over their air
20 space.

21 CHIEF JUDGE SLEDGE: That's
22 instructive to me. I didn't realize that

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1 MR. WYSS: Your Honor, at this
2 point, I would like to introduce Sirius
3 Exhibit 1, which is the written statement and
4 accompanying documents with it.

5 CHIEF JUDGE SLEDGE: Is there any
6 objection to Sirius Exhibit 1?

7 MR. HANDZO: No, Your Honor.

8 CHIEF JUDGE SLEDGE: Without
9 objection, it's admitted.

10 (Whereupon, Sirius
11 Exhibit No. 1 was
12 admitted.)

13 MR. WYSS: Subject to redirect,
14 Your Honor, I have no further questions of
15 this witness.

16 CHIEF JUDGE SLEDGE: Mr. Karmazin,
17 I want to take the freedom to ask you two
18 questions, just to clarify some things that
19 you said that I'm a bit confused about, and it
20 may affect future questions.

21 There was a statement made by the
22 last witness for XM on operations that he used

1 something that far up in the air is subject to
2 a national right or interest.

3 THE WITNESS: I think it's
4 security reasons. I mean, I guess - again,
5 this is not my area of expertise, but if
6 there's a satellite flying over your country,
7 if you're that government, you might want to
8 know a little bit about what that satellite is
9 all about.

10 CHIEF JUDGE SLEDGE: Well, thank
11 you. My next question is much more broad, and
12 will be hard for you to answer, I suspect.
13 But it's been troubling me from all of the
14 testimony of XM, and if that testimony were to
15 apply to Sirius, I'd like to hear your
16 observation on it.

17 We're hearing a message that seems
18 to me to be -- to present great contrast.
19 We're hearing a consistent message that the
20 satellite radio provides top of the line
21 facilities, technology, innovation, and
22 content, for exclusive content by celebrities,

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1 on the one hand. And in contrast to that, it
 2 seems to me, we're hearing a consistent
 3 message of there is no foreseeable, reasonable
 4 projection of becoming profitable. And while
 5 it, in one hand it's a bit erotic with my
 6 background in bankruptcy court, that I'm very
 7 used to hearing people say that we live a top
 8 of the line lifestyle, but we're broke. It
 9 seems to me to be a contrast in this context.
 10 I'd like for your opinion of how it's
 11 consistent and a good business model to
 12 provide this top of the line for everything in
 13 your business, and yet project losses beyond
 14 the reasonable time in which you can project?

15 THE WITNESS: Good question.

16 Satellite radio, Sirius has been around for 17
 17 years and has not made any money. And that in
 18 order for a business, and we're a new
 19 business, we got our first subscriber in 2002.
 20 And I made the analogy with terrestrial radio,
 21 the first radio station in Pittsburgh went on
 22 the air in 1926, KDKA, so this would be like

1 think that there's a bunch of years where you
 2 have losses before you make any money. I
 3 mean, I wish it wasn't the case. I mean, I
 4 wish there was something we could do to make
 5 us have money faster, but I could tell you,
 6 the one thing that you need to do is, people
 7 aren't going to pay unless they -- you know,
 8 people are smart, and they're not going to pay
 9 for radio if you don't give them something
 10 that's worth it. And that's why you've got to
 11 pay for the programming, that's why you've got
 12 to have the quality of service.

13 If you drive your car around and
 14 you hear static, well, you know what, you'll
 15 change the channel, you shut it off. You're
 16 not paying for it. If you're driving around
 17 and you hear static, you know, you're going to
 18 sit there and say why the heck am I paying
 19 \$12.95 for this thing if I can't get good
 20 quality reception? So it's a decision that
 21 was made to be in the pay radio business, and
 22 there's a payout down the road. But the one

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1 in looking at the radio business in the 30s.
 2 So we are a new industry. There is a -- as
 3 far as the content is concerned, if you didn't
 4 have the content that we're talking about, no
 5 one would pay for radio, so the industry
 6 wouldn't exist.

7 There are a number of people out
 8 there, me included, that believe that down the
 9 road, whether or not it be 2008, where we may
 10 be free cash flow positive, or 2009, whether
 11 it's 2010 that we might have EBITDA, or '11 or
 12 '12, we will have earnings. And I think that
 13 I wouldn't -- you didn't ask me this question.
 14 Would I have invested in Sirius in 19 -- in
 15 this company 17 years ago? No, I would not
 16 have invested in the company at that point.
 17 I joined the company two and a half years ago,
 18 and I saw a path based on where the company
 19 was going that the company would be a
 20 profitable company, and maybe be a very
 21 profitable company somewhere down the line.
 22 And I don't think it's so unreasonable to

1 thing you must have is compelling, exclusive
 2 content to differentiate yourself, so you have
 3 a business model, or you don't have a business
 4 model. You might as well just shut down.

5 CHIEF JUDGE SLEDGE: Is it then
 6 true that for this business model, you have to
 7 provide top of the line all the time, and
 8 you're not able to adopt a more, I guess,
 9 traditional business model of being able to
 10 increase your quality as you build your
 11 business, and as you generate income in order
 12 to increase the quality?

13 THE WITNESS: We have 135
 14 channels, so as an example, we have Bloomberg
 15 Radio that's one of our channels, not talking
 16 a lot about Bloomberg Radio, or CNN Radio, or
 17 CNBC. I mean, if you're driving in your car,
 18 you're away from that television set and you
 19 want to know what's going on on Wall Street,
 20 you could turn on CNBC, and we have that at
 21 not extraordinary prices, not top-shelf
 22 prices, so a lot of the content that we have

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1 are not content that have the kind of cost
2 structure that the NFL or Howard Stern. You
3 need a certain amount of that to get the buzz,
4 to distinguish yourself, to get your brand.

5 I'm not going to make news here,
6 but if Rush Limbaugh were available today, and
7 wanted the kind of money that Howard Stern
8 had, and the argument would be you might get
9 a whole bunch of listeners if Rush Limbaugh
10 decided to come over. I would not pay it,
11 because I don't think we need it today. I
12 believe that we have a big draw. It was
13 important to have that marquis talent when we
14 got it. You just can't spend - I mean, I am
15 laser-like focused, laser-like focused on
16 costs. That's what I do. The last two and a
17 half years, that's what I do. But I do know
18 you've got to make investments, but it doesn't
19 mean that you should be on a spending spree
20 and just frivolously through money to
21 programming.

22 CHIEF JUDGE SLEDGE: Thank you.

1 A I don't have any of the -- some of
2 the things I talked about were things that I
3 saw as a competitor, things like that, but I
4 was not at the company until October 18th of
5 2004, and didn't share in any of the decisions
6 that were made until that date.

7 Q Okay. So the answer to my
8 question is, you don't have first-hand
9 knowledge of those things. Right?

10 MR. WYSS: Objection, Your Honor.
11 I think he answered that question.

12 CHIEF JUDGE SLEDGE: Sustained.

13 BY MR. HANDZO:

14 Q And to the extent that you've
15 testified about the technology issues involved
16 in building Sirius prior to the time that you
17 arrived, obviously, you don't have first-hand
18 knowledge of that. Correct?

19 A Again, the same thing, is that I
20 know what it's like to build satellites, and
21 I don't have -- I know you needed to build
22 chipsets, so I mean, I do have some knowledge

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1 You answered my question. All right. Any
2 questions from XM?

3 MR. RICH: No, Your Honor.

4 CHIEF JUDGE SLEDGE: Music Choice?

5 MR. FAKLER: No, Your Honor.

6 CHIEF JUDGE SLEDGE: And cross
7 examination?

8 MR. HANDZO: Thank you, Your
9 Honor. Good afternoon, Mr. Karmazin.

10 THE WITNESS: Good afternoon.

11 CROSS EXAMINATION

12 BY MR. HANDZO:

13 Q Mr. Karmazin, I think you said
14 that you joined Sirius in November of 2005.
15 Is that right?

16 A Yes, sir.

17 Q So to the extent that you've
18 testified today, and in your written
19 testimony, about the business decisions
20 involved in creating Sirius, that's not
21 something that you have any first-hand
22 knowledge of. Correct?

1 -- I mean, I think anyone who's in the radio
2 business would know you needed to do that.
3 But, again, I started November 18th, and
4 anything before that, I was not part of making
5 the decision.

6 Q Now in your testimony today, and
7 in your written direct testimony, you voiced
8 some opinions about what the public is or is
9 not willing to pay for. Am I correct, Mr.
10 Karmazin, that Sirius conducts survey research
11 for its own internal business purposes?

12 A I think what I put down in my
13 statements today, and is my opinion based on
14 my 40 years of experience in the radio
15 business. And companies do research, and I'm
16 sure that our company - I know our company has
17 done some research, but what I was referring
18 to was my opinion, not necessarily some poller
19 or researcher.

20 Q Okay. And it's correct, is it
21 not, that you don't generally read the survey
22 research that's produced within Sirius?

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1 A No. I read lots of things that
 2 come across my desk.
 3 Q You don't generally read the
 4 survey research, do you?
 5 A I look at it.
 6 Q You don't read it, do you?
 7 A Tell me what you mean by "read".
 8 If something comes across my desk, I will look
 9 at it, and see if it's something that as the
 10 CEO of the company I should deal with.
 11 Q Okay. Do you recall that I took
 12 your deposition, Mr. Karmazin?
 13 A I did. I do.
 14 Q And do you recall telling me that
 15 you don't generally read the survey research
 16 that comes across your desk?
 17 A I think what you did was --
 18 MR. WYSS: Objection, Your Honor.
 19 Is there a particular page, so I can follow
 20 along?
 21 CHIEF JUDGE SLEDGE: Mr. Handzo?
 22 CHIEF JUDGE SLEDGE: What's the

1 Karmazin, you said you had a conversation with
 2 the Chairman of BMW, didn't you?
 3 MR. WYSS: Withdrawn, Your Honor.
 4 I'm sorry.
 5 THE WITNESS: You're correct.
 6 MR. HANDZO: Okay.
 7 BY MR. HANDZO:
 8 Q And you were told that BMW is
 9 installing in its cars devices that allow
 10 playing of MP3 players.
 11 A Correct.
 12 Q Okay. And you consider that
 13 competition for Sirius. Correct?
 14 A I consider the fact that there are
 15 many ways of listening to music to be
 16 competitive, so I'm not suggesting that you
 17 could say that an MP3 player is a competitor
 18 to a product that we have. I'm saying that
 19 the ability to listen to music, whether you
 20 are listening to music on your cell phone,
 21 whether you are listening to music on your
 22 terrestrial radio, on your HD radio, or any

1 number, Mr. Handzo?
 2 MR. HANDZO: I haven't numbered
 3 it, Your Honor, because I wasn't going to
 4 introduce it into evidence. I'll happily do
 5 that. Mr. Karmazin, since the copy of my
 6 deposition that I was looking at has different
 7 pagination than the one I handed out, I'm
 8 going to come back to that in a second.
 9 BY MR. HANDZO:
 10 Q You testified, Mr. Karmazin, today
 11 about competitors of Sirius, including
 12 Satellite Radio and XM. Do you recall that?
 13 A Yes.
 14 Q Okay. And you mentioned, I think,
 15 that BMW is starting to install in its cars
 16 devices that allow the playing of MP3 players.
 17 Do you recall that?
 18 MR. WYSS: Objection, Your Honor.
 19 I think that's beyond the scope. I don't
 20 think he elicited the words "BMW" from him at
 21 any point during my examination.
 22 MR. HANDZO: Actually, Mr.

1 device, is a competitor to Sirius.
 2 Q Okay. And that would include
 3 playing CDs in your car. Right?
 4 A And that would include playing CDs
 5 in your car. That would include the
 6 telephone, that if, in fact, you're on the
 7 telephone, you're not listening to satellite
 8 radio.
 9 Q In terms of playing music,
 10 competitors in the car would include CDs.
 11 Right? Yes?
 12 MR. WYSS: Objection, Your Honor.
 13 I think he just answered that question.
 14 THE WITNESS: I guess, what I'm --
 15
 16 CHIEF JUDGE SLEDGE: Well, he
 17 started to talk about non-music, so objection
 18 overruled.
 19 THE WITNESS: I guess what I'm
 20 saying is that I look at radio - again, I
 21 mentioned earlier in my testimony that I look
 22 upon our company as satellite radio, and we're

1 in the radio business. And I look upon radio
2 as our principal competitor. But yes, there
3 are other competitors that you have when you -
4 - you can't listen to both things at the same
5 time, so if you're saying that if you're
6 listening to terrestrial radio, if you're
7 listening to terrestrial radio, can you be
8 listening to a CD? Probably not.

9 CHIEF JUDGE SLEDGE: Okay. I'm
10 glad to hear you say that. Often, I hear
11 these young people say they can listen to five
12 things at one time, and I'm always astounded
13 by that.

14 THE WITNESS: We used to do a lot
15 of work, Your Honor, on multi-tasking, and
16 people would tell me that the day has
17 expanded. When I was at MTV, we would have
18 research that would say that you can do video
19 games and watch television, and listen to the
20 radio, and one doesn't take away from the
21 other. I have trouble with one task.

22 BY MR. HANDZO:

1 CHIEF JUDGE SLEDGE: Overruled.

2 BY MR. HANDZO:

3 Q You also consider cell phones that
4 stream content to be a competitor. Right?

5 A Yes.

6 Q Okay. Now, Mr. Karmazin, let me
7 actually, now having found the right page in
8 the deposition, ask you to look at page 99 of
9 your deposition. And looking down, the
10 pagination is a little odd, but towards the
11 bottom.

12 MR. WYSS: Do you have a line
13 number?

14 MR. HANDZO: It's line number 1,
15 but it's the line number 1 at the bottom, not
16 the top. Let me try and straighten out the
17 record here. You see where I'm pointing to?
18 I asked you --

19 A "In the ordinary course"?

20 Q "In the ordinary course", right.

21 I asked you, "In the ordinary course of
22 business, do surveys of this nature cross your

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1 Q And to turn that around, to the
2 extent that you're listening to music on
3 Sirius in the car, you're not listening to a
4 CD in the car.

5 A At that moment in time.

6 Q Okay. And you're not listening to
7 a cassette in the car.

8 A At that moment in time.

9 Q Or a download being played on an
10 MP3 player in a BMW.

11 A Again, in the car. But, again, it
12 gets back to my point, which I couldn't give
13 Your Honor a good answer on discovery, is that
14 my history in the radio business has been that
15 if, in fact, the radio business has encouraged
16 sales of CDs, because people would hear a
17 song, they want to have it, and they want to
18 not have it just in the car, but they want to
19 have it in their home, or they want it
20 whenever, and they would buy a CD.

21 MR. HANDZO: Your Honor, I'd move
22 to strike; beyond the scope of my question.

1 desk"? And you said, "I don't know what you
2 mean 'normal course of business', a study like
3 this, if it was done, would cross my desk."
4 And I then asked you, "In the ordinary course
5 of business, would you expect to have seen
6 this document?" Your answer was, "I would
7 have been sent it. I'm not sure in the
8 ordinary course I would ever read it." Do you
9 recall saying that?

10 A And I think that's exactly how I
11 answered you before, before you brought this
12 out. That's what I said, is that I sometimes
13 do, and sometimes I don't. And show me a
14 specific piece of research, and that kind of
15 research would be something that a CEO of a
16 company, or at least this CEO wouldn't be
17 looking at.

18 Q Okay. What you told me in your
19 deposition, Mr. Karmazin, is that you're not
20 sure in the normal course you would ever read
21 it.

22 MR. WYSS: Objection, Your Honor.

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1 BY MR. HANDZO:
 2 Q Is that right?
 3 MR. WYSS: He is mischaracterizing
 4 the testimony. He was asked, as the witness
 5 just pointed out, about a specific study,
 6 would you have looked at this specific study?
 7 I think he's now trying to ask him a question
 8 which is not what is in here, this is not
 9 proper impeachment, and I object.
 10 CHIEF JUDGE SLEDGE: Mr. Handzo?
 11 MR. HANDZO: Your Honor, I'll move
 12 on to another part of the deposition.
 13 CHIEF JUDGE SLEDGE: All right.
 14 BY MR. HANDZO:
 15 Q Mr. Karmazin, let me ask you to
 16 flip over to page 101.
 17 MR. WYSS: Your Honor, again, I'm
 18 not sure what the rules are here. The normal
 19 way, if you're trying to impeach the witness
 20 with a deposition is you ask a question, you
 21 get the witness' answer. If the answer is
 22 inconsistent with what's in the deposition,

1 something that in the ordinary course of
 2 business would normally be sent to you?" And
 3 your answer was --
 4 MR. WYSS: Can you point --
 5 MR. HANDZO: I'm sorry. It's at
 6 the bottom of page 101.
 7 THE WITNESS: So is that on line
 8 13?
 9 MR. HANDZO: Yes.
 10 THE WITNESS: Okay. I got it.
 11 MR. WYSS: Objection, Your Honor.
 12 I think if we're going to ask him about this
 13 question, it should start on line 3, where the
 14 witness was handed a very specific document,
 15 and asked about that document.
 16 CHIEF JUDGE SLEDGE: There is no
 17 question asked. The objection is not related
 18 to anything. Overruled.
 19 BY MR. HANDZO:
 20 Q Mr. Karmazin, in your deposition I
 21 asked you, "Question: Again, is this something
 22 that in the ordinary course of business, would

1 then you're entitled to confront the witness.
 2 But I don't know why we're saying do you
 3 remember when I asked you this, and do you
 4 remember that. I think that is not a proper
 5 form of examination in this proceeding.
 6 CHIEF JUDGE SLEDGE: Objection
 7 overruled.
 8 MR. WYSS: Could I have the page
 9 again, Your Honor?
 10 MR. HANDZO: On my copy it is 101.
 11 So it depends on which copy you have, it may
 12 be 125.
 13 MR. WYSS: I think there are
 14 multiple page numbers, so it's the deposition?
 15 MR. HANDZO: Page 101 is at the
 16 bottom.
 17 MR. WYSS: At the bottom.
 18 MR. HANDZO: Yes.
 19 MR. WYSS: Okay. Thank you.
 20 BY MR. HANDZO:
 21 Q Mr. Karmazin, I asked you in your
 22 deposition, "Question: Again, is this

1 normally be sent to you?" And your answer was
 2 -
 3 CHIEF JUDGE SLEDGE: The objection
 4 was?
 5 MR. WYSS: Objection, Your Honor.
 6 CHIEF JUDGE SLEDGE: Any response
 7 to his objection?
 8 MR. HANDZO: Your Honor, my
 9 response to the objection is that the witness'
 10 answer in the deposition related generally to
 11 surveys, not to one specifically.
 12 CHIEF JUDGE SLEDGE: Objection
 13 sustained.
 14 BY MR. HANDZO:
 15 Q Mr. Karmazin, let me go back up to
 16 line 3, as your counsel requests. And there
 17 do you see it says - I asked whether we could
 18 mark this as Exhibit 2, please. Do you see
 19 that?
 20 A Yes.
 21 Q And then I asked you, "You can
 22 probably anticipate my questions, Mr.

1 Karmazin. The first one is, have you seen
 2 this before?" Your answer was, "I probably
 3 have, but I certainly don't recall it."
 4 JUDGE ROBERTS: Mr. Handzo, what
 5 was Exhibit 2?
 6 MR. HANDZO: That was a survey,
 7 Your Honor.
 8 JUDGE ROBERTS: A survey of what?
 9 You don't need to give it to me. You just
 10 need to tell me what the survey was.
 11 MR. HANDZO: Your Honor, it was a
 12 Sirius Satellite Radio customer satisfaction
 13 monitor, second quarter '06 results.
 14 JUDGE ROBERTS: Thank you.
 15 BY MR. HANDZO:
 16 Q Mr. Karmazin, you see I asked you
 17 whether you'd seen that before, and your
 18 answer was, "I probably have, but I certainly
 19 don't recall it." My next question was,
 20 "Again, is this something in the ordinary
 21 course of business that would normally be sent
 22 to you?" And your answer was, "If there was

1 wouldn't read it.
 2 A Probably.
 3 Q Okay. Mr. Karmazin, you were
 4 asked some questions, and in your written
 5 testimony you talked a little bit about Howard
 6 Stern. Now Sirius was, certainly, losing
 7 money when it signed Howard Stern in 2005. Is
 8 that right?
 9 A Yes. Excuse me. We signed Howard
 10 Stern in 2004.
 11 Q Fair enough. And it's your
 12 belief, is it not, that Howard Stern has been
 13 responsible for generating significant revenue
 14 for Sirius.
 15 A It is my belief that Howard Stern
 16 has generated significant subscribers, but as
 17 I told you before, I can't quantify it for
 18 you.
 19 Q And since you can't quantify for
 20 me the number of subscribers, you couldn't
 21 tell me how much Howard Stern's, payments to
 22 Howard Stern works out to in terms of a

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1 some research about consumer satisfaction, I'm
 2 sure I would be on the distribution list, but
 3 it wouldn't be something I would look at."
 4 Right?
 5 A Yes, I read that, I see that.
 6 Q Okay. So your answer to me was,
 7 ordinarily, if there's research on consumer
 8 satisfaction, you wouldn't look at it. Right?
 9 A That's what it says. Okay? And I
 10 guess, my point of view of the word "look" and
 11 "read", I'm not sure of the interpretation.
 12 If it got to my desk, I would need to look at
 13 it to know that I wasn't even going to read
 14 it. But the idea - it's hard to sit there and
 15 say something hits my desk, and I didn't look
 16 at it.
 17 Q Fine.
 18 A You understand? I'm not trying to
 19 play semantics, I'm just trying to be as
 20 honest about answering the question.
 21 Q And what you're telling me is you
 22 would look at the survey research, but you

1 percentage of revenue that Sirius has gotten
 2 from hiring Stern, can you?
 3 A Correct.
 4 Q But Sirius paid Mr. Stern what it
 5 believed the market required. Right?
 6 A Yes.
 7 Q And it was willing -- and that was
 8 a lot of money. Right?
 9 A Tremendous amount of money.
 10 Q And it was willing to do that, it
 11 was willing to pay a lot of money at a time
 12 when it was losing money because it thought it
 13 was a worthwhile investment in the future.
 14 Right?
 15 A Yes.
 16 Q And by the way, you were asked
 17 some questions at the outset of your oral
 18 testimony about the payments to Howard Stern's
 19 manager. Do you recall that?
 20 A Yes.
 21 Q I take it what you were saying
 22 there is, you don't disagree with the amount

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1 that was represented on that chart as being
2 paid to Stern's manager. You're just making
3 the point that that was negotiated in the same
4 contract as the payment to Stern?

5 A Yes.

6 CHIEF JUDGE SLEDGE: No, sir.
7 That's not correct. He said the amount paid
8 to Stern was by a separate contract between
9 Stern and his manager, and that that was
10 simply reflected - it wasn't negotiated with
11 Sirius.

12 MR. HANDZO: Let me see if I can
13 clear that up, Your Honor.

14 BY MR. HANDZO:

15 Q Mr. Karmazin, it's correct, is it
16 not, that the contract with Mr. Stern actually
17 makes a provision in that contract for
18 payments to Mr. Stern's manager?

19 A Yes.

20 Q And it provides in that contract
21 that Mr. Stern's manager gets 10 percent of
22 what gets paid to Mr. Stern.

1 for the purpose of identifying those
2 synergies, and the years in which those
3 synergies would be gotten. So I'm just not
4 able to tell you that -- I believe there are
5 substantial synergies, but I cannot tell you
6 how much, and in what years.

7 Q Well, recognizing that you haven't
8 been able to talk to XM about it, it is your
9 personal view that some of those cost-savings
10 will occur in the first year after the
11 consummation. Isn't that right?

12 A I believe that there should be
13 some savings in the first year. Yes, sir.

14 (Whereupon, SX Exhibit
15 No. 22 was marked for
16 identification.)

17 BY MR. HANDZO:

18 Q Mr. Karmazin, I'm going to show
19 you what we've marked as SoundExchange Exhibit
20 22. Mr. Karmazin, have you had a chance to
21 look at Exhibit 22?

22 A I have.

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1 A Yes.

2 Q And that was what Sirius agreed
3 to.

4 A Yes.

5 Q Mr. Karmazin, I'm correct, am I
6 not, that Sirius and XM have proposed to
7 merge?

8 A Yes.

9 Q And Sirius and XM expect
10 substantial cost-savings to be realized should
11 that merger be approved.

12 A Yes.

13 Q And you expect that some of those
14 cost-savings would occur during the first year
15 after the merger is consummated. Is that
16 right?

17 A I'm not really in a position of
18 being able to comment on that. We have not,
19 based on anti-trust lawyers, been able to talk
20 with XM about the synergies, because that
21 would give us information about each other's
22 company, so a third-party has been retained

1 Q And is that your signature on the
2 first page?

3 A Yes.

4 Q And is this a true and accurate
5 copy of Sirius' contract with Fox News?

6 A I'm not a lawyer, but you're
7 asking me about the contract, and the contract
8 that you've given me is unsigned by Sirius, so
9 I can't tell you whether or not this is the
10 contract.

11 Q Okay. But that is your signature
12 on the front with the contract approval
13 signatures?

14 A Correct.

15 Q And it appears that all of the
16 contract approval signatures are there?

17 A Yes.

18 Q Okay. And Fox News signed it?

19 A I'm sorry?

20 Q And Fox News signed that contract?

21 A Well, no, no. Again, you're
22 relating two different things. You asked me

349

351

1 about a contract approval form that Fox has
2 not signed, and then you're asking me about an
3 attached contract that Sirius hasn't signed.

4 Q Well, actually, Mr. Karmazin, if
5 you look at the last page of this document, do
6 you see a signature by Fox News
7 representative?

8 A Yes.

9 Q Okay. And if you look at the
10 second to last page, do you see a signature by
11 Sirius?

12 A I'm sorry to cause the confusion,
13 but now - yes, that is the correct contract.

14 Q Okay. So this is a contract with
15 Fox.

16 A Yes.

17 MR. HANDZO: Okay. Your Honor,
18 I'd move the admission of SoundExchange
19 Exhibit 22.

20 CHIEF JUDGE SLEDGE: Any objection
21 to Exhibit 22?

22 MR. WYSS: No objection, Your

1 Honor.

2 CHIEF JUDGE SLEDGE: Without
3 objection, the motion is granted.

4 MR. HANDZO: Your Honor, before
5 everybody leaves the room, I wasn't actually
6 going to -- I want to get the document into
7 evidence. I wasn't actually going to ask
8 questions about it, that would require
9 everyone to leave. May I proceed, Your Honor?

10 (Whereupon, SX Exhibit
11 No. 23 was marked for
12 identification.)

13 BY MR. HANDZO:

14 Q Mr. Karmazin, I'm going to show
15 you what we've marked as SoundExchange Exhibit
16 23. Mr. Karmazin, is that your signature on
17 the first page?

18 A It's my authority, yes.

19 Q Okay. So it's signed under your
20 authority?

21 A Yes.

22 Q Okay. And is this the agreement

1 Honor. However, we would --

2 CHIEF JUDGE SLEDGE: Without
3 objection, the exhibit is admitted.

4 (Whereupon, SX Exhibit
5 No. 22 was admitted.)

6 MR. WYSS: Your Honor, we would
7 move for protection under the confidentiality
8 order for this contract. It is a highly
9 competitive, sensitive document that will be
10 of serious concern to the company if it were
11 made available to our competitors.

12 Your Honor, if I could amplify
13 that, as well. There is a specific
14 confidentiality provision, which requires us
15 to keep the information in this confidential
16 on behalf of the other party. And, of course,
17 what we pay, how we pay, all that sort of
18 stuff would tell our competitor exactly what
19 they would need to know to bid against us.

20 CHIEF JUDGE SLEDGE: Any
21 objection?

22 MR. HANDZO: No objection, Your

1 between Sirius and NASCAR?

2 A It appears to be. Yes, sir.

3 MR. HANDZO: Your Honor, I'd move
4 the admission of SoundExchange Exhibit 23?

5 CHIEF JUDGE SLEDGE: Any
6 objection?

7 MR. WYSS: No objection, Your
8 Honor. At this point, however, we would move
9 for treatment of this exhibit under the
10 confidentiality order based on the same
11 reasons I gave before, plus one I neglected to
12 give, which the information in here not only
13 would be useful to our competitor, but it
14 would be useful to other program suppliers who
15 want to know how much we're paying, and what
16 the terms are, so they can try to use them
17 against us in future negotiations.

18 CHIEF JUDGE SLEDGE: Any objection
19 to the motion to apply the protective order?

20 MR. HANDZO: No, Your Honor.

21 CHIEF JUDGE SLEDGE: Without
22 objection, the motion is granted. Mr. Wyss,

1 I can understand your applying the protective
2 order, though for 15 years I held court in
3 Taladega, Alabama. I'm impressed by these
4 figures.

(Laughter.)

6 MR. WYSS: Your Honor, I
7 apologize. I think I jumped up and made my
8 motion before you actually ruled on the
9 admission of the exhibit, so to have a clear
10 record, I apologize for that.

11 CHIEF JUDGE SLEDGE: Thank you.
12 And I didn't keep up with that. Exhibit 23 is
13 admitted.

(Whereupon, SX Exhibit
14 No. 23 was admitted.)

16 MR. HANDZO: Thank you, Your
17 Honor.

(Whereupon, SX Exhibit
18 No. 24 was marked for
19 identification.)

21 BY MR. HANDZO:

22 Q Mr. Karmazin, I'm going to show

1 same grounds that we gave before.

2 CHIEF JUDGE SLEDGE: Mr. Handzo, I
3 don't see the term of this agreement is.
4 Where is that?

5 MR. HANDZO: Your Honor, I'm not
6 sure I can find it, but let me just ask the
7 witness.

8 BY MR. HANDZO:

9 Q Mr. Karmazin, is this the current
10 agreement, currently in effect?

11 A I don't know.

12 Q Has there been more than one
13 agreement signed since you've been at Sirius?

14 A Possibly, could be.

15 Q Have you signed more than one
16 agreement?

17 A I think -- again, I believe there
18 could be a new one.

19 CHIEF JUDGE SLEDGE: Mr. Wyss, do
20 you know the answer to my question?

21 MR. WYSS: I don't know. I can
22 refer to the first page, reflects that this --

1 you what we've marked as SoundExchange Trial
2 Exhibit 24. You can probably anticipate my
3 next question. Is that your signature on the
4 contract approval form?

5 A Yes, sir.

6 Q And is this the agreement between
7 Sirius and the NBA?

8 A Let me just get the -- yes, sir.

9 MR. HANDZO: Okay. Your Honor, I
10 move the admission of SoundExchange Trial
11 Exhibit 24.

12 CHIEF JUDGE SLEDGE: Any objection
13 to Exhibit 24?

14 MR. WYSS: No objection, Your
15 Honor.

16 CHIEF JUDGE SLEDGE: Without
17 objection, Exhibit 24 is admitted.

(Whereupon, SX Exhibit
18 No. 24 was admitted.)

20 MR. WYSS: Your Honor, I would
21 move that Exhibit 24 be treated subject to the
22 Court's confidentiality protections on the

1 the first page of the text of the agreement
2 refers this as first amendment to the
3 NBA/Sirius Satellite Radio agreement, so there
4 should be another document, for completeness,
5 there clearly should be another document that
6 would put this one in context.

7 CHIEF JUDGE SLEDGE: So we don't
8 know if this term is still applicable today,
9 based on this document.

10 MR. HANDZO: Your Honor, I would
11 just note, this is not in the contract itself
12 being the contract summary. On the first page
13 --

14 CHIEF JUDGE SLEDGE: That's not
15 part of the contract.

16 MR. HANDZO: That is correct.
17 Actually, Your Honor, I apologize. Your
18 Honor, there's one other thing I would note,
19 is on the first page of the contract itself,
20 it says that the effective date is through the
21 conclusion of the 2007 NBA Finals, and I
22 believe Cleveland and San Antonio have yet to

1 determine the conclusion of the NBA Finals.
 2 JUDGE WISNIEWSKI: Some would say
 3 that, some would not.
 4 (Laughter.)
 5 CHIEF JUDGE SLEDGE: Where is
 6 that?
 7 MR. HANDZO: Your Honor, it's on
 8 the first page, paragraph A-1(a).
 9 CHIEF JUDGE SLEDGE: On the first
 10 page, you've got A-1, there's no subparagraph
 11 under it.
 12 MR. HANDZO: For some reason, Your
 13 Honor, the copy I'm looking at, and I think
 14 the copy the witness is looking at, appears to
 15 be different from the one you have, and I
 16 apologize. I don't know why that is you were
 17 supplied a different copy.
 18 CHIEF JUDGE SLEDGE: This is
 19 marked 25, not 24.
 20 MR. WYSS: Could we get a copy of
 21 25?
 22 JUDGE ROBERTS: I think 24 is the

1 24?
 2 A Yes.
 3 Q Okay. Let me also hand you Trial
 4 Exhibit 25, just so we get the record straight
 5 here.
 6 JUDGE ROBERTS: Considering that
 7 24 has been admitted, I'd really like to have
 8 it back.
 9 (Laughter.)
 10 BY MR. HANDZO:
 11 Q Mr. Karmazin, is that your
 12 signature on Exhibit 25?
 13 A Yes.
 14 Q Okay. And does it appear to you
 15 that Exhibit 25 is the Second Amendment to the
 16 NBA agreement?
 17 A Yes.
 18 Q Okay. And does that appear to you
 19 that 24 and 25 together are still in effect?
 20 A What I don't know is whether
 21 there's a third amendment. So I have no
 22 reason, in looking at the date, I can't recall

1 first amendment?
 2 MR. HANDZO: That appears to be
 3 correct, Your Honor.
 4 CHIEF JUDGE SLEDGE: I didn't end
 5 up with 24 with that exchange. Do you also do
 6 peas under a shell?
 7 (Laughter.)
 8 COURT REPORTER: Your Honor, is
 9 there now a 24 and 25?
 10 CHIEF JUDGE SLEDGE: No, sir.
 11 There's just 24. And we still do not have any
 12 information that the 24 term makes it
 13 applicable today. Is that correct? Mr. Wyss?
 14 MR. WYSS: Could we get a copy of
 15 25, because it may help us understand exactly
 16 what's going on.
 17 (Whereupon, SX Exhibit
 18 No. 25 was marked for
 19 identification.)
 20 BY MR. HANDZO:
 21 Q Mr. Karmazin, let me just make
 22 sure that I've given you - do you have Exhibit

1 one, but I just can't tell you that there
 2 hasn't been a third amendment.
 3 Q Okay. But looking at 25, and this
 4 is how I started all of the confusion, you
 5 would agree with me that Exhibit 25 indicates
 6 that it's in force through the conclusion of
 7 the 2007 NBA Finals?
 8 A That's what it says.
 9 Q Which have not yet concluded?
 10 A Yes.
 11 Q Okay. So that agreement is still
 12 in force, unless there was some third
 13 amendment. But you don't know there is one.
 14 A Correct.
 15 Q Okay.
 16 CHIEF JUDGE SLEDGE: We don't have
 17 a 25.
 18 JUDGE ROBERTS: I do.
 19 CHIEF JUDGE SLEDGE: You've got
 20 25?
 21 (Laughter.)
 22 MR. HANDZO: Your Honor, I move

1 the admission of SoundExchange Trial Exhibit
2 25.
3 CHIEF JUDGE SLEDGE: I have a
4 motion pending that I haven't ruled on because
5 I can't determine --
6 MR. HANDZO: My apologies.
7 CHIEF JUDGE SLEDGE: -- if it's a
8 current contract.
9 MR. WYSS: Your Honor, the only
10 thing I can --
11 CHIEF JUDGE SLEDGE: If 25 is
12 established to be current, how can I determine
13 that 24 is current?
14 MR. WYSS: 24 has on its front,
15 Your Honor, a contract end date --
16 CHIEF JUDGE SLEDGE: That's not
17 part of the contract.
18 MR. WYSS: -- of 2008. Maybe the
19 witness can shed some light on that.
20 CHIEF JUDGE SLEDGE: Mr. Handzo, I
21 think the best solution is to move the clock
22 forward four minutes, and recess for the day.

1 And, hopefully, by tomorrow counsel will be
2 able to establish whether this is a current
3 contract, so that I can rule on the pending
4 motion on whether to apply the protective
5 order to 24.
6 MR. HANDZO: Very well, Your
7 Honor, and I apologize for the confusion.
8 CHIEF JUDGE SLEDGE: We'll recess
9 until 8:30 in the morning. I'm sorry, 9:30.
10 (Whereupon, the proceedings went
11 off the record at 4:56:24 p.m.)
12
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21

Before the
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APPEARANCES: (CONT.)
On Behalf of Music Choice
PAUL M. FAKLER, ESQ
Moses & Singer LLP
406 Lexington Avenue
New York, New York 10174-1299
(212) 554-7800
pfakler@mosessinger.com

In the matter of:)
)
Adjustment of Rates and Terms)
for Preexisting Subscriptions) Docket No.
Services,) 2006-1
and) CRB DSTR
Satellite Digital Audio Radio)
Services)
)

Room LM-408
Library of Congress
First and Independence
Avenue, S.E.
Washington, D.C. 20540
Thursday,
June 7, 2007

The above-entitled matter came on for hearing,
pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES
On Behalf of SoundExchange
DAVID A. HANDZO, ESQ
MICHAEL B. DeSANCTIS, ESQ
JARED O. FREEDMAN, ESQ
THOMAS J. PERRELLI, ESQ
MARK D. SCHNEIDER, ESQ
Jenner & Block
601 Thirteenth Street, N.W.
Suite 1200 South
Washington, D.C. 20005
(202) 639-6060
dhandzo@jenner.com
On Behalf of XM Satellite Radio Inc.
BRUCE RICH, ESQ
JONATHAN BLOOM, ESQ
TODD LARSON, ESQ
BRUCE S. MEYER, ESQ
RALPH MILLER, ESQ
Weil Gotshal & Manges
567 5th Avenue
New York, New York 10016
(212) 310-8238
On Behalf of Sirius Satellite Radio Inc.
BRUCE G. JOSEPH, ESQ
KARYN K. ABLIN, ESQ
MATT J. ASTLE, ESQ
JENNIFER L. ELGIN, ESQ
THOMAS W. KIRBY, ESQ
MICHAEL L. STURM, ESQ
JOHN WYSS, ESQ
Wiley Rein
1776 K Street, N.W.
Washington, D.C. 20006
(202) 719-7528
bjoseph@wileyrein.com

WITNESS	DIR	CROSS	REDIR	RECCROSS
Mel Karmazin				
By Mr. Wyss			29	
Terrence Smith				
By Mr. Kirby	36		130	
By Mr. DeSanctis		90		
Doug Wilsterman				
By Mr. Sturm	143			
Jeremy Coleman				
By Mr. Sturm	197		285	
By Mr. DeSanctis	226		305	
Steve Cohen				
By Ms. Elgin	333			
EXHIBIT NO.	DESCRIPTION	MARK	RECD	
24	Sirius contract with NBA			withdrawn
26	Sirius contract with NBA with 2 Amendments	6	8	
27	Sirius contract with 112 (Stern)	9	10	
28	5/1/07 Sirius Earnings Guidance	14	15	
29	12/08/04 email Ryan to Karmazin	23	26	
30	Satellite Orbit		90	
31	Satellite Update Report		103	108
32	Martha Stewart Agreement		227	230
33	Fox News Study		243	244
34	June 2006 Sirius Satellite Radio Listener Study		251	253
35	August 2006 Customer Satisfaction Survey			262
Sirius				
32	Written testimony of T. Smith	39	40	
33	August 2005 Sirius News Channel Evaluation	144	144	
34	June 2006 Sirius Satellite Radio Listener Study	199	199	

1 request confidential treatment.
2 CHIEF JUDGE SLEDGE: Any objection
3 to applying the protective order on this
4 exhibit?

5 MR. HANDZO: No, Your Honor.

6 CHIEF JUDGE SLEDGE: Without
7 objection, the motion is granted.

8 BY MR. HANDZO:

9 Q Mr. Karmazin, I'm going to show
10 you next what was marked as Sound Exchange
11 Trial Exhibit No. 27.

12 (Document handed to witness)

13 (Whereupon the aforementioned
14 document was marked Exhibit No. SX
15 27 for identification)

16 MR. HANDZO: Have you had a chance
17 to look at that document?

18 WITNESS: Yes, I have.

19 BY MR. HANDZO:

20 Q And is that the agreement
21 currently in effect between Sirius and Howard
22 Stern?

1 MR. WYSS: Your Honor, at this time
2 we would move for confidential treatment of
3 this exhibit based on the same grounds
4 advanced previously.

5 CHIEF JUDGE SLEDGE: When does it
6 expire?

7 MR. WYSS: 2010, Your Honor.

8 MR. HANDZO: Your Honors, for the
9 record, at page eight you will see a term
10 provision. And that shows a start date, which
11 is January 1, 2006, and then the term says
12 five years from the show start date.

13 CHIEF JUDGE SLEDGE: Any objection
14 to the motion?

15 MR. HANDZO: No, Your Honor.

16 CHIEF JUDGE SLEDGE: Without
17 objection the motion is granted.

18 MR. WYSS: Thank you, Your Honor.

19 BY MR. HANDZO:

20 Q Mr. Karmazin, let me ask you to
21 just turn back to page five of Exhibit 27.

22 And do you see there a provision

1 A 112, which is the company that
2 provides Howard Stern's services.

3 Q Is it through the agreement with
4 112 that Sirius obtains Howard Stern
5 programming, right?

6 A Yes.

7 Q And I'm sorry, you may have stated
8 this, but this is currently in effect?

9 A Yes.

10 MR. HANDZO: Your Honor, I'd move
11 the admission of Sound Exhibit Trial Exhibit
12 No. 27.

13 CHIEF JUDGE SLEDGE: Any objection
14 to the offer of Exhibit 27?

15 MR. WYSS: No objection, Your
16 Honor.

17 CHIEF JUDGE SLEDGE: Without
18 objection, the exhibit is admitted.

19 (Whereupon the aforementioned
20 document previously marked Exhibit
21 No. SX 27 for identification was
22 admitted into evidence)

1 which is headed, consent and fee?

2 A Yes, sir.

3 Q And that talks about a payment to
4 be made by Sirius to Don Buchwald?

5 A Yes.

6 Q Don Buchwald is Howard Stern's
7 agent; is that right?

8 A Yes.

9 Q And to your knowledge, Mr.
10 Karmazin, Mr. Buchwald does not provide any
11 consulting services to Sirius other than
12 whatever help he provides in dealing with
13 Howard Stern; is that right?

14 A I believe that the consulting is
15 related to the Howard Stern channels.

16 Q Mr. Karmazin, I showed you
17 yesterday, I believe, an agreement that
18 represented the agreement between Sirius and
19 Fox News; do you recall that?

20 A Yes.

21 Q Sirius' agreement with Fox News is
22 not an exclusive agreement, correct?

1 A Correct.

2 Q Others can carry Fox News?

3 A Yes.

4 Q Including XM?

5 A Yes.

6 Q And XM actually does carry Fox
7 News, correct?

8 A Yes.

9 Q Now, yesterday Mr. Karmazin in
10 direct examination I think you were asked to
11 update various numbers from your written
12 testimony. And if I recall correctly you said
13 yesterday that Sirius had withdrawn its
14 guidance for the future; is that correct?

15 A We withdrew some guidance for the
16 future.

17 Q And which guidance did you
18 withdraw?

19 A Our free cash flow.

20 Q I just wanted to be clear on
21 what's been withdrawn and not. So let me show
22 you what has been marked as Trial Exhibit No.

13

1 28.

2 (Whereupon the aforementioned
3 document was marked for
4 identification as Exhibit No. SX
5 28)

6 BY MR. HANDZO:

7 Q Mr. Karmazin, is it correct that
8 you participated in an earnings call on May 1,
9 2007?

10 A Correct.

11 Q And that was with a number of Wall
12 Street analysts?

13 A Well, it was our earnings call,
14 and everybody is allowed to listen in,
15 including analysts.

16 Q And the purpose of that earnings
17 call was to discuss Sirius' first quarter,
18 2007, financial and operating results?

19 A Yes.

20 Q This is a transcript of that call?

21 A Appears to be.

22 Q And it is customary to transcribe

14

1 those calls, correct?

2 A Yes.

3 MR. HANDZO: Your Honor, I would
4 move the admission of Exhibit No. 28.

5 CHIEF JUDGE SLEDGE: Any objection
6 to Exhibit No. 28?

7 MR. WYSS: Your Honor, is there
8 some - I don't know whether relevancy, we are
9 entitled to ask for some proffer as to what it
10 goes to? In terms of how it relates to the
11 issues in this proceeding?

12 I mean it is a public document.
13 It certainly is there. I just didn't know
14 whether there was any relevance to our issues
15 here.

16 CHIEF JUDGE SLEDGE: Mr. Wyss, is
17 there no objection?

18 MR. WYSS: No objection, Your
19 Honor.

20 CHIEF JUDGE SLEDGE: Without
21 objection, the exhibit is admitted.
22 (Whereupon the aforementioned

15

1 document previously marked Exhibit
2 No. SX 28 for identification was
3 received into evidence)

4 MR. HANDZO: Thank you.

5 BY MR. HANDZO:

6 Q Mr. Karmazin, let me ask you to
7 turn to page seven of this document. And do
8 you see that you are quoted about two-thirds
9 of the way down the page?

10 A Yes.

11 CHIEF JUDGE SLEDGE: Where are the
12 page numbers?

13 MR. HANDZO: Your Honor, the page
14 number is this kind of grayed out box at the
15 bottom right. A little hard to see.

16 BY MR. HANDZO:

17 Q Now is it correct, Mr. Karmazin,
18 that the guidance you were giving there was
19 that you were reaffirming the guidance that
20 the number of subscribers at your end, 2007,
21 would be over 8 million?

22 A Correct.

16

1 Q Let me ask you to turn a few pages
2 more to page nine. And I'm going to direct
3 your attention first to a question from a
4 Robert Peck from Bear Stearns. You see the
5 part of Mr. Peck's question was, whether you
6 would reiterate your guidance for 2010 of \$3
7 billion of revenue and \$1 billion of free cash
8 flow.

9 Do you see that?

10 A Yes.

11 Q And do you see, a little further
12 down the page, that you respond to that?

13 A Yes.

14 Q And at the end of that response
15 you say, quote, I think the only guidance that
16 we are going to give is the guidance that we
17 have given you, but I can tell you that
18 fundamentally my viewpoint is that nothing has
19 changed from my outlook on how I see the
20 company longer term; you see that?

21 A Yes.

22 Q So you were not there withdrawing

1 it even though he asked about 2010 revenue and
2 cash flow, you were only talking about
3 guidance with respect to 2007 subscribers?

4 A Yes.

5 Q Where in that response do you say
6 that you are only talking about guidance for
7 2007?

8 A It doesn't say. Reiterated the
9 guidance that I gave, and it was very clear
10 what guidance I had given. And then I made a
11 statement that said I still felt, or whatever
12 it was, nothing has changed about my outlook
13 about the fundamentals. That doesn't mean
14 nothing has changed about a specific guidance.

15 Q Sirius had previously given
16 guidance on 2010 revenue and fees and cash
17 flow, right?

18 A At one point we gave a number out
19 that we believe that we would in 2010 have
20 certain performance.

21 Q And in fact if you go back and
22 look at the question Mr. Peck asked, he said,

1 your guidance, were you?

2 A Which guidance?

3 Q The guidance that Mr. Peck asked
4 about with respect to \$3 billion in revenue
5 and \$1 billion in free cash flow in 2010?

6 A I did not affirm that guidance.
7 If you read that, that does not say that.

8 Q Well, you confused me a little
9 bit, Mr. Karmazin.

10 What you say here is, I think the
11 only guidance we are going to give is the
12 guidance we have given you. That's a correct

13 -

14 A That's correct, and that's the 8
15 million subscribers.

16 Q And you are saying that you made
17 that statement in response to a question by
18 Mr. Peck when he was asking you about 2010
19 guidance with respect to revenue and cash
20 flow?

21 A That's correct.

22 Q And you expected him to understand

1 do you reiterate your guidance for 2010; do
2 you see that?

3 A Sir, I see the question. I think
4 I answered what I answered was not reiterating
5 2010 guidance. There is nothing here that
6 says that, and certainly that was not my
7 intent, and I did not reiterate that guidance.

8 And if we did reiterate that
9 guidance, sir, we would have probably had to
10 file a 8K with the SEC. At that time.

11 Q But you also said at the end of
12 that paragraph that, quote, nothing has
13 changed in my outlook on how I see the company
14 longer term.

15 A Yes.

16 Q Was that a correct statement?
17 (No audible response)

18 While I'm on this page, Mr.
19 Karmazin, you will see that in that same
20 response you discuss NASCAR.

21 A Yes.

22 Q And you say unlike a Howard, where

1 he started on January 9, everybody was signing
2 up on that day, in the case of NASCAR we think
3 we're going to see that growth go throughout
4 the year. Do you see that quote?

5 A Yes.

6 Q Now Howard in that case refers to
7 Howard Stern?

8 A Yes.

9 Q And signing up refers to signing
10 up subscribers; right?

11 A Yes.

12 Q And is it correct that what you
13 were saying there is that you expected to get
14 new subscribers as a result of NASCAR through
15 the year, whereas with Stern most of the
16 subscribers came around the time that he
17 started?

18 A No.

19 Q That's not what you are saying
20 there?

21 A No.

22 Q Howard Stern's show actually began

1 A Yes.

2 Q It is true that the more cars that
3 had Sirius receivers installed in them as
4 standard equipment, the more likely Sirius is
5 to increase its subscribers?

6 A It's one of the factors.

7 Q And that's a fairly important
8 factor?

9 A It's a factor.

10 Q Mr. Karmazin, I'm going to show
11 you what we've marked as Sound Exhibit Trial
12 Exhibit No. 29.

13 (Whereupon the aforementioned
14 document was marked for
15 identification as Exhibit No. SX
16 29)

17 BY MR. HANDZO:

18 Q Have you had a chance to look at
19 that, Mr. Karmazin?

20 A Yes, sir.

21 Q And this is an email to you from a
22 Mary Pat Ryan; is that right?

21

23

1 to air in January of 2006, is that correct?

2 A Yes.

3 Q Let me ask you, Mr. Karmazin, to
4 go back to page two. And Mr. Karmazin, you
5 say at the beginning there that 2007 is off to
6 a great start, and quote, we are well on our
7 way to meeting our 2007 outlook for more than
8 8 million subscribers at the end of the year,
9 end quote.

10 Is that still an accurate
11 representation?

12 A Yes, sir.

13 Q Now, in the third paragraph on
14 this same page, you talk about some automakers
15 - Lincoln, Mitsubishi, Audi, Land Rover, and
16 many making serious standard on additional
17 models. Do you see that?

18 A Yes.

19 Q And then in the next paragraph you
20 give some figures for the percentages of the
21 vehicles produced by your OEM partners, that
22 include Sirius receivers?

1 A Yes, sir.

2 Q Who is Ms. Ryan?

3 A She is no longer with the company,
4 but she was an executive at that time in the
5 area of marketing and promotion.

6 Q Do you know what her title was at
7 that time?

8 A I'm sorry, I don't.

9 Q And just for the record, that time
10 was December 8th, 2004?

11 A Yes.

12 Q That's the date of this email?

13 A Yes.

14 Q Now if you look at the next page,
15 do you see an email from you to Ms. Ryan?

16 A No. From me?

17 Q Yes.

18 A Oh, I'm sorry. I see that.

19 Q So you were sending an email to
20 Ms. Ryan and Mr. Wilsterman?

21 A Yes.

22 Q And you asked them for information

22

24

1 about the impact of having and promoting the
2 NFL on adding subscribers?

3 A That's what it says.

4 Q And the first email on the first
5 page is Ms. Ryan's response to that question,
6 right?

7 A It appears to be.

8 MR. HANDZO: Your Honor, I'd move
9 the admission of Sound Exhibit Trial Exhibit
10 No. 29.

11 CHIEF JUDGE SLEDGE: Any objection
12 to Exhibit No. 29?

13 MR. WYSS: Now objection, Your
14 Honor.

15 Could I have just one moment to
16 check for confidentiality concerns, Your
17 Honor?

18 (Pause)

19 MR. WYSS: Your Honor, could I ask
20 the witness whether or not - his familiarity
21 with the document, whether there is anything
22 that he considers in it to be competitively

1 A Can you just direct me to that?

2 Q Sure, it's -

3 A Page two, still?

4 Q No, I'm sorry. It's the first
5 page.

6 A So it's a question I'm on?

7 Q It's Ms. Ryan's response to you on
8 the first page.

9 A This memo on the first page is not
10 a response to me. Not a response to my memo,
11 the direct memo here.

12 Q Well, let me ask you, Mr.

13 Karmazin, let's go back to the second page.
14 Your email to Ms. Ryan and Mr. Wilsterman is
15 December 8, 2004, at 9:38 a.m., correct?

16 A Yes.

17 Q And then Ms. Ryan then sends an
18 email to you - that's the first page, right?

19 A Got it.

20 Q And that's December 8th, 2004,
21 later in the day?

22 A Right.

1 sensitive, that would cause him problems
2 should it be disclosed either to a direct
3 competitor or to other program suppliers.

4 WITNESS: Yes. I don't think so.
5 I do not.

6 CHIEF JUDGE SLEDGE: Without
7 objection the exhibit is admitted.

8 (Whereupon the aforementioned
9 document previously marked Exhibit
10 No. SX 29 for identification was
11 received into evidence)

12 BY MR. HANDZO:

13 Q Now, Mr. Karmazin, in this email
14 Ms. Ryan was replying to you in response to
15 your question. And I'll direct your attention
16 to the fourth paragraph of her response.

17 She was telling you, the
18 quantitative research of people exiting Best
19 Buy stores showed that the primary reason for
20 considering and buying satellite radio was
21 variety of music, commercial free music, and
22 receiver features; correct?

1 Q So you understand this to be a
2 response by Ms. Ryan to your question,
3 correct?

4 A I don't recall the memo, but the
5 timing looks to be that way. Maybe I can read
6 the whole thing and then answer that question.

7 (Witness reviews document)

8 WITNESS: Okay.

9 BY MR. HANDZO:

10 Q It appears to you, does it not,
11 that she was responding to your question?

12 A It appears that way.

13 Q And in the fourth paragraph of her
14 response, she indicated to you that the
15 primary reason according to research that
16 people were considering and buying satellite
17 radio was the variety of music, commercial
18 free music, and receiver features; correct?

19 A It says that, and then it says, in
20 paragraph five, that the share went up during
21 our big NFL purchase. So the memo says a lot
22 of things.

1 Q And that is your share of the
2 market versus XM, correct?
3 A Correct.
4 MR. HANDZO: Thank you, that's all
5 I have, Mr. Karmazin.
6 CHIEF JUDGE SLEDGE: Mr. Wyss, any
7 redirect?
8 MR. WYSS: Very brief, Your Honor.
9 CHIEF JUDGE SLEDGE: All right,
10 please.
11 REDIRECT EXAMINATION
12 BY MR. WYSS:
13 Q Mr. Karmazin, referring to Sound
14 Exchange Exhibit No. 28, that's the transcript
15 of your earnings call, on page nine, you were
16 asked questions about what you were saying
17 about NASCAR adding subscribers and Howard
18 Stern people adding subscribers, I believe all
19 at the same time. And I believe your answer
20 is that no, that's not what I'm saying.
21 Do you recall that?
22 A Yes.

1 whether you should buy satellite radio, I
2 believe Howard Stern will continue to
3 contribute toward us.
4 It wasn't that we just got the
5 contribution the day we started. People may
6 not have been interested in buying satellite
7 radio, even though they may have liked Howard
8 Stern. And a year later they were convinced.
9 So I wasn't saying that Howard
10 only got us subscribers the day we started,
11 and that NASCAR will only get us subscribers
12 this year.
13 I believe that as we become more
14 and more ingrained in the NASCAR arena, not in
15 the arena, but in that business, that we will
16 continue to get subscribers from NASCAR.
17 Q Just one other question.
18 Yesterday you were asked about the merger, the
19 announced merger, potential merger between XM
20 and Sirius, and you were asked questions about
21 the potential financial benefits that might
22 accrue if that merger goes through; do you

29

31

1 Q What are you saying here, just so
2 we're clear to the court?
3 A What I'm saying is the fact that
4 Howard Stern started his show on January 9th.
5 So we saw a surge of people subscribing from
6 the time it was announced, all the way through
7 the following year. So we saw a surge in `04,
8 we saw more in `05, but right before he
9 started there were a huge amount of people who
10 went out and bought the product. We were out
11 of sale. We just sold out of all the product,
12 because people didn't want to miss the first
13 show.
14 So unlike NASCAR, there was no
15 first show. We run NASCAR races throughout
16 the season. Our belief is that Howard Stern
17 adds subscribers to us everyday, so if you
18 decide you want to buy satellite radio and you
19 didn't decide to buy it last year, you are
20 going to buy it next year, and you are going
21 to make a decision on which os the two
22 satellite radio companies you want to buy, or

1 recall that?
2 A Yes.
3 Q Okay, is the merger a done deal?
4 A No.
5 Q Okay, could you - and I don't want
6 to get into nonpublic confidential information
7 - but if you could just explain to the court
8 the public steps that - the hurdles that you
9 are going to have to jump over before there
10 can be a merger.
11 A Your Honors, on February 19th we
12 announced that we were intending to merge with
13 XM. That very day I received a call from
14 Congressman Markey who said to me that he
15 wanted to hold a hearing on our merger and
16 would I agree to participate. And since that
17 period of time, Congress has held four
18 hearings on our merger. There was a House
19 Judiciary, a House Commerce, a Senate
20 Judiciary, a Senate Commerce.
21 We also had, in order to get the
22 merger approved, we needed - we need two

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1 regulatory agency approvals. We need the
2 Justice Department to make sure the merger is
3 not anticompetitive, and we need the FCC to
4 determine that not only is it not
5 anticompetitive, but the merger is in the
6 public interest.

7 So we are in the process of going
8 through a second request with the Justice
9 Department. The FCC has not yet accepted our
10 application, has not put out a public notice
11 yet. So we have a long process. We're very
12 early in the game. I had our annual
13 shareholders meeting right before Memorial
14 Day, so I guess it must have been about two
15 weeks ago, and I told our shareholders that I
16 believe though the merger should be approved
17 that we have an uphill battle to get it done.

18 So there is certainly no certainty
19 to it. I'm optimistic about it, but there is
20 no certainty.

21 Q Is there a drop dead date in the
22 merger agreement?

1 that you need to turn profitable?

2 WITNESS: We have not come to a
3 pure number that says once you get over a
4 certain amount you become profitable. Because
5 right now we are counting subscribers two
6 ways. One is that if you pay \$12.95 you are
7 a subscriber, and if you pay \$6.99 to get a
8 second receiver, you are a subscriber. So
9 that - the way the accounting works, that
10 counts as two.

11 So the revenue is really the key
12 number that drives whether or not we will be
13 profitable. So if you work backwards to where
14 we are today with our cost structure the way
15 it is today, is that we believe that we will
16 need somewhere at least 10 million, maybe 11
17 million subscribers, to where we could be in
18 this area of EBITDA profitable. If you are
19 getting into profit in the GAAP term of
20 profit, we might need to have a number
21 significantly north of that.

22 JUDGE WISNIEWSKI: Thank you, sir.

33

35

1 A I believe - yes, there is a drop
2 dead date. And I don't think -

3 Q Do you know approximately when
4 that is?

5 A I think it's in the first quarter
6 of next year.

7 MR. WYSS: No further questions,
8 thank you, Your Honor.

9 CHIEF JUDGE SLEDGE: Any further
10 cross by XM?

11 MR. RICH: No, Your Honor.

12 CHIEF JUDGE SLEDGE: Anything else
13 by Music Choice?

14 MR. FAKLER: No, Your Honor.

15 CHIEF JUDGE SLEDGE: Anything else
16 by Sound Exchange?

17 MR. HANDZO: No, Your Honor.

18 CHIEF JUDGE SLEDGE: Any questions
19 from the bench?

20 JUDGE WISNIEWSKI: I have one.

21 Mr. Karmazin, has your firm
22 identified some critical mass of subscribers

1 CHIEF JUDGE SLEDGE: All right,
2 thank you, sir.

3 Mr. Joseph.

4 MR. JOSEPH: Your Honor, my
5 partner, Mr. Kirby, will call our next witness
6 and examine our next witness.

7 CHIEF JUDGE SLEDGE: All right.

8 MR. KIRBY: Your Honor, Sirius
9 calls Mr. Terrence Smith.

10 Whereupon,

11 TERRENCE SMITH

12 was called as a witness by counsel for Sirius
13 and, after having been first duly sworn, was
14 examined and testified as follows:

15 CHIEF JUDGE SLEDGE: Thank you,
16 please be seated.

17 MR. KIRBY: May I proceed, Your
18 Honor?

19 CHIEF JUDGE SLEDGE: Yes.

20 DIRECT EXAMINATION

21 BY MR. KIRBY:

22 Q Good morning, Mr. Smith.

34

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Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 In the matter of: °
 Adjustment of Rates and °
 Terms for Preexisting ° Docket No. 2006-1
 Subscriptions Services, ° CRB DSTR
 and °
 Satellite Digital Audio °
 Radio Services °
 Room LM-408
 Library of Congress
 First and Independence Avenue, S.E.
 Washington, D.C. 20540
 Wednesday,
 August 22, 2007

The above-entitled matter came on
 for hearing, pursuant to notice, at 9:30 a.m.
 BEFORE:
 THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

T A B L E O F C O N T E N T S

WITNESS	DIRECT	CROSS	REDIRECT	RECROSS
Bruce Silverman				
By Ms. Ablin	4		300	
By Mr. DeSanctis		254		
Mel Karmazin				
By Mr. Joseph	131		252	
By Mr. Handzo		194		
EXHIBIT NO.	DESCRIPTION		MARK	RECD
SDARS				
79	Silverman Testimony		30	30
Sirius				
62	Karmazin Rebuttal		132	133
SoundExchange				
106	XM/Sirius FCC Filing		204	217
107	Survey		230	
108	Newspaper Article		239	
109	Article on XM outage		262	265
110			264	
111	Editorial		266	268
112	Editorial		269	282
113	Article RE Howard Stern		284	295
114	Article RE XM		288	294
115	Article RE XM/Navigation		296	

APPEARANCES

On Behalf of SoundExchange
 DAVID A. HANDZO, ESQ
 MICHAEL B. DeSANCTIS, ESQ
 JARED O. FREEDMAN, ESQ
 THOMAS J. PERRELLI, ESQ
 MARK D. SCHNEIDER, ESQ
 Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 (202) 639-6060
 dhandzo@jenner.com

On Behalf of XM Satellite Radio, Inc.
 BRUCE RICH, ESQ
 JONATHAN BLOOM, ESQ
 WILLIAM CRUSE, ESQ
 TODD LARSON, ESQ
 BENJAMIN MARKS, ESQ
 BRUCE S. MEYER, ESQ
 RALPH MILLER, ESQ
 JOHN THOMPSON, ESQ
 Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 (212) 310-8238

On Behalf of Sirius Satellite Radio,
 Inc.
 BRUCE G. JOSEPH, ESQ
 KARYN K. ABLIN, ESQ
 MATT J. ASTLE, ESQ
 JENNIFER L. ELGIN, ESQ
 THOMAS W. KIRBY, ESQ
 MICHAEL L. STURM, ESQ
 JOHN WYSS, ESQ
 Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 (202) 719-7528
 bjoeph@wileyrein.com

1 P-R-O-C-E-E-D-I-N-G-S
 2 9:35 a.m.
 3 CHIEF JUDGE SLEDGE: Please call
 4 your next witness.
 5 MS. ABLIN: Your Honor, Sirius and
 6 XM call Bruce Silverman.
 7 CHIEF JUDGE SLEDGE: All right.
 8 JUDGE ROBERTS: Before that,
 9 SoundExchange had asked for a time count.
 10 SoundExchange has consumed 11 hours 30
 11 minutes. The Services have consumed 12 hours,
 12 30 minutes.
 13 WHEREUPON,
 14 BRUCE SILVERMAN
 15 WAS CALLED FOR EXAMINATION BY COUNSEL FOR XM
 16 AND SIRIUS AND, HAVING FIRST BEEN DULY SWORN,
 17 WAS EXAMINED AND TESTIFIED AS FOLLOWS:
 18 CHIEF JUDGE SLEDGE: Please be
 19 seated.
 20 THE WITNESS: Thank you.
 21 DIRECT EXAMINATION
 22 BY MS. ABLIN:

1 worked out quite that way.
2 Regrettably, he is not available
3 tomorrow, and I would very much appreciate the
4 opportunity to put him on the stand for both
5 direct examination and cross examination
6 before Mr. Silverman's cross. As I've said,
7 SoundExchange has consented. There is
8 precedent for this.

9 I fondly remember Mr. Bradley
10 interrupting my cross examination of Dr.
11 Brynjolfsson in the webcasting case. But I
12 would, again, ask the Court's indulgence.

13 CHIEF JUDGE SLEDGE: Mr.
14 DeSanctis?

15 MR. DeSANCTIS: We have no
16 objection to that, Your Honor. We discussed
17 it in advance with counsel.

18 CHIEF JUDGE SLEDGE: Mr.
19 Silverman, you are bumped by the President of
20 a big company.

21 (Laughter.)

22 (Whereupon, the witness was

1 THE WITNESS: Thank you.

2 DIRECT EXAMINATION

3 BY MR. JOSEPH:

4 Q Are you still the Chief Executive
5 Officer of Sirius Satellite Radio?

6 A Yes, sir.

7 Q Could you please tell the Court
8 the purpose of your testimony here today in
9 the rebuttal phase of the case?

10 A Well, I certainly would like to
11 respond to the SoundExchange discussion of
12 where they equate the value that we pay and
13 the amounts of money that we pay to branded
14 non-music content with the issue that's before
15 here, the SoundExchange theme. I would like
16 to talk a little bit about the royalties and
17 the benefits that we receive from this branded
18 content that we don't receive in this case as
19 well.

20 I also would like to talk about
21 the general value that branded content has
22 made to our company as well as discussing, you

1 excused.)

2 We'll recess a few minutes.
3 (Whereupon, the proceedings in the
4 foregoing matter went off the
5 record at 2:10 p.m. and went back
6 on the record at 2:14 p.m.)

7 CHIEF JUDGE SLEDGE: We will come
8 to order. Mr. Joseph?

9 MR. JOSEPH: Thank you, your
10 Honor. Sirius calls Mel Karmazin as its next
11 witness.

12 CHIEF JUDGE SLEDGE: Mr. Karmazin,
13 please raise your right hand.
14 Whereupon,
15 MEL KARMAZIN
16 was called as a witness and, having been first
17 duly sworn, was examined and testified as
18 follows:

19 CHIEF JUDGE SLEDGE: Thank you,
20 please be seated.

21 MR. JOSEPH: Welcome back, Mr.
22 Karmazin.

1 know, the current trends and operations of our
2 business and I would also like the idea -- the
3 ability to discuss our pay per use fee, you
4 know, which we think is very important and the
5 appropriate way that we should compensate
6 SoundExchange for the value that they provide
7 us.

8 Q Mr. Karmazin, I'm going to ask you
9 that you be handed a document that has been
10 previously marked as Sirius Exhibit 62 or SIR
11 X62. I'll ask you to take a look at it, once
12 you have it.

13 (Witness proffered document.)

14 (Sirius Exhibit 62 was
15 marked for
16 identification.)

17 Can you identify Sirius Exhibit 62
18 for us, sir?

19 A This is my written rebuttal
20 testimony along with the exhibits that were
21 attached to it.

22 Q And if you'll turn in the main

1 text of the testimony to the page after page
2 14. Is that your signature appearing on the
3 declaration?

4 A Yes, it is.

5 MR. JOSEPH: Your Honors, at this
6 time I would offer Sirius Exhibit 62 into
7 evidence.

8 CHIEF JUDGE SLEDGE: Any objection
9 to Exhibit 62?

10 MR. HANDZO: No, your Honor.

11 CHIEF JUDGE SLEDGE: Without
12 objection, it's admitted.

13 (Sirius Exhibit 62
14 marked for
15 identification was
16 received in evidence.)

17 MR. JOSEPH: Your Honor, at this
18 time, I'd like to seek the application of the
19 protective order to a few passages and exactly
20 three of the attached tabbed exhibits. First,
21 let me identify them and explain why. On page
22 3, paragraph 5 -- I'll need to improve those

1 then there's a number given. I would ask for
2 the protection of that number in both that
3 line and then where it appears again in the
4 next shaded area, a provision, a specific
5 provision of the Howard Stern contract that
6 has not been disclosed to the public and it
7 would provide information concerning the
8 negotiations and the terms agreed upon that
9 would be competitively disadvantageous.

10 On page 7, in paragraph 14, the
11 material that is in double brackets and shaded
12 is the discussion of another provision of the
13 NFL agreement, concerning what the NFL agreed
14 to provide and for the same reasons as
15 discussed before, I would ask that that be
16 under the protective order. And then finally,
17 with respect to the text of the testimony, in
18 paragraph 16, the top -- the first bracketed
19 material discusses provisions in the Sirius
20 NASCAR agreement and what NASCAR has agreed to
21 provide, again not disclosed publicly, again,
22 would provide a competitive advantage to

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1 binders.

2 Your Honor, I think you're in the
3 first tab, the first exhibit. In paragraph 5
4 on page 3 is a discussion of a very specific
5 provision of the NFL Sirius agreement. That
6 provision discusses matters that if disclosed
7 would provide a competitive disadvantage to
8 Sirius and a competitive advantage to XM. It
9 is a clause that is also subject for
10 confidentiality provision in the agreement as
11 the entire agreement is.

12 I would note that the letter
13 agreement in which that's based is already, I
14 believe, in evidence under the protective
15 order. On page 5, paragraph 11, there are two
16 shaded portions. I actually am not asking for
17 confidential treatment for any part of the
18 shaded portions except for the number that
19 appears, subscribers, just following with me
20 in the one, two, three, four, fifth line,
21 subscribers agreed upon at the time included
22 as an exhibit to Mr. Sterns contract by, and

1 others or potentially a competitive
2 disadvantage to Sirius if XM knew what it was
3 getting from NASCAR or what NASCAR was
4 obligated to provide.

5 With respect to the exhibits,
6 Exhibit 43, Sirius, SIR 43 which was the first
7 tab, is the agreement with the National
8 Football League. I believe the letter
9 agreement that was converted into this
10 agreement is already in evidence under the
11 protective order. And it is a current
12 agreement as can be seen in Section 12.1,
13 where the term is stated and it is subject to
14 a confidentiality obligation as can be seen in
15 Section 13.

16 Obviously, the terms of the -- the
17 detailed terms of the agreement between Sirius
18 and the NFL would provide a significant
19 disadvantage to Sirius if it were to become
20 known and a significant advantage to XM and
21 also to other content providers that Sirius
22 might negotiate with.

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1 CHIEF JUDGE SLEDGE: As you say
2 obviously.
3 MR. JOSEPH: Exhibit 52 is one of
4 the attached agreements to the NFL agreement
5 executed at the same time subject to the same
6 term. And the term is actually -- can be seen
7 on page 3 of this rights agreement -- I'm
8 sorry, the promotional rights agreement
9 subject to the same confidentiality obligation
10 and I seek confidentiality and protection
11 under the protective order for the same
12 reason.

13 Sirius Exhibit 53 consists of the
14 -- a contract approval cover letter, but then
15 an analysis by Sirius comparing the
16 deliverables that the NFL was to provide under
17 the contract to what Sirius actually received
18 in both 2005 and 2006 and of course, the
19 contract provisions are detailed in that
20 comparison, the obligations of the NFL and a
21 letter confirming that the NFL had fulfilled
22 its obligations of date November 22nd, 2006

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1 within the past year regarding the obligations
2 in 2006, which, excuse me, itself included a
3 discussion of what the NFL was providing under
4 the agreement and also not a document that has
5 been made public, also a document that would
6 disclose substantial information concerning
7 the relationship between Sirius and the NFL.
8 That concludes the material that I would ask
9 be subject to the protective order.

10 CHIEF JUDGE SLEDGE: Any response?

11 MR. HANDZO: No objection, your
12 Honor.

13 CHIEF JUDGE SLEDGE: Without
14 objection, the motion is granted.

15 MR. JOSEPH: Thank you, your
16 Honor.

17 BY MR. JOSEPH:

18 Q Now, Mr. Karmazin, can you
19 identify for the Court generally the different
20 kinds of rights and benefits Sirius obtains
21 from its non-music programming deals?

22 A We get advertising revenues as

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1 part of that branded content. We get
2 exclusivity as part of the agreements. We
3 also get association with the branded content
4 which provides us with great advantages and we
5 also get a substantial amount of promotional
6 value as well.

7 Q Let's start with the first thing
8 you mentioned, advertising revenues. In
9 paragraph 22 of your written rebuttal
10 testimony, you talk about the value to Sirius
11 of advertising on its non-music channels. Is
12 that a substantial value?

13 A Yes. I started in November of
14 2004. In that year we got about just under a
15 million dollars of advertising revenue. The
16 following year which was the first year where
17 we announced Howard Stern, that number went to
18 \$6 million and last year which was the first
19 year that included Howard Stern that number
20 was about \$30 million.

21 Advertising is a second stream of
22 revenue. We think that having the two streams

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1 of revenue are important and that number is
2 going to be more important in the future as
3 our number of subscribers grow.

4 Q To what do you attribute the
5 growth in advertising revenues that you've
6 just described?

7 A Well, I think it is from a number
8 of things, including the fact that we added
9 all of this branded content. We also along
10 with the content that we've gotten, we've
11 gotten advertisers that came along with it.
12 So as an example, in the case of Howard Stern,
13 CBS had announced that they did well over \$100
14 million a year in advertising revenue from
15 Howard Stern before he left, and we were able
16 to pick up an awful lot of the advertisers who
17 were part of the Howard Stern Show at that
18 time.

19 The same thing happened with
20 NASCAR, that when we secured the rights for
21 NASCAR, Home Depot and Nextel Sprint were part
22 of the advertisers that were associated with

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1 it and we managed to pick up those
2 advertisers. In the case of the NFL, General
3 Motors was an important advertiser on
4 football. And even though they were a partner
5 and an investor in XM, we also picked up them
6 as an advertiser.

7 The same thing was true of Martha
8 Stewart and all of our other branded content.

9 Q Couldn't you also put ads on your
10 music channels?

11 A No, and I say that emphatically.
12 We are a pay service. We charge \$12.95 that
13 the music that we play is available on free
14 radio. In order for us to distinguish
15 ourselves and for us to be able to charge the
16 \$12.95, we believe that we need to have that
17 be commercial free.

18 Q When you evaluate non-music
19 content deals and the price that you have to
20 pay for non-music content, how do you consider
21 the advertising revenues that you may obtain?

22 A Yeah, an important part of our

1 defined as having something that either nobody
2 else has of it's limited to who else has it.
3 So as an example, some of our content is
4 exclusive to where it's just on Sirius and
5 it's not on any other -- it's not on XM as
6 another satellite service. It's not on
7 terrestrial radio. You know, it's not
8 available in other forms. Some of it means
9 that we have exclusivity as it applies to XM.

10 Some of it would mean that we have
11 exclusivity as it applies to terrestrial
12 radio. You know, so as an example, your
13 Honor, our deal with the NFL is a deal that
14 provides us exclusivity to XM but you can get
15 the NFL on television and you can get the NFL
16 on radio but we also have in the case of the
17 NFL, things that are not available in other
18 formats. So we're broadcasting 32 different
19 versions of the game each week, as compared to
20 where terrestrial radio might be only doing
21 the Washington Redskins here in town.

22 In the case of NASCAR, whereas we

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1 process in making a determination on what
2 content to ad and what to pay for it is a
3 decision on whether or not we are going to
4 offset some of the rights fees that we're
5 paying in the form of advertising and, you
6 know, as an example, when we were talking to
7 Martha Stewart about joining our service, one
8 of the things that Martha offered was that she
9 has a magazine that sells advertising and that
10 her sales department would contribute
11 advertising dollars towards Sirius and that
12 contributed toward how much money we paid for
13 a Martha Stewart show.

14 Q And you also mentioned the
15 importance to Sirius of exclusivity. How
16 important to Sirius is exclusive programming?

17 A Well, you know, I've been around
18 the business --

19 CHIEF JUDGE SLEDGE: Perhaps
20 before you answer that, you should tell us
21 what exclusivity means.

22 THE WITNESS: Well, exclusivity is

1 have exclusivity, again, in satellite radio,
2 and some terrestrial radio stations air it,
3 they don't have the ability to broadcast the
4 10 channels that we do which communicates
5 between the driver and the pit crews for those
6 particular channels.

7 In the case of Howard Stern
8 exclusivity means that Howard cannot do
9 anything else in the audio entertainment, that
10 his services are exclusive to Sirius. So for,
11 you know, my career, exclusivity has always
12 been something that you would seek to get
13 because particularly in a pay service where
14 the only way people are going to get it is if
15 they pay for it and they don't want to pay for
16 something, if they can get it for free. So
17 having exclusive content is very important and
18 one of the benefits that we get from this
19 branded content.

20 CHIEF JUDGE SLEDGE: In light of
21 your answer, I would suggest that perhaps
22 you're required to, in answer to Mr. Joseph's

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1 questions, an exclusivity would have to apply
2 separately to each agreement since exclusivity
3 means a different thing for each agreement
4 that you have.

5 THE WITNESS: I think you're
6 accurate. I mean, I know you're accurate that
7 the exclusivity varies with each of our deals.
8 But the general sense, even if we have
9 exclusivity only to XM or only to terrestrial
10 radio, you know, will have great value and I
11 was responding to the fact that what values
12 they create. Now the amount of the value will
13 differ based on the exclusivity limits.

14 BY MR. JOSEPH:

15 Q And Mr. Karmazin, would the amount
16 you would pay for any given content vary with
17 the amount of exclusivity that you get?

18 A Sure. As a matter of fact,
19 somewhere in my written testimony I pointed
20 out in the case of one of our important
21 content partners, that we have an exclusivity
22 and if, in fact, they didn't honor that

1 show our credibility to the consumers that you
2 know, we had the NFL. So they didn't know
3 about Sirius, but they certainly new about the
4 NFL. We were able to capitalize on
5 associating ourselves with the number one
6 radio personality, you know, in the United
7 States, Howard Stern.

8 They may not have known Sirius and
9 whether or not they liked him, listened to
10 him, they heard of and knew Howard and the
11 fact that Howard, you know, is part of Sirius,
12 gives us a whole bunch of credibility and the
13 same thing was true about all of our other
14 content.

15 I don't think it's important or I
16 think brands are important. You know, if Coca
17 Cola was -- doesn't need to have their brand
18 enhanced by being associated with the NFL
19 because Coca Cola itself is a very established
20 brand. But in the case of Sirius, which was
21 a start-up company with no credibility because
22 nobody knew it, having the association with

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1 exclusivity, there would be a very, very
2 substantial reduction in the rights fee that
3 we pay to that particular partner. And I
4 think I can find it.

5 Q I think that's -- is that
6 paragraph 5, you're referring to, sir?

7 A Yes, it is.

8 Q Happily, we won't need to break
9 down different degrees of exclusivity any
10 further because I'm going to move on to ask
11 about brand association. Mr. Karmazin, why is
12 it important for Sirius to sign deals with
13 well-known brands?

14 A Well, I think it was, you know,
15 very important for Sirius. We were a company
16 that started service in 2002. People did not
17 know what satellite radio was or most people
18 didn't know what satellite radio was and they
19 certainly didn't know what Sirius was.

20 So the opportunity for us to
21 partner with these well-established brands
22 were very, very important for us to be able to

1 these brands, were absolutely critical for us.

2 Q Mr. Karmazin, do you reduce other
3 costs by signing deals with well-known brands?

4 A Well, yeah. I mean, obviously,
5 one of the things that you know, particularly
6 since I've joined the company, is that you
7 know, my goal is to make this company a
8 profitable company and that if, in fact, I'm
9 able to reduce my advertising or promotional
10 costs and able to do that because I have the
11 benefit of the brand to speak for us, we save
12 money in that regard as well.

13 Q Is the benefit of association with
14 well-known brands limited to the relationship
15 with the public and possible subscribers or
16 other members of the public?

17 A Well, you know, it certainly was
18 very important with the public but, you know,
19 at the stage we got involved, almost equally
20 important was the affiliation with those
21 brands with our OEM partners. That our
22 relationship with the Ford Motor Company and

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1 our relationship with the Chrysler Corporation
2 were due for renewals and the fact that we
3 were able to come to them with content like
4 NASCAR, Howard Stern and the NFL was very
5 important insofar as providing us with the
6 credibility that we were prepared to bring to
7 them these important brands.

8 You know, if you think about when
9 people are driving in their car, you know, the
10 heaviest time of the day that you drive in
11 your car is morning drive time. It's
12 generally, you know, considered somewhere in
13 the 6:00 to 10:00 in the morning, Monday
14 through Friday, and well, the number one radio
15 personality is Howard, so if, in fact, the car
16 companies are interested in pleasing people
17 when they're in the car the most, the ability
18 to have that was very important.

19 NASCAR is content that our
20 partners were deeply involved in, the Ford
21 Motor Company, you know, Dodge. Not only, you
22 know, do they advertise there, they sponsor

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1 vehicles in NASCAR and the NFL was an
2 important brand so when we talk to our OEM
3 partners about what role satellite radio could
4 have in the car, you talk about making the
5 driving experience better if, in fact, you
6 have Sirius as part of your service and
7 enhancing our content with these established
8 brands secured us, in my opinion, renewals
9 with all of our content -- with all of our OEM
10 partners.

11 Q Did it have an impact or did your
12 affiliation with well-known brands have an
13 impact on financial markets?

14 A Yeah, I mean, again, you know, the
15 company was a new company even though, you
16 know, it was established seventeen and a half
17 years ago. You know, we got our first
18 subscriber, that the idea of Wall Street may
19 not have had a bunch of credibility in Sirius
20 and they might not have known Sirius but they
21 certainly knew of the success that Howard
22 Stern had.

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1 You know, I was part of Howard
2 Stern's company when we took Infinity public
3 in 1986 and Howard was a big driver of that in
4 the capital markets. Certainly Wall Street
5 knows about the popularity and appeal of the
6 NFL and how successful it is. They know the
7 same thing about NASCAR. So those were
8 obviously important benefits as well.

9 Q Now, what --

10 A I guess I should say one other
11 thing. I'm not sure I should but --

12 Q Sure.

13 A -- I will tell you that I was a
14 competitor and I think I mentioned it in my
15 direct testimony to Sirius back in those days,
16 and I've said this publicly before. I don't
17 think I did it in direct testimony, that the
18 reason that I considered coming to Sirius was
19 because of the fact that they had made a
20 commitment to the NFL and Howard Stern because
21 that was important, in my opinion, as a radio
22 executive, to think that this company had a

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1 chance of becoming profitable because of
2 making those kind of commitments.

3 Q Now, what brand use or trademark
4 rights does Sirius get in its non-music
5 content deals?

6 A That will vary as well, your
7 Honors. But we are, you know, an official
8 sponsor of the NFL and we are able to put the
9 NFL logo and the logos of all of the teams in
10 our promotional material. So if you were to
11 go into Best Buy, you know, you would see a
12 standup display that would incorporate you
13 know, the NFL. We also have put the NFL on
14 some of our radios, so that when a consumer is
15 going into Best Buy or Circuit City to buy a
16 radio, they will see the NFL brand attached to
17 our product.

18 The same thing is true with Howard
19 Stern, you know, that there is their blow-up
20 point of sale material as well as NASCAR and
21 some of our other branded content.

22 Q When you say the blow-up, what are

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1 you referring to?

2 A Okay, I'm sorry. That I'm
3 thinking in terms of a life size standup
4 display that is at the point of sale, pointing
5 out to them, "This is where satellite radio is
6 sold and this is where Sirius is sold and that
7 this content is available on Sirius". So
8 those standups are major retailers.

9 Q Did you get the right to use Fox
10 News trademarks in your deal with Fox News?

11 A Yes, we did.

12 Q And why was that important?

13 A Well, Fox News was important for a
14 number of reasons. We had other news channels
15 that were on but Fox was the cool brand. The
16 other thing was that it was out judgment at
17 the time that we were covering the blue states
18 pretty well with Howard and hadn't done quite
19 as good in amassing content that would appeal
20 to the more conservative side and some of the
21 red states. And Fox News was an important
22 addition for us to get as well.

1 York Times when the deal was announced. You
2 know, we got a great deal of promotion from
3 Howard Stern to say nothing about the over
4 \$100 million that CBS sued Howard and us for
5 that Howard was promoting on CBS' channels,
6 where his audience was listening and they
7 valued that air time at over \$100 million.

8 The same thing, you know, is true
9 about what we get at Superbowl, what we get
10 from the NFL. Many of the teams are putting
11 our logos up on the scoreboards. Game Day
12 magazine which is distributed or sold at the
13 stadiums, have ads that they provide us as
14 well. So you know, getting promotion is an
15 important consideration that we give when
16 we're making a decision on what content to
17 add.

18 I have a good example in the music
19 area to where we did it. We had a channel on
20 Sirius that was called Vacation. And what
21 that channel was, was a sort of upbeat music
22 channel aimed at people who were going on

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1 One of the other things was that
2 in the case of Fox News, your Honor, that's
3 not exclusive to us because XM has it as well.
4 And one of the reasons we wanted Fox News was
5 we didn't want XM to benefit from having Fox
6 and us not have it. So in part, we did it for
7 defensive reasons as well, but also the
8 reasons that I had mentioned about of the
9 popularity of the brand and where it's most
10 popular.

11 Q Now, does Sirius get any direct
12 promotional benefits from its non-music
13 content deals?

14 A Sure. You know, again, you know,
15 we have a lot of branded content that's on and
16 I know Howard is getting a lot of attention,
17 that you know, Howard Stern has been on you
18 know, David Letterman show promoting Sirius.
19 He had a full hour on Larry King. He was
20 featured on 60 Minutes. He was on the cover
21 of virtually all the major magazines. He's
22 been, you know, on the front page of the New

1 vacation, so you would listen while you were
2 driving because it had the kind of music that
3 you might want to hear while you're going on
4 vacation.

5 And it was an okay channel, but
6 our programming people thought that if, in
7 fact, we were able to brand it and do
8 something with it, we would get more value.
9 So we entered into an arrangement with Jimmy
10 Buffet, and Jimmy Buffet, we paid Jimmy Buffet
11 for putting on this channel. We rebranded the
12 channel Margaritaville. So instead of it
13 being called vacation, it's called
14 Margaritaville.

15 Jimmy Buffet is an important part
16 of it and as it applies to the promotion, if
17 you were to see Jimmy Buffet in concert, on
18 the stage, you would see a Sirius logo and you
19 would see Jimmy talking about Sirius at all of
20 his concert appearances. And that's all
21 factored into the price that we pay to Jimmy
22 Buffet for the content. So you know, the

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1 promotion is a very important part of what I
2 think about when we're going to add content.

3 Q Let's turn back to the non-music
4 content deals. Does Martha Stewart provide
5 promotion to Sirius?

6 A Sure. You know, Martha Stewart on
7 her -- in her magazine, you pick up an issue
8 of Martha Stewart's magazine, I can't speak
9 for it being in every issue, but Martha
10 Stewart will be talking about Martha Stewart
11 radio and she will be promoting her show on
12 Sirius. She has a syndicated television show
13 that is on in 200 markets. One of the shows
14 that stands out that she did was she showed
15 people how to install Sirius radio in their
16 car.

17 Martha Stewart at the stove in one
18 of her sets has a Sirius satellite radio
19 there. So, you know, not only is she talking
20 about us when she's making personal
21 appearances, but she's promoting us on these
22 other vehicles. Her website also includes

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1 promotion for Sirius.

2 Q Now do all of these brand and
3 promotional benefits factor into the amount
4 Sirius is willing to pay and does pay in its
5 non-music content deals?

6 A Yeah. I mean, as I said, you
7 know, it's all part of the price. I mean, you
8 know, if I could sit there and save, you know,
9 \$10 million and so far as a rights deal, to
10 save it in advertising, then it's therefore,
11 more valuable for me to have that kind of
12 content than it is to have to spend that money
13 on advertising.

14 I also believe, you know, that
15 when the NFL is promoting Sirius and Martha
16 Stewart is promoting Sirius, there's a great
17 deal more credibility in that than if Sirius
18 promotes Sirius. You know, people are sort of
19 used to seeing advertising, you know, whereas
20 if in fact, somebody else is doing it, I think
21 it enhances the value.

22 Q Now, we've been talking about the

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1 brand value of non-music content. Doesn't
2 music have brand value?

3 A Well, music is valuable, so I'm
4 not suggestion music is not valuable, but I
5 don't think, you know, of music as a brand.
6 I mean, I think of -- if you say
7 entertainment, you know, I think entertainment
8 is not a brand or sports is not a brand. So
9 I think generically you know, the word "music"
10 is not a brand.

11 There are some amazing brands you
12 know, within, you know, the roster of the
13 music companies. I mean, obviously, you know,
14 there's some terrific brands, but the idea of
15 in my way of thinking, you know, is the word
16 "music" a brand, I would tend to think not.

17 Q Let's talk then about those
18 artist's brands you mentioned. Does Sirius
19 get the right to exploit those artist's brands
20 as brands, in other words, to promote them or
21 use their trademarks by virtue of the sound
22 recording performance license that's being

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1 priced in this proceeding?

2 A Yeah, no, I mean, I think I
3 mentioned the difference in my opening
4 statement. I mentioned the advertising that,
5 you know, our branded content gives that
6 SoundExchange is not giving us. I mentioned
7 the exclusivity which we don't get from
8 SoundExchange and I also mentioned the
9 association with the brand which we don't get
10 either. You know, that you know, we don't get
11 to use any of the names of the brand.

12 We can't use them in our
13 commercials without paying them extra money.
14 We don't get them mentioning us on their
15 concert tours. You know, we're not receiving
16 any of the promotional value or associations
17 with those artists. We do get to play them
18 and I'm not underestimating that. That's
19 important, we like to play that music. But we
20 don't get the same kinds of things that we get
21 from our non-music branded content.

22 CHIEF JUDGE SLEDGE: Well, the

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1 music and non-music is the same. You can't
2 use non-music brand unless you pay it and you
3 can't use music brand unless you pay it.

4 THE WITNESS: Right, but we're
5 saying that as part of whatever we pay
6 SoundExchange we don't get any of those
7 benefits.

8 CHIEF JUDGE SLEDGE: Again, it's
9 the same music and non-music. If you strike
10 an agreement with a content provider, any of
11 the examples you gave, if you don't include
12 the right to use the brand and pay for it,
13 then you can't exploit it and the same with
14 music. If you pay only to play the music,
15 then that's the only right you get. If you
16 don't pay to use the brand, then you can't use
17 the brand.

18 THE WITNESS: Well, you're right,
19 your Honor, I don't --

20 CHIEF JUDGE SLEDGE: So they're
21 the same, aren't they?

22 THE WITNESS: Well, no, I think

1 include the sound recordings. If you do a
2 deal with them that includes the sound
3 recordings, then you're not using the license.
4 It's a voluntary license and therefore, you're
5 not paying the royalty rate.

6 THE WITNESS: Well, if what you're
7 saying is that if we didn't have a license
8 with SoundExchange, we would negotiate with
9 each of the people individually to do that?

10 CHIEF JUDGE SLEDGE: Yeah.

11 THE WITNESS: Yeah, that's not my
12 understanding of what the Congress, you know,
13 had originally intended insofar as the
14 compulsory license, but, you know, I mean,
15 this is way over --

16 CHIEF JUDGE SLEDGE: I think you
17 could use the license or not use the license
18 for any music content you want to.

19 THE WITNESS: But I need to use
20 the license, your Honor, for numbers of
21 reasons, not the least of which is -- I'll
22 give you a great example, is that we have

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1 what I'm saying is that when we do a deal with
2 those other content partners, included in the
3 price of those deals are these exclusivities
4 promotion and other things. When we do a deal
5 with SoundExchange, included in that rate that
6 we're paying we don't get any of those
7 benefits. We then have to go out and spend
8 extra money on top of that, which we've done.

9 So we have on -- I'm sure you'll
10 all be happy to know that on September the
11 7th, we're going to start a Grateful Dead
12 channel and it will be, you know, 24 hours,
13 seven days a week Grateful Dead. We had to
14 pay extra on top of what the rate is for
15 SoundExchange for that. The same thing is
16 true in Siriusly Sinatra. The same thing is
17 true in Elvis, is that it's a cost that's on
18 top of the fee connected with the
19 SoundExchange.

20 CHIEF JUDGE SLEDGE: And that's
21 your choice, isn't it? It's on top of the fee
22 if you do an agreement with them that doesn't

1 Radio Disney. That's one of our channels, and
2 Radio Disney has music on it. So that in
3 order for us to carry Radio Disney, we need to
4 have a license fee to be able to cover the
5 music that's played in Radio Disney.

6 CHIEF JUDGE SLEDGE: We're saying
7 the same thing.

8 THE WITNESS: I guess if we're
9 saying the same thing, that's good.

10 CHIEF JUDGE SLEDGE: And it seems
11 to me that saying that you're saying that
12 there is no difference between music and non-
13 music as for what you contract for and what
14 rights you get as a result of what you pay
15 for.

16 THE WITNESS: I don't think I'm
17 saying that, okay, and I don't mean to be
18 stubborn about it. I think what I'm saying is
19 that as I understand this proceeding, that
20 this is a proceeding that is part of
21 SoundExchange and how much money they should
22 get for a compulsory license, and not --

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1 CHIEF JUDGE SLEDGE: Which is
2 important to add right there, which applies
3 when you do not have a voluntary agreement
4 with that artist.

5 THE WITNESS: But we need to have
6 a compulsory license even with those artists
7 where we have an agreement on because a lot of
8 those agreements don't cover the rights that
9 SoundExchange has. They're incremental so
10 that when we go to Frank Sinatra's family, we
11 have to still pay or we're still paying a
12 royalty to SoundExchange, we're paying them
13 for rights that SoundExchange has not given
14 us. They're incremental to that.

15 CHIEF JUDGE SLEDGE: Let me see if
16 I can -- that's the same thing I said. Let me
17 see if I can --

18 JUDGE ROBERTS: Mr. Karmazin, I
19 think your argument would be more persuasive
20 if you were telling us that when I pay a
21 contract price to NASCAR for example, and I
22 get the NASCAR product and I also get all this

1 terrestrial radio, you can hear music in a lot
2 of places. I don't get exclusivity. So
3 therefore, if the music industry was saying,
4 "Do you know what, we're going to take music
5 off of all of these other places and only put
6 it on Sirius, we'd like to enter into
7 negotiations for that", then they could sit
8 there and talk about Howard Stern kind of
9 money. But if, in fact, you're saying that,
10 "We're going to give you the same thing that
11 terrestrial radio has, the same thing that HD
12 radio has, the same thing that On and On has,
13 okay, and you want me to pay the same amount
14 of money that I pay for exclusivity, it
15 doesn't sound right. If, in fact, if and when
16 I pay, you know, Howard, Howard is going on
17 and promoting Letterman. If when I gave
18 SoundExchange that money, they had the Rolling
19 Stones promoting on David Letterman, Sirius,
20 then I would say, yeah, I mean, that's a
21 pretty good argument for why the money should
22 be the same but we're getting different things

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1 promotional value from NASCAR, I pay the same
2 price to SoundExchange and all I get is the
3 content but I don't get the promotional value.
4 And you're not paying the same price to
5 SoundExchange that you're paying for NASCAR or
6 for Howard Stern or for other non-music
7 services, correct?

8 THE WITNESS: No, you're saying --
9 I'm saying right now that you know, some of
10 our content we pay less money than we pay
11 towards SoundExchange. I mean, we have a lot
12 of non-music content on our channel. Some of
13 our more expensive content is more than we are
14 currently paying to SoundExchange, and the
15 reason is for the reasons that I've given you.
16 Again, you may not feel they're good answers
17 and I think they're good answers as a
18 businessman, that the reason that I'm willing
19 to pay money for Howard Stern is because I
20 have exclusivity.

21 I don't get exclusivity from the
22 music business that you can hear music on

1 from SoundExchange than we're getting from
2 these content partners. And that was sort of
3 what I was trying to -- the point that I was
4 trying to make.

5 CHIEF JUDGE SLEDGE: That's the
6 reason we're having some confusion with what
7 you're saying is because in your statements
8 and answers to questions that Mr. Joseph,
9 you're not making a distinction of the
10 different rights that you're talking about.

11 THE WITNESS: I believe that in my
12 written testimony I have provided you with
13 examples of the types of rights. And if you'd
14 like, you know, I'd be happy to start going
15 through some of them as I can recall them and
16 happy to try to give you more color on it if
17 I haven't done a good enough job on it. But
18 you know, as I said, you know, Howard Stern
19 allows us, you know, to use his photograph at
20 point of sale, you know.

21 He is exclusive to us. He is
22 going out promoting us on other venues,

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1 calling attention to us. You know, he is, as
2 I said, unavailable anyplace else, so you
3 know, those are -- we can run advertising
4 during that Howard Stern show and not
5 disadvantage ourselves because Howard is not
6 available for free with commercials.

7 You know, that if Howard were
8 available for free, then how could we be
9 charging for it. You know, so again, I was
10 trying to give you just sort of a snapshot of
11 the generalities. If, in fact, there's more
12 specifics, I'd be happy to try to answer them.

13 BY MR. JOSEPH:

14 Q Mr. Karmazin, just curious, do you
15 happen to know whether Dr. Pelcovits is saying
16 that you should actually be paying the same
17 for your non-music programming where you get
18 all these additional rights as you do for your
19 music programming where you don't get all
20 these additional rights?

21 MR. HANDZO: I'm just going to
22 object. This testifying about what Dr.

1 THE WITNESS: Well, I'm not sure,
2 your Honor, that there is any music content
3 that we get from SoundExchange that can't be
4 provided by anyone else. In other words, we
5 do things to the music and maybe those things
6 might be unique, but it is nothing that
7 SoundExchange gives us that can't be found
8 anywhere else.

9 So as an example, if we have a
10 channel that you know, plays a certain type of
11 music, there's nothing that precludes any
12 terrestrial radio station or HD radio station
13 from playing that same music.

14 JUDGE ROBERTS: Let's explore that
15 a second. You're from the New York area, yes?

16 THE WITNESS: Yes.

17 JUDGE ROBERTS: What radio station
18 can I turn on in the New York area where I'm
19 going to get New Wave music all the time?

20 THE WITNESS: Well, let's assume
21 for this argument okay, there's none, okay,
22 because it --

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1 Pelcovits is thinking or saying, I mean,
2 whatever Dr. Pelcovits has said is in the
3 record and it's not --

4 MR. JOSEPH: I'll withdraw the
5 question.

6 JUDGE ROBERTS: Before you ask him
7 the next question, Mr. Joseph, Mr. Karmazin,
8 you mentioned exclusivity and actually that
9 was probably the biggest question I had for
10 you. And I'm looking at page 1 of your
11 testimony. And in paragraph 2, in the bullet
12 points, the very first bullet point, you say
13 that you're providing testimony on the value
14 of non-music audio content that listeners
15 cannot obtain anywhere else.

16 What is the value of music content
17 that listeners can't provide anywhere --
18 cannot be --

19 THE WITNESS: Can't obtain, your
20 Honor?

21 JUDGE ROBERTS: Yes, can't obtain
22 anywhere else.

1 JUDGE ROBERTS: As a radio man,
2 I'm asking you.

3 THE WITNESS: Well, no, I'm saying
4 there's 120 radio stations including suburban
5 stations and college radio stations that are
6 available, so I believe there are stations
7 that can get it, WFUV in Fordham University.
8 I mean, there are stations --

9 JUDGE ROBERTS: That I could get
10 it all the time.

11 THE WITNESS: But let me take the
12 argument, because I'm not an expert on every
13 radio station in New York but let me say this
14 to you, there's nothing that stops any radio
15 station in New York City that believed there
16 was a market or a business opportunity,
17 nothing stops them from doing exactly what you
18 said. The fact that no one has done it --

19 JUDGE ROBERTS: That may be true,
20 but I'm really more concerned not with what
21 people might do or could do as what they are
22 doing.

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1 THE WITNESS: But they have the
2 ability to do it. In other words, I don't
3 have an exclusivity that says, "Okay,
4 SoundExchange as part of this agreement is
5 saying we have the rights to be exclusive for
6 New Wave music". We're not getting that
7 right.

8 JUDGE ROBERTS: Well, you may not
9 have de jure exclusivity, but don't you have
10 de facto exclusivity?

11 THE WITNESS: No, because if I was
12 in terrestrial radio and I believed that
13 instead of playing rap music, okay, there is
14 a better audience for playing that, in 30
15 minutes, as long as it takes me to take those
16 CDs, you know, that SoundExchange provides the
17 radio station, I can change that format. I
18 can change that format any time I wanted to.

19 JUDGE ROBERTS: Maybe you can do
20 that, but my question again to you is, is that
21 actually happening in the instance of the New
22 York area? And I grew up outside the New York

1 the point being that there is, you know, 200
2 plus markets in the United States. So if New
3 Wave music -- I've spent some time in Los
4 Angeles. There's a station called KROC, you
5 know, in Los Angeles. They play a lot of New
6 Wave music. HTZ plays a lot of it. But the -
7 -

8 JUDGE ROBERTS: I'll have to
9 remember that next time I'm in Los Angeles.

10 THE WITNESS: Well, okay, good,
11 but the sense for me is that in this
12 proceeding, what we're saying is what is
13 SoundExchange giving us? And all I was trying
14 to do was to differentiate because a lot has
15 been talked about while -- you know, if you
16 pay Howard Stern this much money, and you pay
17 NASCAR this much money, well, then you should
18 be paying us something, right? And I agree
19 something for sure, right?

20 But the sense is I was just trying
21 to highlight the differences between why we
22 think, as business people it's worth paying

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1 area and I'm pretty sure that there -- and
2 when I drive through there all the time, there
3 is no radio station that I can turn on and get
4 New Wave music all the time.

5 THE WITNESS: So let me -- since
6 you mentioned New York, let me give you a
7 great example. CBS radio goes through a
8 management change. They decide that there's
9 an oldies station, so you must have heard of
10 WCBS FM if you're from New York, right? It
11 was an oldies radio station.

12 They said, "Do you know what, we
13 don't like the demographics of this any more.
14 So we're going to take that station off the
15 air and we're going to replace it with a
16 station that we're going to call JACK".

17 JUDGE ROBERTS: It happens all the
18 time.

19 THE WITNESS: Okay, and by the
20 way, and by the way, that station now has
21 come back. WCBS FM is now back as an oldies
22 station. It's a different oldies station. So

1 for these rights and it's worth paying less
2 money when we have less rights. More rights
3 gets you more money. Less rights gets you
4 less money.

5 JUDGE ROBERTS: I understand the
6 focus of your testimony. It's just I didn't
7 mean to cut off Judge Wisniewski. It's just
8 that that sentence there on page 1 that
9 listeners cannot obtain anywhere else. I can
10 tell you in the Washington area there is no
11 radio station I can turn on and listen to New
12 Wave music all the time. There's no station
13 that I can turn on and listen to heavy metal
14 all the time. There's no station that I can
15 no longer turn on and listen to classic vinyl
16 all the time, now that 94.7 has changed their
17 format and that obtains for a number of
18 channels that are exclusively music. There's
19 no station I can turn onto and listen to just
20 Music Jam, such as what Sirius offers.

21 And I'm just wondering about the
22 statement that listeners cannot obtain

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1 anywhere else. I can't obtain it anywhere
2 else unless as I think you've heard me say,
3 I'm a Sirius subscriber. I put on my Sirius
4 satellite radio and I tune it to that channel.

5 THE WITNESS: Well but the
6 statement is correct, okay. It's because of
7 the fact that any time --

8 JUDGE ROBERTS: To me that's
9 exclusivity.

10 THE WITNESS: To me it's not,
11 because how could I pay for something and then
12 tomorrow not have it? What happens if --
13 let's assume I decided to buy a radio station
14 in New York City and make it a New Wave radio
15 station. Would -- then what happens? Am I
16 still paying the same amount of money if I
17 don't have exclusivity?

18 JUDGE WISNIEWSKI: Mr. Karmazin,
19 isn't it simply a question of a fallacy of
20 composition? Essentially, you're talking
21 about individual markets as compared to a
22 national market here. So the fact that

1 not giving us promotion. They're not giving
2 us exclusivity. And they're not giving us the
3 rights of knowing that we have it alone.

4 I mean, I may have it alone, I
5 mean, one day a station --

6 JUDGE WISNIEWSKI: I'm glad you're
7 not --

8 THE WITNESS: Oh, no, I'm trying
9 not to be difficult. Please understand. I
10 mean, I'm trying to be as candid. Classic
11 music is not -- classic music used to exist in
12 Washington, DC. Okay, today it doesn't exist
13 on terrestrial radio.

14 JUDGE WISNIEWSKI: I don't like
15 that.

16 THE WITNESS: There you go, I rest
17 my case.

18 CHIEF JUDGE SLEDGE: I should
19 observe that I think this discussion has been
20 fruitful because it strikes me that when I
21 first asked you a question, I was hearing you
22 say that it's not fair to pay a royalty rate

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1 someone may decide tomorrow to program the New
2 Wave music in New York City, that might effect
3 you somewhat, but it doesn't effect you in
4 terms of your decision because across the
5 country they haven't done that; whereas, you
6 have an audience that's a national audience
7 and therefore, a critical mass for that type
8 of music, whereas other stations don't.

9 THE WITNESS: I disagree on that.
10 So let me give you a different example.
11 Country music is one of the most popular music
12 formats on radio stations today, but there's
13 none in New York. It is national. You can
14 get country music in virtually every market in
15 the United States but it just doesn't -- you
16 don't get it in New York City.

17 I'm -- I think this is about how
18 much money should we pay for the rights we're
19 getting? The rights they're giving us,
20 whether I have de facto exclusivity, they're
21 not giving us that right, and they're not
22 assuring us that we have that right. They're

1 that is comparable to a branded non-music
2 content and then you talked about all the
3 rights you were getting from the non-music
4 content. And as we've had this discussion,
5 I'm hearing you say that we should only pay in
6 relation to the rights we get.

7 And that if we're getting
8 restricted rights of sound recordings with no
9 other rights, then that difference in rights
10 ought to be considered when the comparison
11 with non-music content is being made.

12 BY MR. JOSEPH:

13 Q Mr. Karmazin, let's just briefly
14 look at the impact that these non-music
15 programming deals have had on some of Sirius'
16 key metrics. Let me ask you to turn to
17 paragraph 25 of your written rebuttal
18 testimony. What does the table in that
19 paragraph, which actually appears on page 11
20 show?

21 A The left-hand column has a bunch
22 of dates and the dates coincide with events

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1 like the days we've announced deals. It will
2 show the number of subscribers that Sirius the
3 day prior to announcing it, so as an example,
4 just to make the reading easier, that you
5 know, prior to announcing the NFL deal, we had
6 214,000 and at the end of the first quarter we
7 had six and a half million subscribers.

8 The following column represents
9 what is MPD retail market share and MPD is a
10 company that measures the satellite radio
11 retail sales of products. As your Honors
12 know, in order to get Sirius radio, you need
13 to buy a radio. And what this does is this
14 takes the share that we had of that category
15 prior to these events and to where it is
16 today. So you'll see that Sirius had 31
17 percent of the satellite radio market retail
18 sales before these major content deals were
19 announced and in the recent on that's focused
20 here, we had 56 percent.

21 So you could see that the increase
22 that was there and that last comment is the

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1 same thing about unaided brand awareness going
2 from 10 percent to over 52 percent. And, you
3 know, obviously, during this period of time XM
4 and Sirius continued to have the music
5 channels that we had prior to these
6 announcements as well and I think in my
7 opinion, it demonstrates the impact that
8 attracting this content has had on our brand
9 awareness and our share of products at retail.

10 Q Let me ask you to turn to Exhibit
11 56 of your testimony which is in one of the
12 tabs behind. Can you tell the Court what this
13 chart shows?

14 A Sure, I don't want to get
15 redundant but what this chart just graphically
16 demonstrates what I just talked about which is
17 that, you know, take a look when we started
18 our service in 2002, where we were with
19 subscribers and you know, graphically depicts
20 where we were as of the end of the first
21 quarter of '07.

22 Q Now, you're saying that the non-

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1 music programming you've described generated
2 all these subscribers shown on that chart?

3 A Yeah, but we don't have the
4 ability of being able to know what has gotten
5 us those subscribers. You know, what we know
6 is that there has been a dramatic shift
7 towards Sirius since Sirius got these, you
8 know, terrific branded content. That we had
9 the music channels before. That hasn't
10 changed, so you know, I'm under oath, so I'm
11 not able to tell you exactly what the reason
12 was, but I believe that these are branded
13 content, are branded non-music content is what
14 drove the shift to Sirius and the dramatic
15 subscription growth.

16 Q Let's change subjects now, if we
17 might. Mr. Karmazin, paragraph --

18 JUDGE WISNIEWSKI: Before you do
19 that, I have a quick question for Mr.
20 Karmazin. Since you say you can't really
21 parse the subscriber growth, and wouldn't it
22 be difficult to try to identify the revenues

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1 that are associated with the various benefits
2 you've discussed?

3 THE WITNESS: Well, no. As an
4 example, we could tell you what the
5 advertising revenues are because obviously,
6 the advertising revenues are not coming from
7 the music station. I don't know what went on
8 in testimony but we've gotten a great deal of
9 value from the promotion. You know, we could
10 assess the value of what the promotion was.

11 JUDGE WISNIEWSKI: What portion of
12 your total revenues today can you attribute to
13 Howard Stern?

14 THE WITNESS: Well, I can't tell
15 you what percentage of our subscriber revenue
16 that I can attribute to Howard Stern because
17 I can't tell you how many subscribers we got
18 because of Howard Stern.

19 JUDGE WISNIEWSKI: That was my
20 only point, Mr. Karmazin.

21 THE WITNESS: Then you've got it.

22 BY MR. JOSEPH:

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1 Q In paragraph 27 of your written
2 rebuttal testimony, I don't think you're going
3 to need to turn there, but you discuss Sirius'
4 current financial picture. Could you describe
5 that picture for the court?

6 A Yeah. I think I mentioned the
7 last time, I joined the company to make this
8 company a profitable company. You know, there
9 was a time when people were focused on, you
10 know, launching the satellites and attracting
11 content and talent and I came to make this
12 company profitable. And you know, I think
13 that we've made a great deal of progress.

14 You know, we are performing well,
15 insofar as addition of subs we have seen a
16 slow-down in our after market or retail sales.
17 It's been widely reported. You know, we think
18 that that's a function, you know, of
19 competition and other products that are out
20 there but we've, you know, seen an
21 acceleration of our OEM business.

22 You know, that's good for us but

1 profitable company one day.

2 Q How will the fee for sound
3 recording performance rights as set in this
4 proceeding effect your business?

5 A Well, if, in fact, the court were
6 to rule with a number, you know, resembling
7 something that we submitted, I believe that
8 we'll be able to still achieve our goals. You
9 know, I think that obviously, we're aware and
10 prepared to pay a royalty to SoundExchange for
11 what they provide us and if, in fact, it's
12 along the lines our proposal, that we will not
13 be effected. You know, I will not be saying
14 that the reason that we didn't achieve our
15 goals is because of the SoundExchange rate if
16 it's in our area. And it won't be an excuse
17 for not achieving it.

18 If, in fact, it's different than
19 that, depending on how different it is, could
20 have, you know, different kinds of, you know,
21 consequences, that could range from being, you
22 know, significant to devastating depending

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1 for the fact that there's a lot more costs.
2 There's higher costs associated when we
3 attract a subscriber from the OEM channel
4 because the automobile company share in that
5 with higher subscriber acquisition costs. But
6 you know, we're growing subscribers. The
7 slow-down has caused us to withdraw the
8 guidance that we had previously given.

9 There was a time that I believe
10 that in 2007 we would be free cash flow
11 positive. Not that free cash flow is the end
12 all for making a determination of how
13 successful a business is, but we think that
14 it's a good first step and where we thought
15 that that would happen in 2007, the analysts
16 are not saying that that's likely to happen
17 for the first time in 2009. So I'm very
18 optimistic.

19 I believe that the company could
20 be a successful company. You know, we have a
21 lot of challenges and a lot of competition,
22 but I believe that you know, Sirius will be a

1 upon what it is that is being talked about.
2 You know, I've calculated the difference
3 between our proposal and SoundExchange's and
4 it just huge and the fact is that our business
5 -- you know, I've gone through every line
6 item, you know, of the P&O. I mean, someone
7 is serving bottled water here. I'm not
8 serving bottled water in my offices any more.

9 You know, we're looking at
10 watching expenses that I think we've done a
11 really good job of watching our expenses in
12 all areas that we can control. And if, in
13 fact, a content deal came up, we're going to
14 make a decision as to whether or not we should
15 or shouldn't renew that content deal at the
16 price that we're talking about.

17 But if, in fact, we are going to
18 have a rate that is going to you know, be
19 substantially different, you know, than what
20 we've proposed, that could present grave
21 problems for the company.

22 CHIEF JUDGE SLEDGE: Mr. Karmazin,

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1 you just renew your chances to get on McNeal
2 Layer (phonetic) as an environmental friendly
3 company as a result of eliminating bottled
4 water.

5 THE WITNESS: Your Honor, if I
6 would get on McNeal Layer, I would tell them
7 that it was for green reasons and not
8 financial reasons but I'd have my finger
9 crossed when I told them.

10 JUDGE WISNIEWSKI: I take it you
11 haven't investigated that issue with the
12 various contractors you might employ.

13 THE WITNESS: Well, no, I mean --

14 JUDGE WISNIEWSKI: -- their
15 bottled water.

16 THE WITNESS: You know, I've heard
17 enough about what we're paying. You know, I
18 will tell you that -- again, I didn't make
19 Howard Stern's deal, so there's no pride of
20 authorship. I wasn't at the company then. I
21 believe that it turned out to be a great deal
22 because it is possible that if Howard Stern

1 numbers of '09 are correct, so, you know, I
2 guess the first year is '07, so '07, '08,
3 nothing, free cash flow, hopefully, you know,
4 in '09 and then improvement in those
5 subsequent years.

6 And that's using a rate, you know,
7 that is around the rate that we believed the
8 Court should rule on for us.

9 Q You were just asked about another
10 subject. There's been talk in this courtroom
11 about the merger with XM. How do you assess
12 the likelihood of that merger?

13 A Well, I've been a proponent of it,
14 you know, some have called the architect. And
15 I believe that the merger should be allowed to
16 take place. Since we announced the merger,
17 February 19th, I've had four congressional
18 hearings, you know, we've had 70 plus
19 congressmen, a bunch of senators, write
20 letters to the Justice Department and to the
21 FCC saying that the merger should not be
22 allowed to proceed.

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1 and the NFL deals were not done, that our OEM
2 deals would not have been done.

3 JUDGE WISNIEWSKI: That wasn't the
4 contract I was referring to, Mr. Karmazin.

5 THE WITNESS: Oh, that contractor,
6 I agree with you. That contractor is
7 unconscionable and not justified in what we're
8 paying for them, but --

9 BY MR. JOSEPH:

10 Q You mentioned -- I'm speechless.
11 (Laughter)

12 You mentioned the SoundExchange
13 fee, looking only at the SoundExchange fee,
14 how would that fit in with Sirius's current
15 business plan?

16 A Well, I mean, I think that's what
17 I was referring to. I mean, I believe that
18 with our current, you know, business plan, you
19 know, it contemplates, you know, that there is
20 a fee to SoundExchange and that, you know, we
21 will over the term of this deal, find our way.
22 You know, again, let's assume those analysts'

1 The regulators at the FCC have
2 talked about how it is a high hurdle that we
3 would have to overcome in order to get the
4 merger approved. We're fighting a very
5 powerful lobbying organization in the NAD and
6 in spite of my beliefs, Wall Street doesn't
7 believe it's going to happen because Wall
8 Street has given the stocks a haircut from the
9 time we announced the merger and you know,
10 various analysts have projected, you know that
11 Wall Street is saying that there's a 30
12 percent, 40 percent chance based on where the
13 stock prices are sitting. I can't interpret
14 that so I really can't predict what the
15 regulators are going to do. I think they
16 should approve it but you know based on the
17 press, I'm a minority.

18 Q Let me ask you to turn to a final
19 subject. In paragraphs 31 and 32 of your
20 testimony, again, I don't think you need to
21 look at it, you may if you'd like to, you
22 discuss what you believe is the appropriate

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1 basis on which a fee should be charged for the
2 sound recording performance right at a per
3 play or per use based fee. Why do you
4 believe that that's the appropriate fee
5 metric?

6 A I believe that the idea of paying
7 SoundExchange a percentage of our revenues, of
8 our total revenues, is not a fair basis for it
9 because there is a substantial amount of
10 revenues that we generate that SoundExchange
11 is not contributing toward it.

12 And it's my belief that an
13 appropriate way of compensating SoundExchange
14 for the value that they provide us is on a per
15 play basis and what that gives us the ability
16 to do is to add music, subtract music based
17 upon what the value is of that music. And you
18 know, I believe that that is the appropriate
19 way to reward SoundExchange for what they're
20 contributing to us.

21 MR. JOSEPH: Thank you, Mr.
22 Karmazin. I have not further questions on

1 Q But you can't get all of the NFL
2 games on terrestrial radio in DC, right?

3 A Correct.

4 Q And you pointed that out as a
5 benefit that you get from the NFL deal, right?

6 A Correct.

7 Q Okay. And that benefit is
8 significant in your view; is that right?

9 A Our relationship with the NFL is
10 significant.

11 Q And the fact that in the DC
12 market, you can only get the NFL game -- the
13 only NFL game you get is the Redskins and on
14 Sirius you can get everything, correct?

15 A Yes.

16 Q Okay, now it is a fact, is it not,
17 that nothing legally stops any terrestrial
18 radio station in DC from broadcasting any NFL
19 game it wants, right?

20 A Yeah, the owners, I can't tell you
21 whether or not it's in the by-laws but if, as
22 an example, Jerry Jones and Bob Kraft, Jerry

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1 direct subject to redirect.

2 CHIEF JUDGE SLEDGE: All right,
3 we'll take a 10-minute recess.

4 (A short recess was taken at 3:22
5 p.m.)

6 (On the record at 3:30 p.m.)

7 CHIEF JUDGE SLEDGE: Thank you,
8 we'll come to order. Any cross examination?

9 MR. HANDZO: Yes, thank you, your
10 Honor.

11 CROSS EXAMINATION

12 BY MR. HANDZO:

13 Q Good afternoon, Mr. Karmazin. Mr.
14 Karmazin, in response to some questions from
15 Judge Sledge about the definition of
16 exclusivity, I think you gave as an example
17 the NFL. Do you recall that?

18 A Yes, sir.

19 Q And you pointed out that you can
20 get, if you live in DC, a Redskins' game on
21 terrestrial radio, right?

22 A Yes, sir.

1 Jones from the Dallas Cowboys or Bob Kraft,
2 decided that they would allow stations in
3 Washington, DC to broadcast the Cowboys' games
4 and the Patriots' games. That would happen
5 reciprocal and totally undermine -- and I've
6 been part of the NFL where those discussions
7 have taken place, and that is something that
8 has not happened for the most part, in the
9 history of the NFL.

10 There's a Monday night game of the
11 week, but they're not impinging upon each
12 other's territories because they believe that
13 that would interfere with their business.

14 Q The fact of the matter is, Mr.
15 Karmazin, Sirius' contract with the NFL
16 expressly gives the NFL the right to broadcast
17 any and every game it wants on terrestrial
18 radio, right?

19 A Yes.

20 Q Okay, so there is no contractual
21 prohibition, in your contract with the NFL
22 that prohibits them from letting terrestrial

1 radio in DC broadcast all of the games, right?
 2 A You're correct in that regard,
 3 sir, yes.
 4 Q Thank you.
 5 CHIEF JUDGE SLEDGE: But you were
 6 responding that the radio stations cannot
 7 broadcast NFL which was the earlier question
 8 without restriction.
 9 THE WITNESS: Well, your Honor,
 10 what I was trying -- obviously, we broadcast
 11 32 games so that would mean, you know, that
 12 there would have to be 32 radio stations, you
 13 know, in Washington DC that would all say that
 14 they wanted to broadcast the game because
 15 they're either at 1:00 o'clock or at 4:00
 16 o'clock, so you know, it just hasn't ever
 17 happen and it's not going to happen but, you
 18 know, the attorney was correct in what the
 19 contract said.
 20 BY MR. HANDZO:
 21 Q Now, Mr. Karmazin, in paragraphs
 22 28 through 30 of your written testimony, you

1 Q Right?
 2 A Can you repeat the question?
 3 Q Sure, let me just back up. I
 4 mean, you talked generally in your testimony
 5 about the new competition that you face,
 6 right?
 7 A Well, do I talk about the new
 8 competition or do I talk about the
 9 competition?
 10 Q Well, in paragraph 29 you talk
 11 about declining retail sales is likely due to
 12 new competition. Do you see that?
 13 A Yes.
 14 Q Okay.
 15 A And I think what I'm referring to
 16 is that there's been a slow-down at retail,
 17 that the -- what has been introduced recently
 18 has been you know, a hot new consumer
 19 electronics product, you know, Apple's iPhone
 20 which got a lot of attention and also HD
 21 radios are rolling out substantially, but we
 22 obviously compete with terrestrial radio and

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1 talk about the new competition that Sirius
 2 faces I the marketplace, correct?
 3 A Yes.
 4 Q And you say that competition
 5 includes things like iPhones that provide
 6 internet access and streaming music services,
 7 right?
 8 A Yes.
 9 Q Okay, and that competition also
 10 includes internet radio, iPods, MP3 players,
 11 CD players, isn't that right?
 12 A Right.
 13 MR. JOSEPH: Excuse me, your
 14 Honor, is Mr. Handzo asking whether the
 15 testimony talks about internet radios,
 16 streaming, radios to cell phones or is he
 17 asking independent, because I thought the
 18 context was, your testimony talked to that.
 19 MR. HANDZO: No, what I was asking
 20 was, generally, the competition includes the
 21 things that I just listed.
 22 BY MR. HANDZO:

1 other things, but this happened to have been
 2 highlighted as some of the beliefs we have as
 3 to why the retail sales have been slowing
 4 down.
 5 Q Okay, and in addition to the
 6 things that you list in your testimony, you
 7 would agree that you compete with internet
 8 radio, MP3 players and CD players, correct?
 9 A Well, I know that these are like,
 10 you know, I don't want to use the word "tricky
 11 questions", I just want to make sure that you
 12 and I are talking about the same thing, is
 13 that we compete for time with a lot of these
 14 products, right. So that if you're listening
 15 to, you know, satellite radio, you might not
 16 be listening to an am radio or at that moment
 17 in time, you're not listening to an MP3
 18 player. So in that connection, if that's what
 19 you mean by competing, yes, sir.
 20 Q And to the extent that satellite
 21 radio competes with those things as you use
 22 that word, satellite radio can be a substitute

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1 for those other services, correct?

2 A I'm not sure I know what you're
3 referring to as a substitute, but as an
4 example, we don't have the ability to do a lot
5 of things that they have, so I don't think
6 it's a substitute in the pure sense of
7 substitute. So as an example, if you want to
8 listen to a New Wave station, you know, and
9 you have all your New Wave music on your iPod
10 and that we are not playing that music, you
11 know, then we're not necessarily a substitute.

12 Q Well, Mr. Karmazin, isn't it fact
13 that when the use of satellite radio goes up,
14 the use of MP3s and internet radio and CD
15 players goes down?

16 A I don't have that data other than
17 some information that we've said of what
18 happened in a car when that occurs, so if
19 that's what you're referring to, sir, I'm
20 familiar with that information but I'm not
21 sure in general that's the case.

22 Q Well, isn't it the case that that

1 Q Mr. Karmazin, you talked earlier
2 in response to Mr. Joseph's questions about
3 the proposed merger between XM and Sirius,
4 right? And I think you indicated that you
5 actually are in some ways the person who
6 spearheaded that merger effort, right?

7 A I am.

8 Q Okay, and in order for that merger
9 to happen, XM and Sirius need to win
10 regulatory approval from the FCC, right?

11 A Yes.

12 Q Okay, and to that end, Sirius --

13 A And just -- and the Department of
14 Justice, two regulatory agencies.

15 Q True, to the end of getting
16 regulatory approval, Sirius and XM have made
17 filings with the FCC arguing that satellite
18 radio competes with and substitutes for MP3s
19 and internet radio and cell phones and CDs,
20 isn't that right?

21 CHIEF JUDGE SLEDGE: Mr. Joseph?

22 MR. JOSEPH: Your Honor, I'd

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1 is the position that Sirius has taken in the
2 FCC, that when use of satellite radio goes up,
3 use of these other products and services goes
4 down?

5 A I don't know whether or not Sirius
6 has taken that position. All we've said is
7 that at the FCC and here, it's consistent, I
8 would say to you that there's an audio
9 entertainment market that we compete with.
10 You know, there's products that do different
11 things, so, you know, as an example, if I want
12 Bruce Springsteen on and I want to listen to
13 Bruce Springsteen, I turn on satellite radio,
14 I have to wait for that Bruce Springsteen song
15 to come on.

16 If, in fact, I am a Bruce
17 Springsteen fan, and I have a CD or I have an
18 MP3 player, I can play that Bruce Springsteen
19 song any time I want to. So getting into is
20 one a substitute or not, I don't know but I
21 think all of these things are part of a
22 general audio entertainment marketplace.

1 object. This is getting beyond the scope of
2 Mr. Karmazin's direct testimony. He talks
3 about competition in the retail marketplace,
4 talking about the iPhones. Mr. Handzo is now
5 trying to expand that into internet, radio and
6 other subjects that Mr. Karmazin has not
7 testified about in his written direct
8 testimony and did not testify about on direct.

9 CHIEF JUDGE SLEDGE: Overruled.

10 BY MR. HANDZO:

11 Q Mr. Karmazin, let me show you what
12 we've marked as SoundExchange Exhibit 106.
13 And have you had a chance to just glance at
14 that?

15 (SoundExchange Exhibit
16 106 was marked for
17 identification.)

18 (Witness proffered document.)

19 A Yes.

20 Q Okay, that document -- that
21 document is the XM/Sirius joint filing with
22 the FCC in connection with the merger, right?

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1 A I don't want to be a stickler, but
2 is this the time line? I mean, is this the --
3 I haven't gotten to that page, so if this is
4 the one that is signed, as I'm sure it is --

5 MR. JOSEPH: Your Honor, I just
6 would ask that the witness be given a
7 reasonable opportunity to review the document.
8 Mr. Handzo handed him what looks like about
9 400 pages and asks him, "is this the
10 document", and I think he should have a
11 reasonable time to review it.

12 MR. HANDZO: I'm happy to let him
13 take a look.

14 (Pause.)

15 THE WITNESS: Mr. Handzo, were you
16 able to find that page or was it, in fact --

17 BY MR. HANDZO:

18 Q If you'd turn to page 103.

19 A Page 103? Yes.

20 Q So this is the merger filing,
21 correct?

22 A It appears to be to me, yes.

1 rules state that parties must exchange
2 exhibits to be admitted into evidence, offered
3 into evidence at least one day in advance of
4 being offered. This was not exchanged. There
5 is a provision -- that by the way is Rule
6 Section 351.9(b). 351.10(g) does permit the
7 use of exhibits that have not been exchanged
8 on cross examination but solely to impeach the
9 witness' direct testimony and there's no use
10 or no indication that this is going to be used
11 for impeachment.

12 CHIEF JUDGE SLEDGE: Has this not
13 already been introduced into evidence?

14 MR. JOSEPH: No, your Honor, not
15 to my knowledge. This was offered previously
16 as SoundExchange Exhibit 75 in a different
17 form, an unredacted confidential form and
18 SoundExchange, as I understand it, I
19 understand it withdrew the proffer. This is
20 now the public redacted version of the
21 document, at least it appears to be. It
22 actually appears to be multiple documents.

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1 Q Okay. And if you turn to page --

2 CHIEF JUDGE SLEDGE: The way that
3 question is phrased, it sounds like there's
4 been on merger filing. That's a little
5 surprising to me.

6 MR. HANDZO: That's a fair point.
7 This is the -- these are the reply comments of
8 Sirius and XM.

9 BY MR. HANDZO:

10 Q Is that right?

11 A Yes.

12 Q And this was filed with the FCC on
13 July 24, 2007.

14 A Yes.

15 Q Okay. Now, if you'll turn to page
16 35 --

17 MR. HANDZO: Actually, before I do
18 that, your Honor, I'm going to move the
19 admission of SoundExchange Trial Exhibit 106.

20 CHIEF JUDGE SLEDGE: Any objection
21 to Exhibit 106?

22 MR. JOSEPH: Yes, your Honor. The

1 It appears to be a filing plus an
2 attached report from an economist.

3 CHIEF JUDGE SLEDGE: Was it not
4 admitted, Mr. Handzo?

5 MR. HANDZO: Your Honor, I believe
6 that one portion of it was admitted. There
7 was a declaration by David Frear which is a
8 part of this and that was admitted.

9 CHIEF JUDGE SLEDGE: All right.

10 MR. HANDZO: I believe the other -
11 - the rest of it was not. The offer was not
12 pursued so the court didn't rule on it.

13 CHIEF JUDGE SLEDGE: All right,
14 Mr. Handzo, response to the objection?

15 MR. HANDZO: Your Honor, this
16 clearly relates to the testimony which Mr.
17 Joseph himself elicited from Mr. Karmazin
18 about the merger and about the competitive
19 marketplace. Now, when I asked him about that
20 competitive marketplace, and about the
21 competition and substitution which he has
22 talked about, he said, "Oh, I don't think that

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1 that competition means that there's
 2 substitution." This document does impeach
 3 that because this document, which Sirius
 4 submitted to the FCC goes on at great length
 5 to talk about how the competitive marketplace
 6 in which XM and Sirius function, is one in
 7 which they compete with these various other
 8 services that he's identified and they say
 9 that the evidence of that is that there is
 10 substitution and that as the use of XM and
 11 Sirius goes up, it substitutes for these other
 12 devices and uses which is precisely what Mr.
 13 Karmazin has just said he thinks doesn't
 14 happen.

15 CHIEF JUDGE SLEDGE: I'll reserve
 16 ruling until hearing more testimony.

17 MR. HANDZO: All right.

18 BY MR. HANDZO:

19 Q Mr. Karmazin, if you could turn to
 20 page 35 of this document --

21 JUDGE WISNIEWSKI: The first time
 22 35 appears in this document?

1 or was that the question?

2 Q That was the question.

3 A Oh, okay.

4 Q Turn to page 37. And in the first
 5 full paragraph, do you see a line which talks
 6 about the XM and Sirius studies which
 7 demonstrate that when people activate a
 8 satellite radio subscription, they substitute
 9 satellite radio programming for other audio
 10 entertainment and to which they've
 11 historically listened?

12 A Yes.

13 MR. JOSEPH: Your Honor, I object
 14 to that question and move to strike the
 15 response. That's not impeaching. That's
 16 precisely what Mr. Karmazin testified to with
 17 respect to time spent listening.

18 CHIEF JUDGE SLEDGE: I hadn't
 19 found what's being referred to yet.

20 MR. HANDZO: I'm sorry, your
 21 Honor, it was on page 37.

22 CHIEF JUDGE SLEDGE: I'm on page

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1 MR. HANDZO: The first time 35
 2 appears in this document, yes.

3 JUDGE WISNIEWSKI: Thank you.

4 BY MR. HANDZO:

5 Q Do you have it, Mr. Karmazin?

6 A I do.

7 Q Okay, and in the second full
 8 paragraph, second line, do you see how the
 9 document discusses that the outer boundaries
 10 of the relevant market, the key is to identify
 11 products that are reasonable substitutes?

12 A Yes.

13 Q Okay, and it goes on to identify
 14 those products that are reasonable
 15 substitutes.

16 A Yes.

17 Q Including a number of things that
 18 I asked you about.

19 A Yes.

20 Q Okay. And if you turn to page --

21 A Is that the question? I mean, I
 22 just want to make sure, was there a question

1 37. The second line, is that what you're
 2 referring to?

3 MR. HANDZO: No, I'm sorry, the
 4 first full paragraph, your Honor, that starts,
 5 "There already exists".

6 CHIEF JUDGE SLEDGE: All right.

7 MR. HANDZO: That's the part I was
 8 referring to and what Mr. Karmazin had said,
 9 first of all was he said there's --

10 CHIEF JUDGE SLEDGE: Objection
 11 overruled.

12 MR. HANDZO: Okay.

13 BY MR. HANDZO:

14 Q Mr. Karmazin, let me ask you to
 15 turn to pages 57, starting at 57. And if you
 16 look at the following couple of pages through
 17 page 61, it identifies a number of the
 18 products with which satellite radio competes
 19 and for which it substitutes. Do you see
 20 that?

21 A Yes.

22 Q Okay, and among other things, it

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1 identifies internet radio and internet radio
2 players and digital music services and digital
3 media players and wireless phones as products
4 for which satellite radio -- with which
5 satellite radio competes and for which it
6 substitutes.

7 A If you're asking me if that's what
8 it says, that's what it says.

9 Q Okay. Now, if you turn to page
10 103, you'll see that's the end of the first
11 document, do you see that?

12 A Yes.

13 Q And there's an Exhibit A then
14 attached after page 103.

15 A Yes.

16 Q Okay, and that is an economic
17 analysis performed by XM and Sirius'
18 consultants, CRA International.

19 A It was prepared by CRA.

20 Q And it was prepared by CRA for XM
21 and Sirius, correct?

22 A Yes.

1 Do you see that?

2 A Uh-huh.

3 Q Yes?

4 A Yes.

5 Q Okay. And then it goes on to talk
6 about how use of satellite radio, the more
7 people that use that, the less they use these
8 other products.

9 A The usage such as terrestrial
10 radio, goes down, is that what you're saying?

11 Q Yes.

12 A Yes, I see that.

13 MR. HANDZO: Your Honor, having
14 identified a number of the portions of this
15 document, though they're not the only portions
16 which address the issues that I was asking Mr.
17 Karmazin about, I would again, move the
18 admission of this document which relates
19 directly to his testimony and which addresses
20 the thing which he disagreed with which is
21 these products with which they say they
22 compete are in fact, substitutes as well.

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1 Q Now, if you turn to page 3 of that
2 Exhibit A, do you see in paragraph number 5
3 there, it says, "Sirius and XM complete in an
4 audio entertainment market not only with one
5 another but also with other forms of audio
6 entertainment products, do you see that?"

7 A Yes.

8 Q And it goes on to identify those
9 products as terrestrial radio, iPods and other
10 MP3 players, audio content enabled wireless
11 phones and the content and services listened
12 to on those devices; do you see that?

13 A Yeah, you left out both analogue
14 and HD radio, but yes.

15 Q Okay. But, yes?

16 A Yes.

17 Q Okay, and then skipping down to
18 the next paragraph, in the second sentence, it
19 says that, "Substantial usage and survey data
20 supports the conclusion that customers treat
21 satellite radio and other products as
22 reasonable substitutes in the broad market".

1 MR. JOSEPH: Your Honor, I'd renew
2 my objection. Again, in reference to Mr.
3 Karmazin's written testimony, he did not speak
4 of these issues on his oral direct testimony.
5 He spoke not of these issues. What Mr. Handzo
6 is trying to do is bootstrap other answers
7 that he's gotten from Mr. Karmazin which are,
8 in fact, consistent. Mr. Karmazin said that
9 there was substitution for listening time and
10 that we competed for listening time and I
11 haven't seen anything in this document that
12 he's pointed to that impeaches that.

13 This is about 400 pages of
14 material, a great deal of which is on other
15 subjects as well. The rules -- so I have that
16 objection. The rules require that relevant
17 and relevant matter -- exhibits that contain
18 relevant material and other material that is
19 not relevant or intended as evidence must be
20 plainly designated. There are no such
21 designations here.

22 And again, the only valid use of

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1 this document in this context in this
 2 courtroom today would be solely to impeach the
 3 witness' testimony so there's a great deal of
 4 material in here. First of all, I don't
 5 believe anything in here has impeached the
 6 witness but there's a great deal of material
 7 that clearly doesn't go to that subject. So
 8 I would renew my objection.

9 CHIEF JUDGE SLEDGE: The objection
 10 is overruled. It's admitted for the purpose of
 11 impeachment only.

12 (SoundExchange Exhibit
 13 106 marked for
 14 identification was
 15 received in evidence.)

16 BY MR. HANDZO:

17 Q Mr. Karmazin, let me go back to
 18 page 35 of this exhibit and I'm just going to
 19 ask you about the second line of the second
 20 paragraph, which reads, "All available
 21 evidence demonstrates that consumers have an
 22 abundance of reasonable substitutes for

1 THE WITNESS: I see the line.

2 BY MR. HANDZO:

3 Q Okay. And is that a correct
 4 statement?

5 A The issue for me when I see the
 6 words is that we compete with those medium.
 7 I don't know from a legal point of view or an
 8 antitrust point of view what, you know,
 9 substitute means. If you're asking me do I
 10 think that satellite radio is like a CD, well,
 11 obviously, it's not, right? I mean, a CD you
 12 could play it whenever you want to play it.
 13 It's very different than radio.

14 But if you're listening in a car
 15 to a CD at that moment in time, you're not
 16 listening to satellite radio. So I believe
 17 that all of those devices compete with
 18 satellite radio for time. You know, I mean,
 19 you're not listening to terrestrial radio at
 20 the same moment in time you're listening to
 21 satellite radio.

22 Q And my question, Mr. Karmazin is a

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1 satellite" --

2 A Excuse me.

3 Q I'm sorry, the --

4 A The second sentence?

5 Q Second sentence, I apologize.

6 A Okay, okay.

7 Q "All available evidence
 8 demonstrates that consumers have an abundance
 9 of reasonable substitutes for satellite radio
 10 including most directly terrestrial radio and
 11 HD radio as well as wireless phones, iPods and
 12 other MP3 players and internet radio and
 13 consumer choices are increasing rapidly over
 14 time". Do you see that line?

15 A I see that line.

16 Q Okay.

17 MR. JOSEPH: I'm sorry, your
 18 Honor, just so the record is clear, I believe
 19 Mr. Handzo is reading actually from the third
 20 sentence, not the second sentence.

21 MR. HANDZO: I apologize, that's
 22 correct.

1 little more specific. Wouldn't you also agree
 2 that all of those devices are substitutes for
 3 satellite radio?

4 A I do not -- are substitutes for
 5 satellite radio? If you want the
 6 functionality that those products offer.
 7 They're not the same. I mean, you know, we
 8 compete so there's no question that the
 9 marketplace is competitive but I don't think
 10 that anybody thinks that you know, Howard
 11 Stern is available on a CD. I don't think
 12 that anybody is listening to the NASCAR race,
 13 you know, that's going on live, on their MP3
 14 player.

15 Q Okay, but you would agree, would
 16 you not, that satellite radio competes with
 17 the services and products listed here in the
 18 sense that as satellite radio succeeds in
 19 attracting subscribers, those other products
 20 and services will lose customers?

21 A No, I couldn't disagree with you
 22 more. I mean, I can tell you that satellite

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1 radio has grown dramatically over the last
2 number of years and there's a thing called an
3 Apple iPod that has 100 million customers for
4 it and that came during the period of time
5 that satellite radio was there.

6 Q Isn't it exactly the point of this
7 filing with the FCC to argue that the market
8 should be defined broadly because satellite
9 radio competes with iPods and downloads and
10 CDs and internet radio and cell phones?

11 A No, the purpose of the filing with
12 the FCC, this is a reply comment to what other
13 people had said, but our purpose of filing at
14 the FCC is two-fold. One is to demonstrate
15 that if the merger is approved, it would not
16 be anti-competitive. That there are plenty of
17 choices for the consumer, that if there's
18 going to be one satellite radio company, that
19 if they don't want satellite radio, the
20 consumer will have lots and lots of choices.
21 So that's one of the purposes of it. And the
22 second purpose of the filing is to demonstrate

1 anything different than I've said for my whole
2 career. I've been talking about this and I've
3 been publicly talking about it. We compete
4 with all of these other devices. I'm saying
5 we compete with these devices. You want me to
6 say that a CD is the same thing as a satellite
7 radio and that's bizarre. It's just not.

8 BY MR. HANDZO:

9 Q Well, actually that's not exactly
10 what I want to you to say, Mr. Karmazin.

11 A Okay. Well, tell me what you want
12 me to say and I'll see if I can say it.

13 Q You'll say anything I want you to
14 say.

15 A I said I'll think about it. Let
16 me know.

17 Q Okay. Well, that's different.
18 That shortens things a lot. I am stating the
19 following proposition. I'm asking you to
20 agree or disagree. I'm not asking you to say
21 that CDs are the same as satellite radio. I'm
22 asking you to agree with or disagree with is

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1 that the merger is in the public interest and
2 we talked about that in the area of choice.

3 So, yes, if the merger is
4 approved, and there were only one satellite
5 radio company, we say the consumer is not hurt
6 because there is plenty of competitors to
7 satellite radio offering different things but
8 it's a robust market.

9 Q And is it your position then that
10 the -- that Sirius has not taken the position
11 with the FCC that satellite radio is a
12 substitute for internet radio, CDs, downloads,
13 iPods, cell phones?

14 CHIEF JUDGE SLEDGE: Mr. Joseph.

15 MR. JOSEPH: I object to the form
16 and use of the negative, double negative.

17 CHIEF JUDGE SLEDGE: Overruled.

18 THE WITNESS: No, I would not say
19 that. I'm saying that we -- When I talk about
20 competition whoever drafted this may be
21 talking about substitute. I know exactly what
22 you want me to say, but I'm not going to say

1 that the satellite radio is a substitute at
2 least to some degree for CDs, downloads,
3 iPods, internet radio and other forms of audio
4 entertainment.

5 A It would not be the word
6 "substitute" that I would use. It doesn't
7 mean that it's not in this filing and it
8 doesn't mean that in the connection of
9 antitrust rules or in regulatory process that
10 that word is not there. It's not a word I
11 would use.

12 Q Okay. So since it's not a word
13 that you would use, I take it you disagree
14 with my proposition.

15 A That?

16 Q That satellite radio is a
17 substitute for CDs, downloads, internet radio,
18 cell phones.

19 CHIEF JUDGE SLEDGE: That was not
20 the proposition.

21 MR. JOSEPH: And I object to
22 compounding questioning. There are about five

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1 different pieces of this.

2 CHIEF JUDGE SLEDGE: Objection
3 overruled. The proposition was importantly a
4 substitute at least to some degree that was
5 omitted in the second question.

6 MR. HANDZO: I'm sorry, Your
7 Honor. You're absolutely right.

8 MR. HANDZO: The proposition, Mr.
9 Karmazin, was this. Do you agree that
10 satellite radio is a substitute at least to
11 some degree for CDs, downloads, iPods,
12 internet radio and cell phones.

13 CHIEF JUDGE SLEDGE: Mr. Joseph.

14 MR. JOSEPH: One more objection,
15 Your Honor. I object to the use of the term
16 "substitute" which has multiple meanings and
17 is vague.

18 CHIEF JUDGE SLEDGE: Overruled.

19 THE WITNESS: If by your use of
20 the word "substitute" that you're talking
21 about competing, I'm comfortable in saying
22 that. But I'm not comfortable in saying in

1 A Okay. That question I understand
2 and I couldn't agree with you more about that
3 and that goes back to my days in being in
4 terrestrial radio for 40 years including
5 satellite radio and I still believe, and I
6 can't speak for what gets entered in here,
7 that discovery of music is an important part
8 that radio offers that you hear a song on the
9 radio and that song on the radio often leads
10 you to buying a product because you may want
11 that product when you're not listening to
12 satellite radio in your car. You may want it
13 when you're at the gym. You may want it when
14 you're jogging. You may want it when you're
15 on an airplane. So I don't believe at all
16 that air play -- And I believe I said this
17 before. If air play didn't help sell records,
18 the record companies wouldn't be involved in
19 payola in paying disc jockeys to play it, nor
20 would there be such an extensive amount of
21 promotion departments. There's a ton of
22 promotion people from the record companies

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1 some ways because you're going to have to tell
2 me in what way you're asking me is one
3 substitutable for another. So it's clearly
4 substitutable if you have 15 minutes worth of
5 time in your car and you're deciding whether
6 you want to listen to your CD, your iPod, your
7 terrestrial radio, your HD radio or your
8 satellite radio. So you could tell me that
9 while you're driving in your car you can
10 substitute one listening experience for
11 another and if that's the context you're
12 asking for, yes, in that way I could agree.
13 But if you're saying insofar as the device and
14 the use of it and the functionality of it, in
15 general, no, I don't use that word.

16 BY MR. HANDZO:

17 Q Let me ask you to consider
18 substitution in a slightly different context
19 and that context is substitution meaning the
20 more people listen to satellite radio the less
21 they buy with respect to CDs, downloads and so
22 on.

1 that are at our office wanting us to play
2 their music. We get the music for free.

3 MR. JOSEPH: I'm sorry, Your
4 Honor. Just for the record, I think there was
5 a disconnection between the question and that
6 answer.

7 MR. HANDZO: I was about to
8 identify that.

9 BY MR. HANDZO:

10 Q Mr. Karmazin, you started off, I
11 think, saying that you agreed with me and then
12 your answer makes it sound like you disagree
13 with me. So let me -- I think you said you
14 couldn't agree with me more and my question
15 was isn't it true that the more people who
16 listen to satellite radio the less they buy of
17 CDs and so forth.

18 A I said the more. I couldn't agree
19 with you if I couldn't disagree with you more
20 is what I was starting to say.

21 Q Okay. Thank you.

22 A And if I said that, I apologize.

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1 It's my passion on that subject.

2 Q Okay. Mr. Karmazin, you talked
3 about exclusivity at various points in your
4 testimony. Isn't it true that the wireless
5 cell phone competitors are offering a growing
6 number of audio services that include news and
7 sports as well as music that consumers can get
8 in the car?

9 A Yes. As I mentioned to you, we
10 have different degrees of exclusivity with
11 some of our deals. So, as an example, in the
12 case of Howard Stern, his content would be
13 prohibited from being on wireless in the same
14 way as Martha Stewart. So in the case of some
15 of our content, they have the rights to put
16 their content on wireless.

17 Q So, for example, the NFL games
18 could be going over a cell phone.

19 A It could be.

20 Q Now, Mr. Karmazin, in your written
21 testimony and in response to questions from
22 Mr. Joseph, I think you talked about the value

1 Q In the ordinary course of
2 business, do you receive survey research done
3 internally at Sirius?

4 A I can't tell you I receive all of
5 it. I'm the CEO of the company. I mean -- By
6 the way, this could have crossed my desk. I
7 just don't recall seeing this. Just looking
8 through it quickly, I do not recall it.

9 Q Okay. Let me ask you to turn to
10 the page that's Bates numbered 17181.

11 A 17181.

12 Q And because I recall some
13 testimony from the direct case that sometimes
14 research gets repackaged in different ways.
15 I'm going to ask you whether you've seen this
16 particular page.

17 A I don't recall it.

18 Q This is research that addressed
19 why people are interested in satellite radio.
20 Correct?

21 MR. JOSEPH: Your Honor, I
22 objection to the question. The witness has

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1 of brands. Do you recall that?

2 A Yes.

3 Q And I take it you think that one
4 of those brands is Howard Stern, in fact.

5 A Yes.

6 Q And it's your testimony, is it
7 not, that he brought a lot of benefits to
8 Sirius?

9 A Yes.

10 Q Including benefits that would have
11 begun before he went on the air?

12 A Some.

13 (Whereupon, the document
14 referred to was marked
15 as SX Exhibit No. 107
16 for identification.)

17 BY MR. HANDZO:

18 Q Mr. Karmazin, I'm going to show
19 you what was marked as SoundExchange Trial
20 Exhibit 107. Mr. Karmazin, have you seen this
21 document before?

22 A I don't believe so.

1 said he has not seen this document and the
2 only way he could possibly know what it
3 purports to be is from reading the face of it.

4 CHIEF JUDGE SLEDGE: Sustained.

5 BY MR. HANDZO:

6 Q Mr. Karmazin, isn't it true that
7 research conducted by Sirius demonstrated that
8 actually very few people were interested in
9 satellite radio because of Howard Stern?

10 A You have to really understand the
11 way this thing works. I've been involved with
12 Howard Stern and research for over 20 years
13 and when you ask anybody whether -- not
14 anybody -- When you ask people do they listen
15 to Howard, they immediately say they don't
16 listen to Howard because Howard is
17 controversial and Howard may send a message.
18 So in all of the research that's ever been
19 done, Howard tends to under perform versus
20 what the belief is that his audience is. So,
21 as an example, if I were to say, "Do you
22 listen to NPR or Howard Stern," more people

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1 would say NPR when the reality is it's not.
 2 So the fact that Howard Stern would show up in
 3 research with a low percentage, I can't speak
 4 for this percentage, at low percentage,
 5 doesn't surprise me at all because people
 6 don't necessarily admit and I don't know how
 7 this research was done, in what form, but it's
 8 -- If you want me to stop there, I will. But
 9 I can give you some more color on the subject,
 10 okay, because I happen to deal with it. We
 11 have a channel --

12 Q Well --

13 A You want me to stop?

14 Q I'm going to stop you there.

15 A Okay. That's okay.

16 CHIEF JUDGE SLEDGE: Mr. Karmazin,
 17 your answer reminds me that for over 25 years
 18 you couldn't find anybody in Alabama that
 19 voted for George Wallace and he continued to
 20 get re-elected.

21 THE WITNESS: In New York City,
 22 Your Honor, if asked, do you read the New York

1 awareness and you have to attribute it to
 2 something and I'm willing to hear what else.
 3 But I believe Howard Stern has been the
 4 driver.

5 Q I thought you told us earlier that
 6 you don't know how many subscribers came as a
 7 result of Howard Stern.

8 A And I repeat it. I don't know
 9 exactly, but I could tell you directionally
 10 about the fact that today we have over seven
 11 million subscribers and we have 675,000 the
 12 day before Howard announced he was coming and
 13 the music has stayed the same and there hasn't
 14 been that many changes that have taken place
 15 and I believe Howard was a major driver. I
 16 can't tell you exactly how many people came
 17 because of Howard Stern. You're correct.

18 MR. HANDZO: Your Honor, I'm going
 19 to move the admission of SoundExchange Trial
 20 Exhibit 107. I recognize obviously that Mr.
 21 Karmazin has said that he hasn't seen it.
 22 However, it is a Sirius document produced by

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1 Post or don't read the New York Post, a lot of
 2 people will say they don't read the New York
 3 Post and they want to admit that they read the
 4 New York Times. But when you dig further,
 5 there's an awful lot of people who were
 6 reading the New York Post.

7 BY MR. HANDZO:

8 Q Mr. Karmazin, my question to you
 9 actually hadn't been whether you think people
 10 accurately report their feelings about Howard
 11 Stern. My question was really more specific.
 12 Isn't it right that Sirius' own research
 13 indicated that a very low percentage of people
 14 were interested in satellite radio because of
 15 Howard Stern.

16 A I don't know what research you're
 17 talking about, how it was conducted. All I
 18 can tell you is the results and we've
 19 demonstrated, in my opinion. More important
 20 of what people say they're going to do is what
 21 they've done and you have to take a look at
 22 our growth in subscribers and our growth in

1 Sirius. It has a Sirius Bates number on it.
 2 Mr. Karmazin is the CEO of the company and,
 3 more importantly, he is the person that Sirius
 4 has put on among other things to address their
 5 perception of the importance of Howard Stern.
 6 Mr. Karmazin has testified at great length
 7 both in writing and orally about the fact that
 8 he thinks Howard Stern is very important and
 9 this document I would submit to you impeaches
 10 that testimony because it shows through
 11 Sirius' own survey research that only three
 12 percent of people said they were interested in
 13 satellite radio because of Howard Stern.

14 CHIEF JUDGE SLEDGE: Mr. Joseph.

15 MR. JOSEPH: Objection on several
 16 grounds, Your Honor. Lack of foundation.
 17 There is nobody who has testified to how this
 18 research was conducted or what it was or for
 19 what purpose it was conducted. The witness on
 20 the stand testified that he does not have
 21 knowledge of this research.

22 Ground one is lack of foundation.

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1 Ground two is that this document was not
 2 exchanged 24 hours or a day prior to its use.
 3 Therefore, its only purpose is impeachment and
 4 I do not believe that there was any impeaching
 5 use of this document. The witness testified
 6 as to his understanding and what he understood
 7 about research that was conducted. So that's
 8 a second ground.

9 As far as Mr. Handzo's statement
 10 that Mr. Karmazin has been put forward to talk
 11 about the importance of Howard Stern, it is
 12 also true that in the direct phase of this
 13 case there were many Sirius executives
 14 including the former director of research who
 15 was brought forward before the Court and the
 16 subject of Mr. Stern was a live issue in the
 17 case at that time as well.

18 So may I have one moment to see if
 19 I have another ground? And it is also clear
 20 from the face of this document that Mr. Stern
 21 was not even on Sirius and it had only been
 22 several months since the announcement of the

1 \$12.95, but I don't know the timing.
 2 (Whereupon, the document
 3 referred to was marked
 4 as SX Exhibit No. 108
 5 for identification.)

6 BY MR. HANDZO:

7 Q Mr. Karmazin, I'm going to show
 8 you what we've marked as SoundExchange Trial
 9 Exhibit 108. Have you had a chance to take a
 10 look at that?

11 A Yes.

12 Q And do you see there's a -- Well,
 13 this is a newspaper story about XM raising its
 14 prices.

15 A Yes.

16 Q And do you see that there's a date
 17 down at the bottom of February 28, 2005?

18 A I see 2/28, yes.

19 Q Does that refresh your
 20 recollection about when the price increase
 21 was?

22 A Well, I don't have a recollection

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1 Stern deal took place, about seven months. So
 2 with all of that, I object to the admission of
 3 this document.

4 CHIEF JUDGE SLEDGE: The objection
 5 is sustained.

6 CROSS EXAMINATION (Cont'd.)

7 BY MR. HANDZO:

8 Q Mr. Karmazin, let me ask you to
 9 turn to Exhibit 56 of your written testimony.
 10 Do you have that?

11 A Yes sir.

12 Q Okay. Now it's correct, is it
 13 not, that when you first joined Sirius,
 14 Sirius' subscriber price, basic monthly
 15 subscriber price, was \$12.95 per subscriber?

16 A For the principal subscription,
 17 yes, that's correct.

18 Q And the subscription price for XM
 19 at that point in time for their basic package
 20 was actually \$9.99. Correct?

21 A I don't recall. I know at one
 22 time XM was at a lower price and then became

1 of it, but it says that it was as of that
 2 date, yes.

3 Q Okay. Does that sound right to
 4 you?

5 A I don't remember the time frame at
 6 all. I mean, I'm not the CEO of XM. So I
 7 really don't know that much about that
 8 company, but it appears, and I'm not trying to
 9 hedge, that XM announced that they were
 10 raising their prices in February.

11 Q Okay. In any event, the price
 12 increase happened after you joined Sirius.
 13 Correct?

14 A Yes.

15 Q And you joined Sirius in October
 16 or November of 2004?

17 A November 18, 2004.

18 Q Okay. Now the price increase by
 19 XM certainly helped Sirius draw subscribers,
 20 did it not?

21 A No, not that I can think of.

22 Q Well, certainly didn't it help

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1 Sirius with respect to competing with XM?
 2 A No. In my opinion, I believe that
 3 using your analogy of when I joined and when
 4 Howard started that XM believed that they were
 5 going to benefit from more subscribers coming
 6 to satellite radio and I can't speak for them
 7 and that they believed that it would serve
 8 their business model better to try to charge
 9 \$12.95 for those people coming to satellite
 10 radio because Mel Karmazin and Howard Stern
 11 than it would be to sell at \$9.99.

12 Q Okay. I'm really not asking about
 13 XM's view. What I'm asking is from Sirius'
 14 perspective certainly it was a competitive
 15 benefit to Sirius to be competing with
 16 somebody who was charging \$12.95 instead of
 17 \$9.99. Right?

18 A I will tell you that our principal
 19 competition, so before somebody subscribers to
 20 satellite radio, they are using AM/FM radio,
 21 there is very little movement from an XM
 22 subscriber to a Sirius subscriber so that the

1 wouldn't you expect that price is going to be
 2 one of the issues they would consider?

3 A I'm sure it is a factor.

4 Q And to the extent that it is a
 5 factor, that factor would have helped XM in
 6 the days when they were priced two or three
 7 dollars cheaper than Sirius. Right?

8 A I can't speak for what's going to
 9 help XM.

10 Q Wouldn't you expect that having a
 11 lower price at XM would help them attract
 12 subscribers away from Sirius?

13 MR. JOSEPH: Your Honor, I object.
 14 Mr. Handzo is mischaracterizing the relevant
 15 prices reflected even in the article that he's
 16 using as an example. He's failing to point to
 17 extras that XM charged for services that
 18 Sirius included.

19 CHIEF JUDGE SLEDGE: What does
 20 that have to do with his question?

21 MR. JOSEPH: His question includes
 22 an implicit -- includes an expressed statement

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1 idea of who we print -- Yes, we compete with
 2 XM and the idea is that I would have liked to
 3 have had XM at a lower price because maybe
 4 their financial model wouldn't have been as
 5 good. So they couldn't afford to pay for
 6 talent and they can't.

7 So I can't make the analogy that
 8 it was good for Sirius that they raised the
 9 price. The fact that they raised their price
 10 gives them financially more resources if
 11 satellite radio is picking up customers so
 12 they can pay for more content.

13 Q Well, you agree with me that XM
 14 and Sirius compete. Right?

15 A Yes.

16 Q And when someone decides to sign
 17 up for satellite radio obviously they need to
 18 make a choice between XM and Sirius. Right?

19 A Most of them. Some subscribe to
 20 both.

21 Q Okay. To the extent that people
 22 have to make choice between XM and Sirius,

1 that XM was charging less compared to Sirius
 2 and that's not what this article says at all.
 3 He's mixing apples and oranges. He has an
 4 implicit assumption in his question which is
 5 false.

6 CHIEF JUDGE SLEDGE: The facts
 7 you're stating has nothing to do with the
 8 questions and answers that are going on. The
 9 objection is overruled.

10 THE WITNESS: I can give you a
 11 whole bunch of arguments. One argument is
 12 that it hurt Sirius because you're asking me
 13 to speculate on the effect of it. Because
 14 what XM did was they went to subscribers and
 15 said that we are going to raise our price, but
 16 if you book now, okay, instead of you going to
 17 Sirius and going for Howard Stern, if you were
 18 to buy it now, we will hold the price of \$9.99
 19 for you. So if anything, the argument of them
 20 raising the price I would interpret as being
 21 something that they would do to try to get
 22 people not to come to Sirius, but to take

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1 advantage of the lower price that XM was going
2 to have and lock in that price for a long
3 period of time.

4 BY MR. HANDZO:

5 Q So you just don't think there was
6 any benefit to Sirius at all, the fact that
7 your principal competitor raised its prices
8 three dollars.

9 A Yes. I don't know of any
10 information that I can give you that would
11 tell you that their raising the price didn't
12 hurt us more than it helped us because it got
13 people to lock in a \$9.99 price for a long
14 period of time at a time when there was a lot
15 of talk about satellite radio. So it gave
16 them an excuse to say, "Hey, you know what?
17 Sirius is \$12.95. But you know what? We're
18 \$9.99 and you can hold that \$9.99 even though
19 we're going to raise our price."

20 Q Can't do that today. Right? You
21 can't sign up for XM for \$9.99.

22 A I don't know what offers XM is

1 that XM's ARPU is somewhere in the \$10 range.
2 So obviously, people are getting it for less
3 than \$12.95.

4 Q By the way, what is Sirius' ARPU?

5 A \$11 or something and just so you
6 also understand. That factors in some rebates
7 so that if, in fact, when you buy a radio if
8 we gave \$50 rebate the way that gets accounted
9 for is in the ARPU.

10 Q It is not possible -- Mr.
11 Karmazin, wouldn't you agree that if XM and
12 Sirius raised their prices fewer people would
13 subscribe?

14 A I believe that we are competing
15 with free. Our primary competition is, I
16 mentioned this before and I don't want to
17 dwell on it because I know the point's been
18 made, I believe that the more we raise our
19 price, the more today, this is my viewpoint
20 today, is that the more that we raise our
21 price the more that we are more difficult to
22 convert people from free radio to Sirius.

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1 having.

2 Q You don't know what XM's pricing
3 is.

4 A No. Trust me. I know what their
5 list price is. I know what the advertised
6 price is. But I don't know what would happen
7 if you were to call the call center and say,
8 "You know what? I'm interested in buying it.
9 What's available?" There may be some specials
10 and packages. I don't know.

11 Q You don't have any evidence, do
12 you, that anybody can get Sirius for less than
13 \$12.95 per month?

14 A Sirius?

15 Q I'm sorry. XM.

16 A I have no -- Yes, we have some
17 anecdotal information that people are paying
18 less than \$12.95 and the way you look at that
19 is if you take a look at their ARPU, average
20 revenue per user. So if their average revenue
21 per user is below \$12.95, then people are
22 getting it for less than \$12.95 and I believe

1 It's counter intuitive to think that if we
2 could sell our product at \$6.99 we might get
3 more subscribers than we could get at \$14.99.

4 Q To the extent that if you raise
5 your prices you get fewer subscribers, isn't
6 it right that when XM raised its price it was
7 going to get fewer subscribers?

8 A I don't know enough about what
9 XM's viewpoint was at the time. Remember,
10 that was done at a time when satellite radio
11 at retail was taking off. I'm giving you what
12 my comment is today and we talked about it in
13 my earlier statements about how things have
14 slowed down in retail. So it's possible that
15 XM would have a different viewpoint two years
16 ago in '05 than they would in '07.

17 CHIEF JUDGE SLEDGE: Mr. Handzo, I
18 hope at some point we're going to understand
19 why all this conversation about pricing is
20 something worth considering.

21 MR. HANDZO: I can explain it now,
22 but you probably don't want me to do my

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1 closing argument now. But the point is Mr.
2 Karmazin has a chart here which shows their
3 subscribers climbing which he relates to the
4 signing up content deals. The fact that
5 increase in subscribers actually coincides
6 with when XM raised its price and lost that
7 competitive advantage vis ... vis Sirius.

8 BY MR. HANDZO:

9 Q Mr. Karmazin, you talked in your
10 written testimony about OEM deals and benefits
11 you got from non music content deals in
12 working with your OEM partners. Do you recall
13 that?

14 A Yes.

15 Q Now, in fact, Sirius has OEM deals
16 in place with a number of major car
17 manufacturers before it entered into these non
18 music content deals, didn't it?

19 A They had some agreements in place,
20 yes.

21 Q Okay. For example, before these
22 non music content deals that you've talked

1 A Yes.

2 Q And it had an OEM deal with
3 Infinity prior to the NFL deal.

4 A I don't recall the Infinity one.
5 I know for sure Ford and Chrysler.

6 Q And Audi, that was before the --

7 A I don't know.

8 MR. HANDZO: May I have a moment,
9 Your Honor?

10 CHIEF JUDGE SLEDGE: Yes sir.

11 MR. HANDZO: I think that's all I
12 have, Your Honor. Thank you.

13 CHIEF JUDGE SLEDGE: Any redirect?

14 MR. JOSEPH: May I have two
15 minutes, Your Honor?

16 CHIEF JUDGE SLEDGE: Yes sir.

17 (Pause.)

18 CHIEF JUDGE SLEDGE: Mr. Joseph.

19 MR. JOSEPH: I just have two very
20 quick subjects, Your Honor. They may only be
21 two questions.

22 CHIEF JUDGE SLEDGE: All right.

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1 about, Sirius had an OEM deal with Volkswagen.
2 Right?

3 A I don't have the dates of which
4 when the agreements existed and when they did.
5 I certainly acknowledge that there were OEM
6 agreements in place. There wasn't a lot of
7 OEM production in place at that time. So
8 these agreements that I talked about were
9 important because they tied to putting the
10 satellite radio in the car, not just doing R&D
11 and development work. So the number of
12 subscribers that we had in the OEM area in
13 2005 was in a couple of hundred thousand. So
14 even though the agreements were there, they
15 only delivered a couple of hundred thousand
16 subscribers as compared to today.

17 Q Okay. For example, Sirius had an
18 OEM agreement with Ford prior to those, prior,
19 for example, to the NFL deal. Right?

20 A Yes.

21 Q Okay, and it had an OEM deal with
22 Daimler Chrysler prior to the NFL deal.

1 REDIRECT EXAMINATION

2 BY MR. JOSEPH:

3 Q Mr. Karmazin, just a couple of
4 quick follow-up questions about things Mr.
5 Handzo asked you about if you recall. Do you
6 know whether at the time XM was charging \$9.99
7 for its base service it was also charging
8 \$1.99 extra for Opie & Anthony?

9 A And I believe they also were
10 charging extra for possibly Internet and
11 Playboy, I think, at the time. I know there
12 were extras but I don't know -- I can't recall
13 the specific amounts or the specific content.

14 Q And do you know whether at the
15 time they raised their price to \$12.95 they
16 stopped charging at least some of those
17 extras?

18 A Yes, that I recall. The \$12.95
19 was an all-inclusive.

20 Q Now Mr. Handzo asked you about the
21 earlier, the pre NFL deals, with Ford and
22 Chrysler. Did those deals obligate the car

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1 makers to put Sirius radios in any particular
2 number or percentage of cars?

3 A They did not.

4 MR. JOSEPH: I have nothing
5 further, Your Honor.

6 CHIEF JUDGE SLEDGE: Any questions
7 from the bench? Thank you, sir. That's the
8 end of your testimony.

9 THE WITNESS: Thank you sir.

10 (Witness excused.)

11 CHIEF JUDGE SLEDGE: We'll recess
12 about two minutes. Off the record.

13 (Whereupon, at 4:35 p.m., the
14 above-entitled matter recessed and reconvened
15 at 4:38 p.m. the same day.)

16 Whereupon,

17 BRUCE SILVERMAN

18 was recalled as a witness, and having been
19 previously duly sworn, was examined and
20 testified as follows:

21 CHIEF JUDGE SLEDGE: On the
22 record. Mr. Silverman, please be seated.

1 the ad cost analysis, you didn't review the
2 editorial that was either used or
3 intentionally not included, did you?

4 A That's correct.

5 Q You only did some spot checking, I
6 think, was your testimony earlier today?

7 A Well, I did some of the analysis
8 myself. I was part of the team. I didn't
9 just spot check. So I did some of it myself,
10 but, no, I didn't review all of them. There
11 would have been 4,000 plus to review.

12 Q When you did your spot checking,
13 did you change anything? Did you find
14 anything that your team had included that you
15 think should have been excluded or visa versa?

16 A I certainly found -- I found
17 things that were included that I then
18 excluded. But I didn't, as I testified
19 earlier, review any of the nos. So if they
20 were things they excluded, I just didn't go
21 there.

22 Q But you did find things in your

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1 THE WITNESS: Thank you.

2 CHIEF JUDGE SLEDGE: Mr.

3 DeSanctis.

4 MR. DeSANCTIS: Good afternoon,
5 Mr. Silverman.

6 THE WITNESS: Good afternoon.

7 CROSS EXAMINATION

8 BY MR. DeSANCTIS:

9 Q When did you perform the ad cost
10 analysis that you testified about earlier
11 today?

12 A It was performed between -- I'm
13 trying to remember the exact dates, but it
14 would have -- I was actually retained shortly,
15 I think, it was on the 5th of July this year
16 and we completed it a day or two before the
17 testimony had to be filed.

18 Q Okay. So XM and Sirius didn't
19 have that at the time they executed their
20 content deals that you used, did they?

21 A No, they couldn't have.

22 Q Okay. Now you and your team did

1 spot check that you felt should not be
2 included.

3 A Yes.

4 Q And yet you didn't then go on to
5 check everything. Correct?

6 A I was not able to check
7 everything.

8 Q Now for the television editorials
9 that you included in your ad cost analysis,
10 again you didn't actually view all of the
11 television advertisements, television
12 editorials, that were either included or
13 excluded, did you?

14 A Are you asking if we actually, if
15 I actually, viewed it?

16 Q Yes.

17 A No, the process didn't involve
18 viewing actual video.

19 Q Right. No one viewed. No one on
20 your team viewed the actual television
21 editorial that you used in your ad cost
22 analysis. Correct?

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**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of)	
)	
)	
DETERMINATION OF RATES AND TERMS	)	Docket No. 2011-1
FOR PREEXISTING SUBSCRIPTION AND	)	CRB PSS/Satellite II
SATELLITE DIGITAL AUDIO RADIO)	
SERVICES)	

WRITTEN DIRECT TESTIMONY OF JAMES E. MEYER

(On behalf of Sirius XM Radio Inc.)

Introduction

1. My name is James E. Meyer. I am President, Operations and Sales, of Sirius XM Radio Inc. (“Sirius XM” or “the Company”). I have served as President, Operations and Sales, since I joined Sirius Satellite Radio Inc. (“Sirius”) in 2004, before its merger with XM Satellite Radio Holdings, Inc. (“XM”). I earned a Bachelor of Science and a Masters in Business Administration from St. Bonaventure University.

2. Before joining Sirius, I was President of Aegis Ventures Incorporated, a consulting firm that provides management services. Before Aegis, I held a number of senior management positions in the consumer electronics area, including as Senior Executive Vice President and Chief Operating Officer of Thomson Inc., a world leader in consumer electronics, from 1997 to 2001. As Senior Executive Vice President and COO, I was responsible for Thomson’s Digital Media Solutions business unit, a global business that serves the entertainment, broadcast and content industries for such clients as The Walt Disney Company, Warner Bros., DreamWorks, Microsoft, DirecTV, ABC and BBC. From 2001 to 2002, I served

as special advisor to the Chairman of Thomson S.A. I have also held other senior management positions at Thomson, General Electric and RCA during my 25-year career in consumer electronics.

3. In my role as President, Operations and Sales, of Sirius XM, I am responsible for three primary areas of the Company: (1) technological operations, (2) sales and marketing and (3) Sirius XM's substantial customer-facing organization.

4. With respect to technological operations, all aspects of the technology underlying Sirius XM's products and services fall within my purview, including our delivery networks, the systems that receive, format and digitize the content provided to our subscribers through our networks, and engineering and research and development ("R&D"), including delivery over systems as well as the "chipsets" integrated into our various in-vehicle and aftermarket products.

5. I also oversee Sirius XM's extensive customer-facing organization, which comprises approximately 3,000 customer service agents provided by third-party vendors and over 100 other employees whose work focuses exclusively on attracting, servicing and retaining (and sometimes reacquiring) subscribers.¹ To that end, I am responsible for all of Sirius XM's efforts to attract and acquire new customers, including through the original equipment manufacturer ("OEM") market (*i.e.*, the automobile industry) and retail market (known in our

¹ The costs derived from Sirius XM's customer-facing organization, primarily from customer service and billing – *i.e.*, operation of third-party customer service centers and subscriber management systems, as well as bad debt expense – are significant. In 2010, the Company spent approximately [REDACTED] on technology that has enabled us to improve the customer-care experience, including the integration of our subscriber management system to get both Sirius and XM subscriber platforms on the same system, with resulting costs for staff training to ensure agents were familiar with the new platform, as well as the introduction of a new unified website. Overall in 2010, Sirius XM spent approximately \$241.7 million on customer-care and billing-related costs; in the first half of 2011 alone, we spent over \$128 million for customer-service-related costs. This increase was attributable to an increase in daily weighted average subscribers, which drove higher call-center volume, billing and collection costs, transaction fees, bad debt expense and personnel costs. We expect our customer service and billing expenses to increase as our subscriber base grows due to increased call center operating costs, transaction fees and bad debt expense.

business as the “aftermarket”). I have the ultimate responsibility for the teams that establish and develop relationships with automobile manufacturers that install satellite radios in their vehicles and with retail establishments that sell our products, such as Best Buy and Radio Shack. These efforts dovetail with the Sales & Marketing unit, as to which I oversee approximately 125 employees. I also oversee the Company’s efforts to retain existing subscribers and its aggressive win-back marketing efforts aimed at reacquiring subscribers who have ended their service. As part of my responsibilities in these areas, I am intimately familiar with the competitive environment in which Sirius XM operates.

6. I have reviewed the written direct testimony of the following witnesses from the proceeding that set rates for the Company’s satellite service for the period 2007 through 2012 (“*Satellite I*”): Terrence Smith, John Douglas Wilsterman and Robert Law (all formerly of Sirius) and Gary Parsons, Anthony Masiello and Stephen Cook (all formerly of XM). Collectively, these individuals’ testimony covered the following key areas, among others: (a) the history of Sirius and XM, including their respective concepts, launches and startup costs; (b) the development and maintenance of satellite radio technology, including satellites, chipsets, receivers, product innovations and development costs; (c) marketing efforts, strategies and relationships with the OEM and retail markets for the sale of Sirius and XM satellite radio products and services, including the substantial incentive payments both Sirius and XM historically have paid (and continue to pay) to market participants; and (d) the competitive landscape facing the two companies at the time of the *Satellite I* proceeding.

7. These witnesses’ testimony has been designated to be included in this proceeding, and I will not restate most of what is provided there. The purpose of my testimony instead is to update that testimony where appropriate, as well as to discuss various aspects of the state of the

Company that fall within my purview, the current competitive landscape, and how such matters affect our expectations for the next licensing period of 2013 to 2017.

Overview & Summary Of Testimony

8. Sirius XM is a satellite radio company that broadcasts music and non-music content on a subscription-fee basis on more than 135 channels throughout the continental United States. The programming offered to Sirius XM subscribers constitutes a mix of diverse genres of music and often exclusive offerings of talk, sports, news, entertainment and data (such as traffic and weather) content. The vast majority of the Company's revenue is derived from subscription fees. Advertising revenue constitutes between two and three percent of the Company's aggregate revenues. Sirius XM currently has more than 21 million subscribers.

9. XM merged with a subsidiary of Sirius in July 2008. However, Sirius XM still operates and maintains two proprietary satellite radio systems (the former Sirius and XM legacy systems), and will continue to do so for the indefinite future. This dual-system approach is necessitated by the fact that we have millions of installed satellite radios in the market capable of receiving only one or the other service. The combined Sirius XM cannot simply cut off one or the other of the legacy networks without shutting off access to half of our existing subscribers. Although it might not be intuitive to the casual observer, the merger did not result in substantial synergies or efficiencies in the category of expenses relating to the distinct satellite networks that support these separate systems.

10. Sirius XM primarily distributes our service and products through the sale or lease of new vehicles. The Company has agreements with every major automaker to offer satellite radios as factory- or dealer-installed equipment in their vehicles. For a variety of reasons, this distribution channel has become ever more critical since the time of the *Satellite I* proceeding. In

2006, 48% of our new subscribers were obtained through the OEM market, with the majority coming to Sirius and XM through the aftermarket. In the last four quarters, 88% of Sirius XM's gross additional subscribers have been obtained through the OEM market and 70% of our total subscriber count is attributable to the OEM channel. Although making up a substantially lower portion of our distribution activity, our radios also continue to be available through retail locations nationwide and through the Company's websites.

11. Satellite radio faces significantly more intense competition today from new technology and other media that either did not exist, or were not fully developed, at the time of the *Satellite I* proceeding. While terrestrial radio (which pays no performance royalties whatsoever to the record industry) remains our primary competition, enormous advances in broadband technology have enabled a newly-viable class of Internet-based competitors to provide streaming and other forms of music and non-music content that can be accessed on wireless smartphones and other mobile devices capable of being easily used in automobiles. These competitors (and the delivery platforms on which they rely) offer consumers features and advantages that formerly set satellite radio apart from terrestrial radio: nationwide, largely commercial-free access to diverse genres of uncensored content.

12. For their part, automobile manufacturers are responding with technological innovations that enable consumers to access music and other content from their smartphones and other mobile devices with increasing safety and seamlessness. "Connected-car" technology in active development (and already in use in Ford, Toyota and other vehicles) increasingly is providing consumers with ever-greater audio entertainment choices in competition with Sirius XM on our dominant distribution platform.

13. Sirius XM faces the further challenge that these new Internet-based competitors have widely divergent cost structures from our own. Sirius and XM were required to invest billions of dollars to acquire spectrum and build from scratch an entirely new category of service: nationwide satellite-delivered radio. Major investments were needed (i) to build, market and support the chipsets and radios that enable subscribers to receive our content, and (ii) to build a nationwide distribution system featuring satellites, repeaters, and other facilities enabling network uplink and signal transmission. Sirius, XM and now the merged entity, Sirius XM, have expended enormous additional sums maintaining, updating and replacing older technology. Significant ongoing technology expenditures will continue over the 2013-2017 period to service the more than 21 million subscribers who enjoy and depend on our satellite radio service every day. In contrast, Internet audio content providers, which piggyback on both third-party hardware (computers, smartphones and the like) and distribution networks (Internet and mobile broadband), have not been saddled with remotely comparable expense.

14. While Sirius XM has only recently become profitable and realized a positive free cash flow, as a subscriber-based service company, its continued profitability and viability depends almost entirely on our ability to attract and retain subscribers. Sirius XM continues to operate in a fragile environment in which numerous factors present a palpable risk to the Company's ability to do so. In addition to the increasingly vigorous competition we face in the market, our ever-increasing dependence on automakers makes the demand for our service difficult to predict, given the challenges faced by that market. The purchase of a satellite radio and a subscription to Sirius XM's service is discretionary. As we saw firsthand during the dramatic economic downturn of 2008 and 2009, auto sales slowed significantly and negatively impacted our subscriber growth – to the point where we narrowly averted a Chapter 11

bankruptcy filing. Along the same lines, general economic conditions and the status of the credit markets can, and do, affect our business.

The Competitive Landscape

15. Satellite radio faces significantly more intense competitive threats today resulting from new and more fully developed technology and other media that were not a significant marketplace factor at the time of the *Satellite I* rate-setting proceeding. At the time of that proceeding, Sirius and XM viewed terrestrial radio as their primary competition. While this remains true, as I will explain, changes in both technology and consumer behavior have blazed a trail for new categories of competitors – in particular in the vehicle – that were unforeseen even five years ago.

16. Terrestrial radio continues to represent the dominant form of in-vehicle listening, primarily because it is free. AM/FM radios are in every new and used car on the road, and radio stations blanket the country. Over 90% of Americans have access to and enjoy free terrestrial radio. Similarly, HD radio, which was just emerging at the time of the *Satellite I* proceeding, continues to pose a competitive threat to Sirius XM, as it also provides music to listeners at no cost and with a much better sound quality than analog terrestrial radio.

17. To date, Sirius XM has succeeded in clawing away a share of the radio audience by offering an enhanced value proposition for listeners, including uninterrupted nationwide coverage, a wide variety of commercial-free music, access to uncensored content, as well as the Company's compelling non-music content (including exclusive talk and sports channels). Many of these distinguishing advantages have eroded, however, with the advent and growth in the last few years of several important technological developments. First, over the last several years, wireless carriers have made significant and costly investments (in the tens of billions of dollars)

to enhance wireless networks, resulting in the third-generation (3G) networks and now the dramatically more advanced fourth-generation (4G) networks. These network upgrades have themselves led to upgrades in the technologies of smartphones and other mobile devices, and the web browsers or applications (“apps”) on those devices, through which users seamlessly access the Internet.² As I will explain, the combination of rapid advances in broadband and wireless network technology, and smartphones equipped to take advantage of this technology, has enabled a new generation of Internet-based content providers to deliver content directly to consumers in automobiles in a variety of ways – including by integration of such services directly into the in-dash audio entertainment systems of the vehicles. These competitors will increasingly offer the same advantages over terrestrial radio that Sirius XM once had to itself without the burden of deploying the network to distribute their content.

18. Smartphones also address changes in consumer consumption of entertainment content in ways that will affect Sirius XM. Consumers in the twenty-first century want convenience (to consume entertainment programming on demand, when they want it) and personalization (to have that programming personally tailored to their tastes), and technology now increasingly affords them those abilities. The popularity of the digital video recorder (DVR), which permits television viewers to record shows through their cable boxes and watch them whenever they wish, is a prime example of the marriage of technology to this consumer appetite. Increasingly, consumers want – and are coming to expect – this level of convenience in

² In 2007, Apple introduced the iPhone, which for the first time provided access to the Internet and allowed users to download apps that allow for live mobile streaming, in addition to the music and video content downloadable onto Apple’s more traditional iPods. In addition to the iPhone, live mobile streaming also is now available via apps on certain Blackberry and Android mobile devices. More recently, technology providers like Apple, Amazon and Barnes & Noble have introduced devices called tablets, which also operate on apps and are essentially smartphones with larger screens (and without voice capabilities). For purposes of the following discussions, I treat these and other similar app-ready Internet-connected mobile devices to be encompassed in the category referred to as “smartphones.”

their audio entertainment experience as well, including in the vehicle. As to personalization, a host of Internet radio providers (almost all of which offer smartphone apps accessible in the vehicle) have emerged with technology that creates highly-customized programming closely tailored to a user's stated tastes and preferences – and they do so very inexpensively. The imminent penetration of these competitors into the OEM market – the market on which Sirius XM's business principally depends – is likely to have a palpable competitive effect on the Company during the next license period.

The Development of Competitive Internet-Based Services

19. As is discussed in detail in the accompanying testimony of William Rosenblatt, at the time of the *Satellite I* proceeding, portable, mobile music tended to be limited to tracks downloaded on a desktop PC (or laptop) and transferred to a portable device. As a result, these devices' content was static – *i.e.*, it was chosen by the listeners themselves in building their music libraries. For these reasons, although an iPod or other mp3 player could be connected to an automobile through an auxiliary cable such that the user could bring his or her CD collection into the car, true wireless streaming and downloading was not yet available or as widespread on a convenient basis.

20. Two important and rapid technological developments have occurred since the record in the *Satellite I* proceeding was developed that have increased the competitive threat to Sirius XM of Internet music providers. First, a new class of devices called smartphones has emerged that permit consumers to connect to the Internet at speeds sufficient to transmit audio content at superior sound quality. These smartphones, like computers, are capable of running “apps” through which they can access numerous different Internet content providers on a mobile network. The sale and distribution of smartphones and other mobile devices continues to exceed

expectations: more than 100 million smartphones are reported to be in use in the U.S. today. Relatedly, third-generation (3G) mobile networks have enabled a steady increase in the audio quality and reliability of mobile Internet radio streaming. This trend is expected to increase even further as fourth-generation (4G) networks become the new standard.

21. Second, these technological advances in smartphone capabilities have enabled significant new competition for satellite radio. The period since 2007 has witnessed the rapid proliferation of mobile Internet music applications, as well as tremendous growth in the availability of non-music (*e.g.*, sports, news and talk) programming available on smartphones. Some of the major competitors to have emerged in the last few years in the Internet music area are Pandora, Rhapsody, Last.fm, Slacker, MOG, Spotify and others. Additionally, traditional radio broadcasters like CBS and Clear Channel now make high-fidelity digital streams of their content available on the Internet and make otherwise territorially-limited broadcasts available nationwide on smartphones through Last.fm and iHeartRadio. (While such content previously was available to a degree on the Internet, it has grown dramatically and is now available wirelessly on smartphones.) Some of these services are free, while others charge a monthly subscription rate, which is in most cases lower than Sirius XM's subscription packages. The new breed of Internet music service providers offers a variety of advanced services and functionalities, from curated playlists and permanent downloads to custom playlists, interactive streaming and cloud sync. All of these services are capable of running on smartphone apps and often have few if any geographic limitations, providing listeners with programming from across the country or around the world. In the near future, we can likely expect even more competitors in this space, including such music and media giants as Facebook, Apple, Google and Microsoft.

22. Smartphones also permit listeners to access not only apps for music content, but also sports, news, weather, traffic and other talk radio content via their mobile devices. These services are available today, and offer sports and other talk programming on mobile devices similar to that currently available on Sirius XM. For example, Stitcher is an on-demand Internet radio service that focuses on news and information radio, providing online streaming through its website and mobile apps. Stitcher aggregates content from thousands of content providers (including NPR, CNN, Fox News, MSNBC, BBC and the like – all of which are also available on Sirius XM’s service) and organizes the content into “stations” that listeners can browse and listen to for free. Other non-music content available for streaming online is available directly from prominent sources such as NFL.com, MLB.com and ESPN.com.

23. Sirius XM continues, of course, to offer exclusive non-music content from extremely popular celebrity personalities such as Howard Stern and Oprah Winfrey (as described in the accompanying testimony of Mel Karmazin), as well as carefully programmed music content on its numerous channels (as described in the testimony of Steven Blatter). That said, the availability of generally comparable content through mobile apps is a new competitive challenge, particularly in view of the excellent sound quality, increasingly seamless wireless coverage area, and integration into the automobile listening experience afforded by these alternatives to the consumer. We expect that further improvements from higher bandwidths, wider programming selection and advancements in functionality will make Internet audio content and smartphone apps an increasingly significant competitor, especially in vehicles.

The Introduction Of “Connected Cars”

24. Even today, there are many options in the market that make the expanded choice of online audio content services easily available in automobiles. One such option, as described

in the testimony of William Rosenblatt, involves a direct audio connection to a listener's smartphone by means of a cable, Bluetooth, or smartphone dock built directly into the vehicle. This is the simplest capability available that provides the excellent sound quality of Internet audio content to be transmitted over car audio systems, and is already being used by an appreciable number of people (particularly, and not surprisingly, those in younger age groups) to listen to Internet content over mobile apps in their cars (as Mr. Rosenblatt notes, 90% of new cars allow for such connections). This type of connectivity requires the listener to control the app through the screen of the smartphone device itself, which is more difficult to maneuver than an in-dash radio system.

25. A more seamless listening experience – and even greater competitive challenge – is reflected in the next step in technological innovation for the in-car listening experience: what has become known as the “connected car.” There are two levels of integration for connected-car technologies: one uses smartphones as wireless transmitters to provide Internet-based audio content through mobile apps on the car's dashboard display (and is on the market today); the other provides access to Internet audio content apps through a modem incorporated directly into the car's computer (and will be introduced in the OEM market in the imminent future).

26. Whereas a smartphone connected to an input jack is controlled on the smartphone screen and then transmitted to the car's audio system, the newer “connected” services will shift the interface from the phone to the screens and controls of the car itself. Thus, in today's connected-car technology, automakers have built protocols into the computer of the car that allow smartphone apps to be integrated and accessed in the dashboard display. That is, the smartphone itself still acts as the wireless transmitter, but it is controlled “remotely” through the car's system controls. An icon for the Internet audio content provider (*e.g.*, Pandora or ESPN)

will actually appear on the dash, alongside icons for Sirius XM and AM/FM terrestrial radio. The entire in-dash entertainment system may be controlled through touchscreen technology or voice recognition. From the user's perspective, the listening experience is seamless and easy to use, and in many ways indistinguishable from the terrestrial and satellite radio services also available through the same unit.

27. This connected-car technology, which is actually implemented and is in cars on the road today, has significant advantages for both consumers and automakers, which make it a viable and immediate competitive threat to Sirius XM. For consumers, it has the advantage of providing more choice on a safer, seamless listening experience. Every app on the smartphone is potentially available on the dash.³ For automakers, the system has the advantage of being relatively inexpensive to deploy: unlike satellite radio, which requires an OEM to purchase and install the actual receiver device, the cost of the wireless receiver (*i.e.*, the smartphone itself) lies with the consumer, not the automaker. Additionally, unlike satellite radio, connected cars result in no disruption to the listening experience in the event a particular Internet content provider goes out of business. In that circumstance, its icon simply disappears from the dashboard display; contrast this with the negative feedback the OEM is likely to receive were Sirius XM to go out of business and the customer left with a non-functional factory-installed radio.

28. Ford was the first to introduce this first-generation connected-car technology through its SYNC system, created through a partnership with Microsoft. SYNC seamlessly allows smartphone apps to appear on the vehicle's dashboard display, no different than AM/FM radio or a Bluetooth connection for a cell phone. SYNC is now available on most Ford and

³ As the New York Times recently noted, current options in traditional radio, hard-wire connections to iPods or other personal music libraries, and even satellite radio may be seen by consumers as having their limitations for in-car listening relative to connected-car technology, which the Times writer described (based on a review of MOG's new BMW-compatible app) as "so intriguing." *See* SXM Dir. Ex. 3.

Lincoln products. As of January 2011, nearly 80% of 2011 Ford model purchasers were opting to purchase the SYNC package when available, and there were more than three million cars equipped with SYNC on the road. Industry commentators have noted that this 80% attachment rate on new car sales indicates that, increasingly, consumers and car owners are seeing connected components as a must-have feature for a new vehicle.⁴ A recent television advertisement featuring the current version of Ford's SYNC system is attached to this testimony as SXM Dir. Ex. 4.

29. It is no surprise that other automakers have been close behind. For example, Toyota has introduced its Entune system as way to seamlessly integrate smartphone apps into the car's multimedia system in three of its 2012 models. A recent television commercial featuring the Entune system is attached to this testimony as SXM Dir. Ex. 5. Similarly, GM has unveiled Chevrolet MyLink, available in 2012 Chevrolet Volt and Equinox models, 2013 Malibu models, and the new CUE (Cadillac User Experience) infotainment platform that will be rolling out on select Cadillac models next year and will ultimately spread to the entire Cadillac line. MyLink builds upon GM's OnStar service to connect to a user's smartphone and allow access to apps directly through steering-wheel mounted controls, touch-screen dashboard display or voice commands; similarly, CUE combines an LCD touchscreen with proximity sensors and already supports such Internet-based music providers as Pandora and Stitcher. Comparable options are expected in additional Buick and GMC models in the near future. Hyundai and Kia also have similar systems in place. Finally, BMW recently announced its plans to integrate MOG on-demand audio services into BMW vehicles equipped with BMW's own proprietary smartphone integration option. The integration software permits the driver to dock his or her smartphone and use its wireless network connection to access content and control the app through the vehicle's

⁴ See <http://news.yahoo.com/ford-sync-now-3-million-vehicles-20110103-100312-722.html>.

LCD display. BMW's arrangement with MOG is part of its ConnectedDrive strategy that eventually will encompass numerous types of music and infotainment delivery. BMW's plans also include allowing new car models to adapt over time and integrate with apps that do not even yet exist (*i.e.*, they will be "backwards compatible").

30. Automakers typically require a long time period – on average, about 155 weeks – between their decision to incorporate a new feature and its actual appearance in cars rolling off the lines. Because connected-car technology is ubiquitously accepted as the future of infotainment in the market today, we believe that within three years – *i.e.*, during the next licensing period – all major automakers will be incorporating similar systems into their cars. By 2015-2016, we estimate that approximately 70-80% of new car production will have this kind of connected-car capability. A recent report of IHS iSuppli projects that U.S. sales of connected cars will reach approximately 11 million units annually by 2018 – more annual installations than satellite radio has ever achieved.⁵

31. Automakers are also currently developing a next-generation connected car, in which the modem that allows the consumer to receive Internet content is built directly into the car's computer. This has become known as the "embedded strategy" of connected cars. Using this technology, any Internet radio listening experience will be as seamless to use as AM/FM radio or the car's built-in navigation system – and available without the need to connect, or even to own, a smartphone. It also will provide seamless access to data services such as infotainment, telematics, and safety and security services. To implement this new form of connected car, OEMs most likely will engage in negotiations not with content providers (as it does with Sirius

⁵ See <http://www.isuppli.com/Automotive-Infotainment-and-Telematics/News/Pages/Automotive-Internet-Radio-Market-Set-to-Boom.aspx>.

XM), but with the wireless companies providing the connectivity. This technology is already developed and will begin to be deployed within the 2013-2017 licensing period.

32. Further, in the near future, automakers are likely to seek lower-cost opportunities to incorporate into their vehicles a single worldwide wireless audio platform to streamline engineering and reduce costs globally. Unlike Sirius XM, the newer Internet-based audio content providers will be able to provide their services via this new worldwide platform; Sirius XM, on the other hand, has no ability to broadcast its programming via satellite outside of North America. This development, in conjunction with the proliferation of connected cars, could have a serious negative impact on Sirius XM's subscriber base within the 2013-2017 licensing period.

* * *

33. There is no doubt that connected cars are Sirius XM's most immediate competitive threat during the next licensing period. Automakers are already deploying today's version of the connected car and will be deploying the next generation in the very near term. Although it likely will take the next several years of actual deployment for the automakers to determine which version of the connected car wins out – or to develop even further advanced platforms such as worldwide infotainment packages – what is certain is that the connected car is poised to compete vigorously with Sirius XM in the all-important OEM market.

34. In my opinion, the incorporation rate of connected-car capabilities into vehicles will exceed the incorporation rate of satellite radios before the end of the 2013-2017 licensing period. This increased level of competition could result in lower subscription, advertising or other revenue coming in to Sirius XM, and/or could increase our marketing, promotion or other operating expenses and, consequently, reduce our net income. Although we cannot be certain of precisely the effect this competition will have, there is a real risk that it will have a harmful impact on the Company's churn and conversion rates during the next licensing period.

Key Differences Between Sirius XM And Its Internet-Based Competitors

35. One significant difference between Sirius XM and its new competitors is their widely divergent cost structures.⁶ First, unlike Sirius XM's historic and substantial ongoing payments of incentives to OEMs for the installation of satellite radios into vehicles, Internet audio content providers need not pay automakers incentives to have their capabilities incorporated into the vehicles' platforms. As Mr. Rosenblatt testifies, automakers are increasingly eager to incorporate wireless access to audio content in their cars (either through hard-wired input jacks, Bluetooth connections or software installed to synch the vehicle's apps with smartphone apps) because they believe they will be popular and will sell more cars. It may be the wireless network providers that will end up bidding against one another for access to the OEM market (since they will sell the data plans used by the drivers to stream content into the car); content providers will be able to piggyback off this investment without any expenditure of their own.

36. Moreover, unlike Sirius XM, which was required to invest billions of dollars to develop and launch its services, and which continues to invest hundreds of millions of dollars in maintaining and updating its satellites, repeaters, chipsets and radios,⁷ none of the Internet audio content providers is faced with comparable costs. Internet audio content providers do not pay for their delivery method at all; rather, it is the listener who pays for delivery by obtaining his or her own Internet access or data plan. Likewise, unlike Sirius XM, Internet audio content providers need not pay for any device that is necessary to receive their content; while Sirius XM incurs the

⁶ The unique categories of costs Sirius XM bears, including dollar figures, are described in further detail in the testimony of David Frear.

⁷ The *Satellite I* testimony of Terrence Smith and Anthony Masiello explained the startup and development costs faced by both Sirius and XM to make their services a reality. I will further address below Sirius XM's continuing efforts and expenditures in the development and innovation of its technological infrastructure.

costs necessary to develop, subsidize, manufacture and install its satellite radios (which are then in turn installed in vehicles or sold in retail outlets), it is consumer electronics companies that develop, and end-users who purchase, the computer, smartphone or other mobile device needed to receive Internet audio content.

Distribution of Sirius XM's Products

The Increased Importance Of The OEM Market

37. Sirius XM's primary means of distributing our service is through the sale or lease of new vehicles. Over the last few years Sirius XM has become more and more wed to the highly volatile and cyclical auto industry, and OEM distribution has become increasingly critical to the Company's business as compared to the so-called "aftermarket." In 2006, approximately 48% of new subscribers were obtained through the OEM market, with the majority coming to Sirius or XM through the aftermarket; in the last four quarters preceding this testimony, in contrast, 88% of Sirius XM's gross additional subscribers were obtained through the OEM market. 70% of our total subscriber count now is attributable to the OEM channel.

38. While in 2007 Sirius and XM were striving to build out their OEM penetration, today the Company has agreements with every major automaker to offer satellite radios as factory- or dealer-installed equipment in their vehicles. Satellite radios are now available in substantially all vehicle models sold in the United States today; approximately 65% of cars manufactured for sale in the United States are equipped with a factory-installed satellite radio – a substantial increase from the 30% of satellite-radio-equipped vehicles manufactured in 2007.

39. As an essentially one-product company, our overwhelming dependence on the auto industry exposes the Company to the fragility of the market in which the automakers operate. The automotive industry – and thus Sirius XM's subscriber level – is dependent on

numerous headwinds for auto production and sales, including the availability of consumer credit, general economic conditions, consumer confidence and fuel costs – not to mention unpredictable events like the tsunami in Japan in early 2011. While we cannot predict with certainty how the auto industry will perform over the next several years, numerous economists have projected that economic conditions – and thus the automobile market – are unlikely to strengthen substantially, given the debt problems in the U.S. and Europe, among other issues that will temper both hiring and consumer spending.⁸

40. What is certain is that, to the extent vehicle sales by automakers decline, or the penetration of factory-installed satellite radios into those vehicles is reduced, subscriber growth for satellite radio will be adversely impacted. We saw this firsthand when the auto industry itself suffered a near-death experience during the last licensing period. These changes in the auto industry resulted in a corresponding decrease in Sirius XM's own performance at that time – the number of installations in January 2009 dropped by approximately 67% from their August 2007 peak. Sirius XM did not recover to August 2007 levels until mid-2010, aided in part by somewhat improved industry auto sales (which remain low by historic standards), and even more by increases in our penetration of auto production. Because we will not be able to duplicate that improvement in penetration, our vulnerability to future auto declines is actually significantly greater than it was in prior years. While it appears that the auto industry is on the slow mend,⁹ it is difficult if not impossible to project precisely how it will perform, and how Sirius XM will perform, over the next licensing period, particularly more than 12-18 months into the future.

⁸ See <http://www.autoobserver.com/2011/09/edmundscom-trims-2011-forecast-to-126-million.html>.

⁹ It is important to keep in mind that although 2011 new vehicles sales levels are projected to finish stronger than those in 2009 and 2010, auto sales for the four years from 2009 through 2012 will be at their lowest level since the period 1980 to 1983.

41. The terms of our contracts with automakers are extremely favorable for the OEMs. For example, as an incentive to OEMs to install our satellite radios in their vehicles and offer our service to consumers as part of the sale or lease price of their vehicles, we continue to make substantial payments to the OEMs. Without these subsidies and incentives, OEMs would not continue to undertake the development, integration or end-user marketing of Sirius XM that are essential to our ability to inform customers about our products and to acquire subscribers. In today's market the importance of incentives cannot be overstated, in particular in view of the increasingly robust competition that Sirius XM faces, as detailed above.

42. The incentives Sirius XM pays to OEMs take various forms. For example, in many cases incentives comprise a share of the revenues the Company derives from subscribers using vehicles equipped to receive our service, as well as reimbursements for certain costs associated with the installation of satellite radios. These cost reimbursements can include, in certain cases, covering the OEM's hardware costs, tooling expenses and promotional and advertising expenses, providing facilities for testing of prototypes, and discounted subscription fees. Each OEM has a different agreement with Sirius XM that sets out what its incentive and revenue share payment entitlements will be. With some exceptions, OEMs generally earn approximately [REDACTED] of net subscription revenues from their enabled vehicles.

43. Sirius XM's average annual expenditure on incentives to the OEM market – including revenue shares, commissions, hardware subsidies and marketing costs – based on contractual terms for 2009 through 2012 has been over [REDACTED]. Although we have been successful in reducing the revenue share of certain of our agreements, and unit costs of installation continue to improve, our overall expenditures to automakers are likely to increase over time as auto volume, revenue share payments, marketing, and commissions increase.

The Retail Aftermarket

44. Sirius XM also continues to distribute satellite radios and subscriptions directly to consumers through our websites, national retailers such as Best Buy, Radio Shack, Wal-Mart and a broad base of regional and/or independent retailers. Approximately 110-120 people are involved in the design and development of Sirius XM radios and accessories, including in-house staff involved in aftermarket product design and development, as well as in-house dedicated engineers and outside programmers. As described above, distribution through the aftermarket channel has declined substantially since the *Satellite I* proceeding, and continues to decline at an annual rate of approximately 5-10%; this trend is expected to continue, and in fact to accelerate, in the 2013-2017 period. Nevertheless, we continue to offer incentives to our aftermarket distributors, because without them it would be difficult, if not impossible, to convince retail outlets to dedicate any of the scarce shelf space in their stores to carry Sirius XM's radio products.¹⁰ In total, Sirius XM continues to spend approximately [REDACTED] on aftermarket incentives annually.

Sirius XM's Technical Contributions and Continuing Innovation

45. The *Satellite I* testimony of Terrence Smith and Anthony Masiello outlined in detail the extraordinary level of investment and innovative effort involved in creating and

¹⁰ In their *Satellite I* testimony, Mr. Law and Mr. Cook described the ways in which Sirius and XM paid incentives to retail outlets and consumer electronics manufacturers to ensure the manufacture and distribution of their satellite radios. For example, they explained how Sirius and XM subsidized chipset and manufacturing costs to enable retailers to offer lower retail price points, and how we paid retailers certain revenue shares and activation fees, as well as paying them for circular promotions and point-of-sale displays. Today, the incentives Sirius XM pays to aftermarket participants vary by retailer, and sometimes vary based on whether the retailer is marketing the Sirius or XM service. We also have an incentive program for our smaller distribution channels, such as truck stops, travel centers and special markets (e.g., boats and RVs).

launching the Sirius and XM systems.¹¹ I will not repeat that testimony here. Instead, I will address the material changes in our technological efforts that have occurred since the *Satellite I* proceeding, as well as some of our projected innovations during the 2013-2017 period, which are required to ensure that Sirius XM's business remains competitive and viable.

46. Our satellite radio systems are built around three principal components: (1) satellites, terrestrial repeaters and other satellite facilities related to the network uplink and transmission of the signal, (2) broadcast studios and (3) satellite radio receivers. The delivery of our content to our subscribers depends on the development and maintenance of satellites and an extensive network of terrestrial repeaters, as well as the development and continued innovation of our chipsets, receiver products and broadcast facilities.

47. In light of the increasingly competitive environment in which the Company operates and will operate in the future, we continually monitor our infrastructure, incur substantial expense to maintain and upgrade our technology, and evaluate and develop innovations in our product offerings to ensure we deliver a compelling product in an ever-changing landscape. We are well aware that it is common, especially in the last decade, for financially sound companies to fall on hard times due to the rise of competing, lower-cost technologies. Take Blockbuster and Borders, for example: both companies once had considerable financial health, but when faced with the rapid emergence of new technology from Netflix and Amazon (among others), fell into financial turmoil. Finding themselves struggling to innovate rapidly to remain competitive, both companies recently have filed for bankruptcy.

48. Sirius XM certainly strives to stay ahead of the curve and avoid a similar fate – whether from competition or as a result of unforeseen system failures. Even with satellites in

¹¹ The effort and expense were so extraordinary that in my view, were Sirius XM just starting up today instead of some twenty years ago, it would not be possible to launch and maintain the Company's services, given today's market conditions.

orbit and a fully operational system, we continue to require a huge amount of intensive technological innovation and investment in upgrades both on the ground and to the satellites themselves. As Mr. Masiello predicted in 2006, innovation has continued unabated over the last licensing period in numerous areas of the technology surrounding Sirius XM's business. Overall, we employ approximately 300 people in our technology-related units, including employees dedicated to engineering and development, operations, and implementation of our products. Our Satellite & Transmission and R&D efforts are extremely costly, representing more than \$80 million and \$45 million in operating costs, respectively, in 2010.

Sirius XM's Satellite Networks

49. Sirius XM continues to maintain and operate two fully functional satellite networks for the legacy Sirius and XM networks. Upgrades for both systems are necessary to maintain Sirius XM's infrastructure and to ensure no drop-off in quality or coverage of satellite signals. Satellites fail unexpectedly in the ordinary course, and cannot be repaired in orbit; accordingly, our satellite network has to be periodically upgraded and satellites (including backups) must be replaced from time to time. Each satellite replacement campaign is required to ensure the quality of Sirius XM's service and involves a significant investment of time, money and resources to accomplish. Such projects typically take approximately thirty-six months from concept through contracts, construction, testing and finally launch. Each individual satellite replacement project requires an investment of approximately \$300 million, which includes satellite construction, launch, insurance, capitalized labor and new ground equipment to support telemetry, tracking and command (TT&C) and uplink. By the end of the first quarter of 2012, Sirius XM will have gone through a complete replenishment of the satellite systems on both the

Sirius and XM systems. Overall, this project has cost the Company approximately \$1.5 billion over the last six years.

50. Today, we have a total of five satellites in orbit to service the XM system; these include two of the original XM satellites (expected to be useful for a couple more years), two satellites that were launched in 2005 and 2006 (XM-3 and XM-4) to replace original satellites, and one satellite (XM-5) that was launched in October 2010 as an in-orbit spare for both the XM and Sirius systems. It took a tremendous amount of work and expense – about \$300 million – to develop and construct the XM-5 satellite and to allow it to function as a spare for either of our satellite systems. On the Sirius network, by the end of the first quarter of 2012, we will have replaced the original three Sirius satellites with two new satellites (FM-5, launched in 2009, and FM-6), at a total cost of approximately \$600 million.

51. Typically, subject to the good health of a satellite, its expected useful life is approximately 12 to 15 years. Absent any unforeseen circumstances, we would hope that our newly replenished satellite networks (which we began to upgrade in 2005) will maintain Sirius XM's services through approximately 2020. However, as noted, new satellites require a great deal of time, planning and investment. We will have to start our investment for our next new generation of satellites in 2016 or 2017, and by 2017 we likely will have commenced construction for the replacement of the XM constellation of satellites. In the meantime, we must diligently monitor our current satellites; any satellite failure could require an earlier \$300 million investment for a replacement to maintain the integrity of our satellite service, and a potentially crippling loss of revenue if we were to have more than one failure before the time it takes to replace the first failed satellite.

Sirius XM's Network Of Terrestrial Repeaters

52. Satellite coverage provides clear reception only insofar as areas have an unobstructed line-of-sight with one of the satellites. Where there are obstructions (due to terrain, tall buildings, etc.), signals from the Sirius or XM satellites might be blocked and reception of satellite signals can be adversely affected. In many of these areas, the Company has deployed a vast network of terrestrial repeaters to fill in any gaps in coverage. These repeaters receive the satellite signal not from the main satellites, but rather through a separate service at a different frequency, and use a different modulation method than the satellites to optimize propagation of the signal and avoid interference with the satellite signal. The repeaters first translate the signals they receive into the correct frequency to be transmitted to satellite radios, and then send the signal out at a modulation that allows for better transmissions in dense or obstructed areas.

53. In furtherance of our hierarchical modulation scheme project, which I describe below, Sirius XM was required to visit every single site that houses a terrestrial repeater to upgrade the electronics. For the XM system repeaters, this project has just recently been completed, and involved upgrades both to increase the repeaters' capabilities and to address end-of-life issues, resulting in total costs of approximately \$7 million.¹² Additional components will need to be replaced on the XM repeater network over the next several years, which will involve a substantial financial investment.

¹² In performing this extensive analysis, our engineers found that we were maintaining more XM repeaters than was truly necessary. Accordingly, we plan to reduce our XM repeater network from 800 repeaters to 600. We are also looking to find ways in which to co-locate our repeaters; *i.e.*, to house the repeaters for the XM and Sirius systems in a single site pursuant to a single lease. We hope ultimately to realize some cost savings and efficiencies by doing so, but this effort will also involve a substantial reengineering of the entire network to accomplish.

54. For the Sirius repeaters, an even greater investment will be required going forward. The Company plans in the near future to move to having only two Sirius satellites instead of three; these two satellites will orbit the Earth in a geostationary orbit at a lower elevation than the three original geosynchronous satellites. In short, this means that the satellites will experience more signal blockages as they orbit. As a result, Sirius XM will need to increase the number of repeaters on the Sirius system substantially. By 2015, we plan to increase the number of Sirius repeaters from 140 to 450. This upgrade of the Sirius repeater network, combined with replacement of end-of-life equipment at existing Sirius sites, will cost the Company a total of approximately [REDACTED].

Sirius XM's Continuing Innovations In Chipsets & Radios

55. In addition to the significant expenditures in continuing to upgrade our satellites and repeater networks, Sirius XM also has expended substantial resources to develop new technology in our chipsets (the “brains” of the radio) and the satellite radios themselves. Today’s chipsets have smaller geometries, and can provide more features and better processing at a lower cost than those from just a few years ago. With today’s technology, the Company can increase the type of processing that it puts into its receivers to increase the programming that can be delivered using the same amount of bandwidth that we are permitted to use.

56. To accomplish these goals, Sirius XM launched what we have called our “hierarchical modulation scheme,” through which we are now able to deliver 25% more content over our existing network to help us compete more effectively in the increasingly competitive landscape.¹³ This endeavor has required substantial effort and expense to update Sirius XM’s

¹³ This expanded content primarily takes the form of an expanded lineup of channels (what we have coined the “XMH” channels), which feature, among other additional content, an expanded lineup of content, including a new line of Spanish-language music and non-music channels geared toward the fast-growing Hispanic community.

entire infrastructure and network, including terrestrial repeaters (as described above), uplink information, new chipsets for both networks, new technology for error protection of those signals, and development and implementation of state-of-the-art compression technology.

57. The new hierarchical modulation essentially permits Sirius XM to overlay additional content over the legacy modulations by compressing the data that is delivered and injecting a layer of “noise” on top of it. The existing radios in the market today will filter out the noise and the subscriber’s listening experience is completely unaffected. However, new radios equipped with our new chipset will be able to interpret the new layer of information as additional programming (*i.e.*, new channels). To accomplish this, Sirius XM had to, at a substantial expense, change how our signals are sent through both networks of satellites and repeaters, and also had to develop new chipsets (the x65H chipset)¹⁴ and radios (the Edge and Lynx radio products as well as others that continue to be developed and will be introduced by the end of 2012) to collect and deliver the information in a usable format to the listener. Overall, this project resulted in approximately \$20 million in costs to the Company.

58. Due to the several-year deployment time in the OEM market for new technology, at first these new products will be available only through our aftermarket distribution channel, where we do not face the same constraints as we see with the automakers’ time to market. However, Sirius XM is also now working with its OEMs to include the new XMH-enabled chipsets in the satellite radios installed in their vehicles. Chrysler will roll out cars with these

¹⁴ As with other technologies, chipset development is an area that requires constant, substantial investment to remain competitive. A new generation of chipset is delivered to the market approximately every twenty-four months, and each requires a substantial investment and dedicated R&D team. For example, in addition to the x65H chipset that has been recently introduced, Sirius XM plans to introduce its eighth generation Sirius chipset within the next two years that will improve the quality of service on both the Sirius and XM bands.

capabilities in the spring of 2012. Ultimately, within the next three to four years, we hope to have this new technology established as the standard in satellite radio technology.

Sirius XM's Broadcast Studio Facilities

59. Sirius XM's programming originates principally from studios in New York City and Washington, D.C., and to a lesser extent from smaller studio facilities in Cleveland, Los Angeles, Memphis, Nashville and Orlando. Both of the New York and Washington, D.C. offices house facilities for programming origination, programming personnel and facilities to transmit programming. The merger of Sirius and XM has not resulted in any significant space or cost efficiencies in the Company's facilities.

60. At multiple locations, Sirius XM continues to bolster its broadcast and satellite uplink facilities, storage of content, and the like. These revamping projects have required a fairly significant investment of approximately \$14 million. Over the next few years, Sirius XM plans to replace its studio infrastructures, upgrade and replace its storage requirements for its broadcast facilities, invest in archival tools and continue to develop and invest in security technology to protect the value of its content and prevent hacking and other security threats. These projects are expected to cost the company approximately [REDACTED] over the next 5 years

Data Service Offerings

61. In addition to its audio content, Sirius XM also continues to invest substantially in being able to provide data services to its subscribers. Our data services provide information regarding weather, traffic, stock prices and even gasoline station locations and gasoline pricing. We purchase the data and package and deliver it to the subscriber in a useful way through tools in the radios. Sirius XM also has individual agreements with certain OEMs to provide specific information to drivers in their vehicles. For example, Sirius XM has an agreement with Toyota

through which certain information specifically for Lexus drivers is fed to Sirius XM, which then passes along the information through its receivers; Sirius XM manages the radios so that only those installed in Lexus vehicles can decode the data, for all others it is undetectable.

62. Data services have become a far more important element of Sirius XM's services since the previous rate-setting proceeding, amounting to an approximately \$11.5 million investment in development and delivery. Data services provide additional capabilities that OEMs value over and above Sirius XM's music content, and is another useful means of keeping our products installed in the dash of vehicles on the road today.

The Outlook For The Future Of Sirius XM

63. The foregoing overview of Sirius XM's business operations, technology investments and other costs of operation, as well as the competitive environment in which Sirius XM operates, should make clear the extremely challenging environment in which the Company operates, despite our significant efforts and only recent profitability. Given this environment, it is extremely difficult to predict precisely how the Company will perform more than a year or two out, or what market factors will have an effect – for better or worse – on the Company's financials. What is clear is that any number of factors, including prominently the increasingly competitive environment for in-car listening, and Sirius XM's near-total dependence on the volatile auto market, could have a significant negative effect on Sirius XM.

64. While we remain bullish about our future, certain key data underscore the challenges we continue to face. Our annual conversion rate – basically, the number of trial subscribers who sign up – has dropped since 2007 from over 50% for Sirius and over 52% for XM to about 45% for the combined Company today. The Company's monthly churn rate (*i.e.*, the percentage of self-paying subscribers who discontinue use of our service) during the last year

has ranged between approximately 1.9% and 2.0%. In other words, the Company loses between approximately 300,000 and 400,000 self-paying subscribers per month, who primarily leave because they believe they can access the audio content they desire elsewhere either for free or more cheaply.¹⁵ To attract new subscribers to offset this attrition, and to grow our subscription base overall, Sirius XM will need to provide a service that is price- and quality-competitive with the increasing array of viable consumer alternatives, and do so while supporting a cost structure that is far more onerous than that of our competition.

65. Another challenge we face results from implementation of our first-ever price increase, effective January 1, 2012. Under the FCC's order approving the merger of Sirius and XM, the combined Company agreed not to raise the retail price for its basic subscription package, a la carte programming packages or certain other programming packages until mid-2011. Thus, notwithstanding the massive expansion of our premium content over the last several years, Sirius XM has never raised its prices to consumers.¹⁶ In July 2011, the FCC issued an order stating that there was no further need for the agency to be involved in Sirius XM's pricing decisions going forward. In view of the value we have added to our services over the last several years, effective January 1, 2012, Sirius XM will increase the price of its base service from \$12.95 per month to \$14.49 per month.

¹⁵ Subscribers choose not to renew their subscriptions for a variety of reasons, the most common being a change in vehicle, unwillingness to pay for the cost of service, or dissatisfaction with the service or customer care. When subscribers leave Sirius XM due to the cost of service, our research has shown that while the majority of them return to terrestrial radio, a growing number of them will replace satellite radio with content available on smartphone or mobile device apps, particularly those who already know about or use such apps outside of the car.

¹⁶ Prior to the merger of the two companies, Sirius also charged \$12.95, the same fee it charged since its launch; XM charged \$9.95 from its launch until 2005, and \$12.95 from 2005 until the merger.

66. Notwithstanding the justification for the price increase, we cannot predict with certainty what its impact will be on our subscriber levels or bottom line.¹⁷ Because of our subscription renewal cycles, while we are fairly certain that we stand to lose subscribers – in other words, that the price increase will have some negative impact on both churn and conversion rates – we will not know the full effects on these or other important subscriber metrics until mid-2013.

¹⁷ Under the FCC order approving the merger of Sirius and XM, we were permitted to institute a separate charge for payments incurred since the filing of our merger application to the music, recording and publishing industries for the performance of musical works and sound recordings or for device recording fees. Effective July 29, 2009, we began adding a U.S. Music Royalty Fee (“MRF”) to most of our subscribers’ invoices as a small percentage of the base subscription rate; we reduced the percentage charged in the MRF as of December 6, 2010. The presence of the MRF in addition to our price increase will limit our ability to charge customers additional fees going forward without serious effect on churn.

The New York Times

Gadgetwise

Getting Smart About Personal Technology

NOVEMBER 15, 2011, 6:00 AM

Trying Out the World's First In-Car Music-Streaming System

By [SAM GROBART](#)

MOG, the music-streaming service, can now integrate with BMW's iDrive interface. Here are some of the problems with listening to music in your car (which is otherwise awesome):

1. Commercial radio is just awful. A limited number of songs played in endless repetition is bad enough — to then have to hear asinine ads for weight-loss and debt-reduction services on top of that makes you wish you had never been born. Public radio can be worlds better, but it's not always consistent—and there's always the possibility that you've stumbled into the minefield of boredom and haranguing that is Pledge Week.

2. Your own music can get tiresome. Whether it's a stack of CDs in a changer or your iPod connected to your car stereo, the problem with your own music is that, well, it's yours. You know all of it already. Now, sometimes, that's O.K. — you want to hear your favorite songs. But you can find yourself caught in a closed circuit if you're stuck with only the songs you've bought. (This is particularly true if you mostly listen to older music. I stopped getting new tracks after [Eric B. & Rakim](#) broke up.)

3. Satellite radio is good, but it also has its limits. I embraced satellite strongly and passionately when it came on the scene. Narrowly programmed, ad-free channels meant that there was a high likelihood I would enjoy what was being played while still preserving the serendipity and discovery of radio. But over the years, I think I've heard most everything satellite radio is going to play for me. The stations' playlists are not ever-changing. Spend time with, say, [First Wave](#) (the New Wave channel on Sirius XM) and you'll find yourself saying, "Please, please, please let me hear [a Smiths song](#) other than the five you play all the time."

That's what made my time with [MOG's](#) new BMW-compatible app so intriguing. If you don't know, MOG is an ad-free, subscription-supported online music-streaming service, like [Rhapsody](#) and [Spotify](#). MOG has more than 13 million songs in its library. It's not every song in the history of the cosmos, but it's a robust and diverse collection of music. If you pay MOG \$10 a month, you can get its mobile app. As of today, the iPhone version of that app now works in concert with BMW and Minis to deliver the full MOG experience on the road.

Third-party apps that are integrated into car systems are not entirely new. [Pandora](#), the popular radiolike streaming service, [has been available in many new cars](#). But Pandora is more like a radio station: You pick an artist, and the service plays songs from people like that artist.

MOG does more than that. For starters, you can call up any song in its library at any time. If you want to hear “[No Parking On the Dance Floor](#)” by Atlantic Starr, by all means do so. If you want to pivot from there to Cherrelle’s “[I Didn’t Mean to Turn You On](#),” have at it.

You select songs and albums using BMW’s dashboard and steering-wheel controls. Furthermore, MOG’s visual interface is identical to other BMWs’ [iDrive](#) system. That’s because MOG is part of BMW’s [ConnectedDrive Apps](#) platform, which translates third-party apps into BMW’s visual language and makes them work with the knobs and buttons in the cockpit. If you know how to tune in a radio station in a BMW (no mean feat, by the way—[iDrive hasn’t always been universally loved](#)), you can use MOG.

In addition to letting you select individual songs, MOG allows you store playlists, so you can call up mixes you’ve already made from songs in its library. Not only that, you can play “featured playlists” by other users, as well as playlists created by MOG’s editorial staff and invited musicians. You can listen to John Legend’s “Favorite Philly Soul Jams” and “Cowbell Rock,” playlists that will be far more eclectic than what you find on satellite, for the most part.

MOG also takes a page from the Pandora playbook and allows you to make a radio station out of any song you are listening to. If you’ve got “[Tell Me Something Good](#)” by Rufus and Chaka Khan on, you can enable MOG’s radio mode and hear either songs only from that artist or from a range of similar artists.

Since MOG on BMW is working off the phone, it requires a wireless connection. But like other streaming-music services, it lets you store selected tracks on your phone, so they are available if you drive through a dead spot.

What’s it like to use all this? It’s pretty cool, actually. I didn’t do a whole lot of single-title searching while I was driving, because the idea of spelling out “[J.U.N.G.L.E. L.O.V.E.](#)” while going 50 m.p.h. didn’t seem smart. But if you have someone in the car with you, they can have a lot of fun playing D.J. The mixes — ones I made on MOG’s site and then used in the car or mixes from other people that show up in the menu — were a lot easier to call up and move through: if a song came on I didn’t much like, I could use my loaner BMW’s steering-wheel controls to advance to the next track.

All of this is available only to people who bought 2011 BMWs and Minis that have the BMW Apps or Mini Connection option installed. That’s not a huge number of people, but the implications of this project are wider than that. Software is a lot easier and faster to update than hardware. Technology moves a lot faster than automakers can plan: In 2006, the Lexus LS 460 was the first car to offer an internal hard drive that could store music. Its capacity was 30GB. Back in 2000, when the LS 460 was being planned, 30GB was probably a lot. But by 2006, when the \$61,000 sedan was released, you could get an iPod with 80GB for \$349.

When a manufacturer develops a new car, you’re talking about a cycle that can last six or seven years. BMW says it was able to go from concept to release in eight months—that’s almost unheard of in the auto industry.

What automakers are realizing is that they don't need to provide everything themselves — they just need to create a platform for other apps. Ford is doing this with its Applink program, and you would have to imagine that other carmakers are ramping up their own plans. Music, navigation, communication — we already have all of these things in a smartphone.

To talk about all this without bringing up safety would be negligent. As [Louis C.K. recently pointed out](#), just because we can do something does not mean we should. Is calling up a MOG playlist any more involved than tuning in a radio station? Probably not. Is getting e-mails read aloud to you more involving? Possibly. Probably. Car manufacturers will say that they are merely providing a safe way to incorporate activities people are already doing on their smartphones. But does adding new functions to a car make it safer than the alternative or just make it more appealing for people to do (i.e., does widening the highway reduce traffic or encourage more people to drive on it)?

MOG's interactivity with BMW and Mini dashboards is an elegant, simple way to get more music you want to hear in the car. I had a blast hearing songs I hadn't thought about in years. I think the way carmakers are thinking about technology and outsourcing it is the right way to go. I just don't know if I may need a co-pilot to enjoy this bright new future.

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of)
)
)
DETERMINATION OF RATES AND TERMS) **Docket No. 2011-1**
FOR PREEXISTING SUBSCRIPTION AND) **CRB PSS/Satellite II**
SATELLITE DIGITAL AUDIO RADIO)
SERVICES)

WRITTEN DIRECT TESTIMONY OF DAVID J. FREAR

(On behalf of Sirius XM Radio Inc.)

Introduction and Witness Background

1. My name is David J. Frear. I am Executive Vice President and Chief Financial Officer of Sirius XM Radio Inc. (“Sirius XM” or the “Company”). Prior to the merger of Sirius Satellite Radio Inc. (“Sirius”) and XM Satellite Radio Holdings, Inc. (“XM”), I served as Executive Vice President and Chief Financial Officer of Sirius. I hold a Master of Business Administration degree from University of Michigan Graduate School of Business Administration as well as a Bachelor of Arts degree from University of Michigan.

2. I testified on behalf of Sirius in the predecessor proceeding before the Copyright Royalty Board (“CRB”) to set rates for the 2007-2012 period (“*Satellite I*”).

3. My prior testimony covered, among other topics, the risks of the satellite radio business, the start-up and ongoing costs incurred by Sirius in running its business, as well as how Sirius generates revenues. Sirius XM has designated that testimony for inclusion in this proceeding.

4. My present testimony is organized as follows: I begin with a discussion of the financial health of Sirius XM, updating the record since the time of the last proceeding, summarizing key financial events that have transpired during the current license term, and addressing the more salient risks the Company is currently facing. I next discuss the negative impact that an increase in the sound recording royalty rate beyond that applicable for 2012 would have on the Company. Finally, I discuss our recent efforts to procure licenses in direct dealings with individual record labels that would encompass the rights for which rates are to be set in this proceeding. We have experienced considerable success with this license initiative to date, despite the overt interference with those direct-licensing efforts by SoundExchange and other record industry trade groups, which would strongly have preferred avoiding the implications for rate-setting here of the rates established in those licenses.

The Financial State of Sirius XM

A. The Merger of Sirius and XM

5. On February 19, 2007 Sirius and XM announced their intent to merge. Shortly thereafter, in March 2007, the two companies filed a “Consolidated Application for Authority to Transfer Control” with the Federal Communications Commission (“FCC”). In June 2007, the FCC’s Mass Media Bureau gave public notice that it had accepted the application for filing, started its informal six-month merger review clock, and set a deadline for comments or petitions for July 2007. At around the same time, in April 2007, the U.S. Department of Justice (DOJ) announced it would conduct an investigation of the merger as well.

6. Sirius' shareholders approved the transaction in November 2007, but it was not until March 2008 that the DOJ announced it had closed its investigation of the merger, citing no harm to consumers or competition. As part of its ultimate findings, the DOJ concluded that the evidence did not establish that any reduction in competition would result from the merger; according to the DOJ, the relevant market in which Sirius and XM competed was broader than just satellite radio, and included terrestrial radio, Internet music services, iPods, and various other audio options.

7. The FCC approved the merger on July 25, 2008. The companies officially merged on July 29, 2008. As a result of the merger, XM shareholders received 4.6 shares of Sirius common stock for each share of XM stock they held.

B. Sirius XM's Near Bankruptcy Experience

8. The challenging conditions that had plagued the separately-owned entities continued in the immediate aftermath of the merger – a time when many companies struggled to stay afloat in the midst of the credit crisis. By late 2008, Sirius XM had insufficient cash to repay the remaining outstanding balance due on the \$300 million of 2½% Convertible Notes that were set to come due on February 17, 2009 (the “Notes”) and an inability to access the capital markets to refinance this (and other) debt. In an effort to avoid bankruptcy, the Company retained Evercore Capital (“Evercore”) in November 2008 to raise capital to refinance the Notes. Evercore solicited 21 prospective investors, spanning the range of likely private equity, debt investor, and corporate sources. None was willing to provide the necessary financing to the Company.

9. Among the stated reasons that potential investors declined to invest in the Company during this period of crisis were:

- The Company and its predecessors had sustained nearly 20 years of losses and did not have positive EBIDTA margins;
- Sirius XM’s business is highly risky;
- Sirius XM faces a risk of declining market share due to new competition and technology;
- The business is too dependent on the cyclical automotive industry and GM and Chrysler were themselves on the precipice of bankruptcy;
- Institutional investors were faced with large cash redemptions at the time; and
- The Company was not a good fit for traditional investors.

10. These are the same Notes that SoundExchange, through its expert witness Sean Butson, opined in *Satellite I* could be refinanced. Indeed, Mr. Butson “*conservatively* assumed that all maturing SDARs bonds will be refinanced at 10%, which is above the coupon rate of the bonds.” Rebuttal Testimony of Sean Butson, CFA, at 17 (“Butson Rebuttal”) (emphasis added). No one, myself included, anticipated at the time of the last proceeding that the Company would be unable to refinance the Notes at all.

11. Two weeks prior to the maturity of the Notes, Sirius XM expected to sign an agreement with a large group of noteholders to extend the maturity of the Notes. On the day of the scheduled signing, the largest holders informed the Company that they had sold their Notes to a third party, whom they declined to identify. We immediately initiated a call to a party that we suspected, based on industry rumor, had purchased the large block of Notes. With only days remaining until the February 17, 2009 maturity date of the Notes, and with no viable sources of financing, we engaged in discussions

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

12. With financing options running out, Sirius XM hired the consulting firm Alvarez & Marsal, which spent eight weeks preparing the Company to file a Chapter 11 petition on the date that the Notes were to come due. Filing for Chapter 11 bankruptcy protection was averted only when, after brief but intense negotiations, Liberty Media Corporation (“Liberty”), a potential lender we had only recently been introduced to, agreed to provide a \$380 million loan (in two phases) in a series of transactions that enabled the Company to avert a bankruptcy and a default on its debt.

13. The terms of the Liberty deal, while acceptable to Sirius XM given the circumstances, were onerous: Liberty demanded and received an extraordinary 15% interest rate on its loans; a \$30 million “restructuring” fee that further increased the cost of the loans; preferred stock equal to 40% of the Company’s equity on a converted basis; liens on substantially all of the Company’s assets; and the right to nominate directors to the Company’s Board of Directors proportional to its equity interest in the Company.

14. The Liberty funds were used to pay all the principal and interest on the Notes that came due on February 17, 2009, as well as for general corporate purposes. Also in

early 2009, we extended two bank credit agreements totaling \$350 million. The terms of the extensions were also onerous, requiring the Company to pay a 2% restructuring fee to existing lenders and for Liberty to take a \$100 million participation in the credit agreement.

15. To repay the Liberty loans and the extended bank agreement, Sirius XM issued new notes, which were non-investment grade “junk” bonds. This debt consists of \$526 million of 11.25% Senior Secured Notes due in 2013, which we issued in June 2009, and \$257 million of 9.75% Senior Secured Notes due in 2015, which we issued in August 2009.

16. The Sirius XM stock price reflects this tumultuous financial history and near bankruptcy experience. The stock fell from over \$4 in January 2007 down to \$.055 per share on Feb. 11, 2009, a time when bankruptcy seemed inevitable. On September 15, 2009, we received a delisting notice from NASDAQ because our common stock had closed below \$1.00 per share for 30 consecutive days and was therefore not in compliance with the NASDAQ Marketplace Rules.¹ The stock price still has not recovered or even approached its historic highs.² The share price remains substantially below January 2007 levels – currently trading at approximately \$1.75 per share – and in

¹ As the Company was unable to cure this noncompliance in the allowed time, NASDAQ set a hearing to determine if the Company should be de-listed or given an extension of time to comply with marketplace rules. On April 27, 2010, two days before the hearing was set to take place, NASDAQ informed Sirius XM that it had regained compliance with all marketplace rules and allowed the Company to remain listed. *See* April 27, 2010 Press Release “SIRIUS XM Regains Compliance With All NASDAQ Listing Rules.”

² By comparison, on March 7, 2000, XM’s stock closed at a high of \$45.93 and Sirius’ at \$66.50 on February 17, 2000.

the past 52 weeks has ranged from \$1.27 to \$2.44 per share. Consequently, investors that purchased stock in January 2007 have lost over 50% of their investment. Those that purchased stock in February 2000 – when Sirius’s share price was at a high – are even worse off. They have lost over 97% of their investment.

C. Sirius XM’s Current Financial Position

17. After nearly 20 years of losses and following the Company’s recent near bankruptcy experience, Sirius XM achieved its first year of positive net income in 2010 and, in 2009, its first year of positive free cash flow (“FCF”) and Adjusted EBITDA.

Key financial metrics since the *Satellite I* proceeding are shown in the chart below:

	2007 ³	2008 ³	2009	2010
Total Revenue	\$2,059	\$2,437	\$2,473	\$2,817
Net Income (Loss)	(\$1,248)	(\$902)	(\$352)	\$43
Adjusted EBITDA	(\$565)	(\$136)	\$463	\$626
FCF	(\$505)	(\$552)	\$185	\$210
EBIT	(\$859)	(\$429)	\$153	\$353

18. While this recent performance is encouraging, it is important to recognize that Sirius XM is still a long way from recouping the massive expenditures that were necessary for the Company to provide a product that now, after 20 years of losses, generates sufficient revenues to cover its ongoing costs.⁴ As of September 30, 2011, Sirius XM had amassed a cumulative FCF of negative \$5.5 billion and a cumulative EBITDA of negative \$3.7 billion. It also has cumulative net operating losses of \$8 billion. Even if the Company is able to continue its recent trend of profitability, it will be

³ Pre merger figures for Sirius and XM are combined for 2007 and 2008.

⁴ Many of these expenses are detailed in my *Satellite I* testimony and the *Satellite I* testimony of Mark Vendetti.

years before Sirius XM recoups all of its losses from the last two decades. Any increase to our costs, such as an increase in the SoundExchange royalty rate, will only lengthen the time it takes to recoup these losses.

19. Furthermore, were it not for the one-time merger-related cost cutting efforts, the Company would not be profitable today. As part of the merger, we were able to reduce our subscriber acquisition, sales, marketing, and administrative costs by more than \$500 million. As part of these efforts, we reduced the number of employees of the combined company considerably.

20. We have also succeeded in reducing our programming costs more than \$100 million over the 2008-2009 period and continue to renegotiate key contracts with content providers in an effort to further reduce our costs. Below are examples of some of the more significant cost reductions we have achieved through contract renegotiations:

- a. **Howard Stern:** [REDACTED]
- b. **National Football League:** The original seven year contract called for stock and cash payments of nearly \$230 million, or an average payment of nearly \$33 million per year. The renegotiated [REDACTED].

⁵ The original seven year agreement also contained \$73 million in warrants. If one includes this additional value received by the NFL, the annual savings increases to over [REDACTED].

- c. **Oprah:** The original three year contract called for \$55 million of payments over three years, or annual payments of over \$18 million. The new [REDACTED].
- d. **Bruce Springsteen:** [REDACTED]
- e. **National Basketball Association:** [REDACTED]
- f. **NASCAR:** The original five year agreement calls for payments of \$107.5 million, or \$21.5 million per year. The revised agreement calls for payments [REDACTED]

As these savings make clear, the cost of content that Sirius XM has been able to secure through individualized, marketplace negotiations has been declining over the last several years. The fee paid to SoundExchange, by contrast, is not the product of a similar marketplace dynamic, increasing substantially year after year, and is currently one of our largest costs.

21. Even with these cost cutting efforts, Sirius XM continues to expend extraordinary sums of money each year in operating expenses to maintain its business, primarily to support its delivery infrastructure as well as the specialized reception devices (satellite radios) that transmit our service to consumers.

22. It is important to note that these costs differ substantially from those incurred by the Internet-based services with which we are increasingly competing for subscribers. Internet-based services are simply able to piggyback on delivery networks

(broadband/wireless Internet) and reception devices (PCs and mobile phones) that were built, and are maintained and marketed at tremendous cost, by other parties (including broadband and cellular providers, PC makers, smartphone manufacturers, etc.). Sirius XM, by contrast, incurs the costs of content as well as the costs of delivery and receiver development.

23. I describe this because it provides important context to the competitive dynamics discussed in the accompanying testimony of James Meyer (“Meyer Testimony”). I also understand that our economic expert in this case, Dr. Noll, is adjusting certain marketplace benchmarks to account for the fact that the costs and revenues of those Internet-based benchmark services do not include or cover certain of the delivery and receiver costs that are wrapped into Sirius XM’s stem-to-stern delivery of content through our proprietary satellite network and receivers. I have reviewed Dr. Noll’s allocation of costs as between those that are unique to Sirius XM and those of the type incurred by Internet music providers. In the following paragraphs I highlight and briefly describe those cost categories that are unique to Sirius XM as relied upon by Dr. Noll. The following dollar amounts are rounded annual totals based on Sirius XM’s 2010 operating costs, as reflected in our Annual Report on Form 10-K.

24. *Satellite and Transmission Costs*: \$81 million. This category comprises the Company’s costs associated with the operation and maintenance of our technological infrastructure, including satellites, satellite telemetry, tracking and control systems, terrestrial repeater networks, satellite uplink facilities, and broadcast facilities. The costs associated with our satellites are described in greater detail in the Meyer Testimony.

25. *Engineering Design and Development Costs*: \$45 million. This category

of costs relates to the Company's development of new chipsets and products, research and development for broadcast information systems, and costs associated with the incorporation of our radios into vehicles manufactured by automakers.

26. *Subscriber Acquisition Costs:* \$413 million. Sirius XM's business being dependent on its subscriber count, the cost of attracting and retaining subscribers is among the Company's largest and most important costs. The category of "subscriber acquisition costs"⁶ as reported in Sirius XM's public filings is derived principally from hardware subsidies and other commissions and incentives paid to automakers to install and activate satellite radios in their vehicles and subsidies paid for chipsets and certain other components used in manufacturing radios.

27. *Sales and Marketing Costs.* [REDACTED]. While our total annual costs for Sales and Marketing in 2010 were over \$215 million, the [REDACTED] allocated by Dr. Noll includes only those costs associated with the OEM and retail markets.⁷

28. *Revenue Share and Royalties:* [REDACTED]. While our total annual costs for Revenue Share and Royalties in 2010 were over \$435 million, the [REDACTED]

⁶ In terms of dollars, the reported category of subscriber acquisitions costs is our second highest, following only the category revenue share and royalties.

⁷ In total, our sales and marketing costs include those for advertising, media and production, including promotional events and sponsorships; cooperative marketing; customer retention and personnel. Cooperative marketing costs include fixed and variable payments to reimburse retailers and automakers for the cost of advertising and other product awareness activities performed on the Company's behalf. In the first half of 2011 alone, Sirius XM expended nearly \$100 million in sales and marketing, a slight decrease from the previous year. However, we expect sales and marketing expenses to increase going forward as we increase our advertising and promotional initiatives to attract new customers in existing and new distribution channels, and to launch and expand programs to retain our customers.

allocated by Dr. Noll includes only Sirius XM’s revenue-sharing arrangements with OEMs as part of our hardware distribution network.

29. *Depreciation and Amortization:* [REDACTED]. While our total Depreciation and Amortization costs were nearly \$274 million, the [REDACTED] allocated by Dr. Noll covers depreciation expenses associated with satellite transmission including satellites [REDACTED]) and the costs associated with the launch vehicle, broadcast equipment, and the terrestrial repeater network [REDACTED].⁸

30. In addition to these large ongoing costs, Sirius XM currently carries a substantial amount of debt. Today, Sirius XM has \$3.086 billion of outstanding debt, of which \$2.386 billion matures between 2013 and 2015 – *i.e.*, during the license term covered by this proceeding:

Type	Face Value	Coupon Rate	Maturity Date
Senior Notes	\$779 Million	13%	8/1/2013
Exchangeable Senior Subordinated Convertible Notes	\$550 Million	7%	12/1/2014
Senior Notes	\$800 Million	8.75%	4/1/2015
Senior Secured Notes	\$257 Million	9.75%	9/1/2015
Senior Notes	<u>\$700 Million</u>	7.625%	11/1/2018
TOTAL	\$3.086 Billion		

31. This debt load poses significant risks to the Company, as many of the risk factors that prevented the Company from accessing traditional credit markets in 2008 and 2009 persist today: the credit markets remain tight and the current economic climate continues to be filled with uncertainty.⁹ While the Company hopes to be able to

⁸ There is also a \$50 million purchase price adjustment properly allocated by Dr. Noll to this category of expenses.

⁹ The risk of another financial crisis has been a leading news item and now factors into the financial planning of many companies. “My worry about the next financial crisis is

refinance much of this debt, there is no assurance that it will be able to do so in the coming years on acceptable terms.

32. As described in the Company's most recent Annual Report on Form 10-K, this indebtedness:

- increases our vulnerability to general adverse economic and industry conditions;
- requires us to dedicate a substantial portion of our cash flow from operations to payments on indebtedness, reducing the availability of cash flow to fund capital expenditures, marketing and other general corporate activities;
- limits our ability to borrow additional funds or make capital expenditures;
- limits our flexibility in planning for, or reacting to, changes in our business and the audio entertainment industry; and
- may place us at a competitive disadvantage compared to other competitors.¹⁰

it will come from some corner we haven't really thought about, and we'll be locked into more constraints on the Fed's ability and on the Treasury's ability to really do anything," said Jeremy Stein, an economics professor at Harvard University who worked as an adviser to both the Treasury Department and the White House in 2009." Shahien Nasiripour, "Financial System Riskier, Next Bailout Will Be Costlier, S&P Says," *The Huffington Post*, 4/19/11. "The financial system is riskier than it was before the 2008 crisis that led the U.S. economy to the worst contraction since the Great Depression, Taleb [author of *The Black Swan*] said." Renee Bonorchis and Miles Weiss, "Taleb Says Government Bonds to Collapse, Avoid Stocks," *Bloomberg News*, 8/11/10. S&P has said that "we believe the risks from the U.S. financial sector are higher than we considered them to be before 2008." Shahien Nasiripour, "Financial System Riskier, Next Bailout Will Be Costlier, S&P Says," *The Huffington Post*, 4/19/11.

¹⁰ 2010 Sirius XM Radio Inc. Annual Report, Form 10-K at p. 18.

D. Sirius XM's Financial Outlook

33. Despite these large costs and significant debt, I am optimistic about Sirius XM's near term prospects. I believe that revenues will continue to increase over the next twelve months, without a commensurate increase in costs. Indeed, Sirius XM has provided some limited guidance to investors to this effect. On September 14, 2011 we provided the following estimate of future revenues and Adjusted EBITDA:

	2011(E)	2012(E)
Revenue	\$3 Billion	\$3.3 Billion
Adjusted EBITDA	\$715 Million	\$860 Million

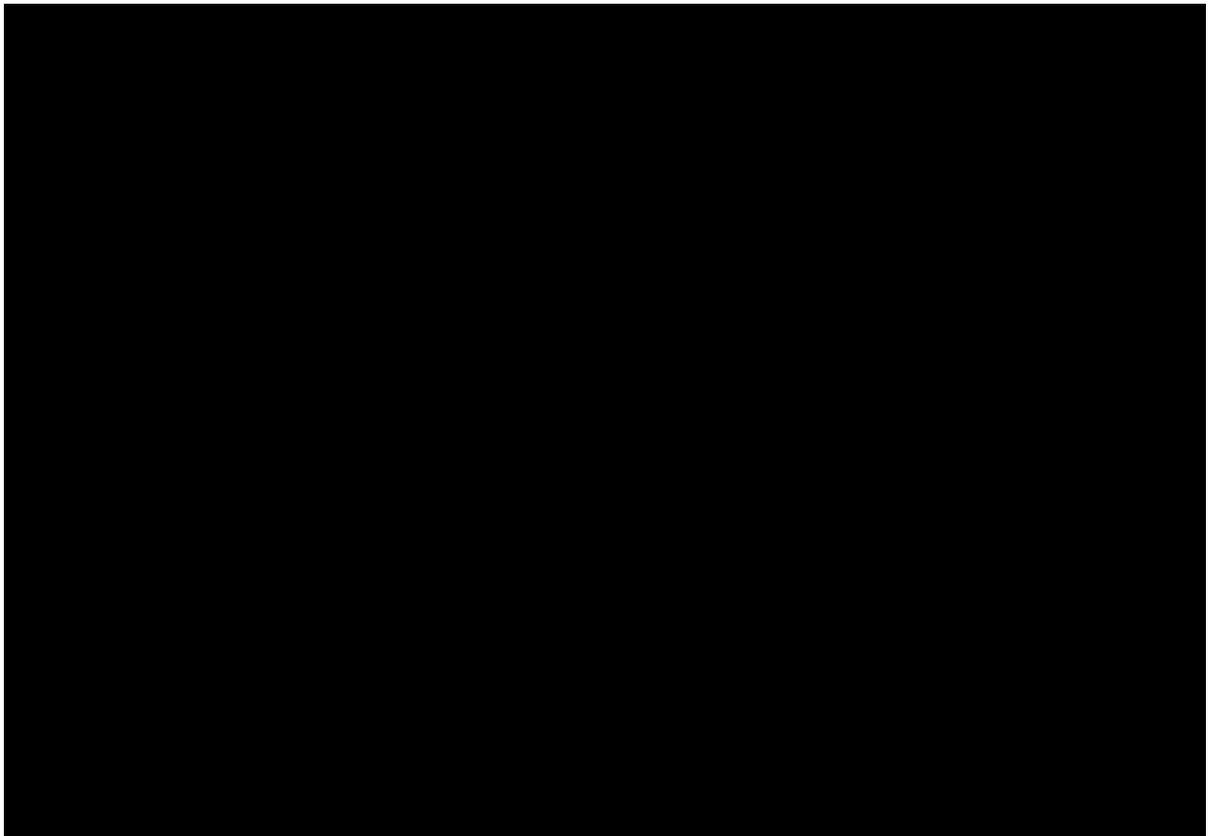
This guidance was accompanied by warnings that a number of risks may come to pass that would cause our results to materially differ.¹¹

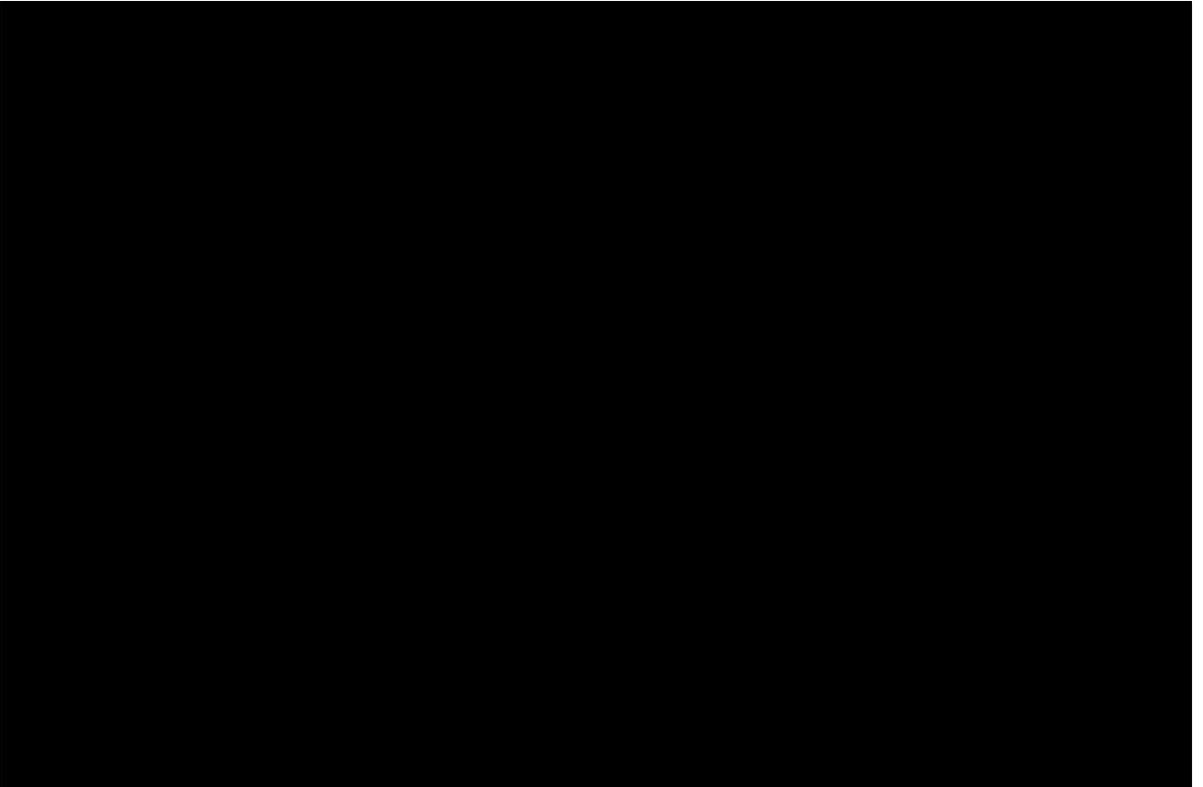
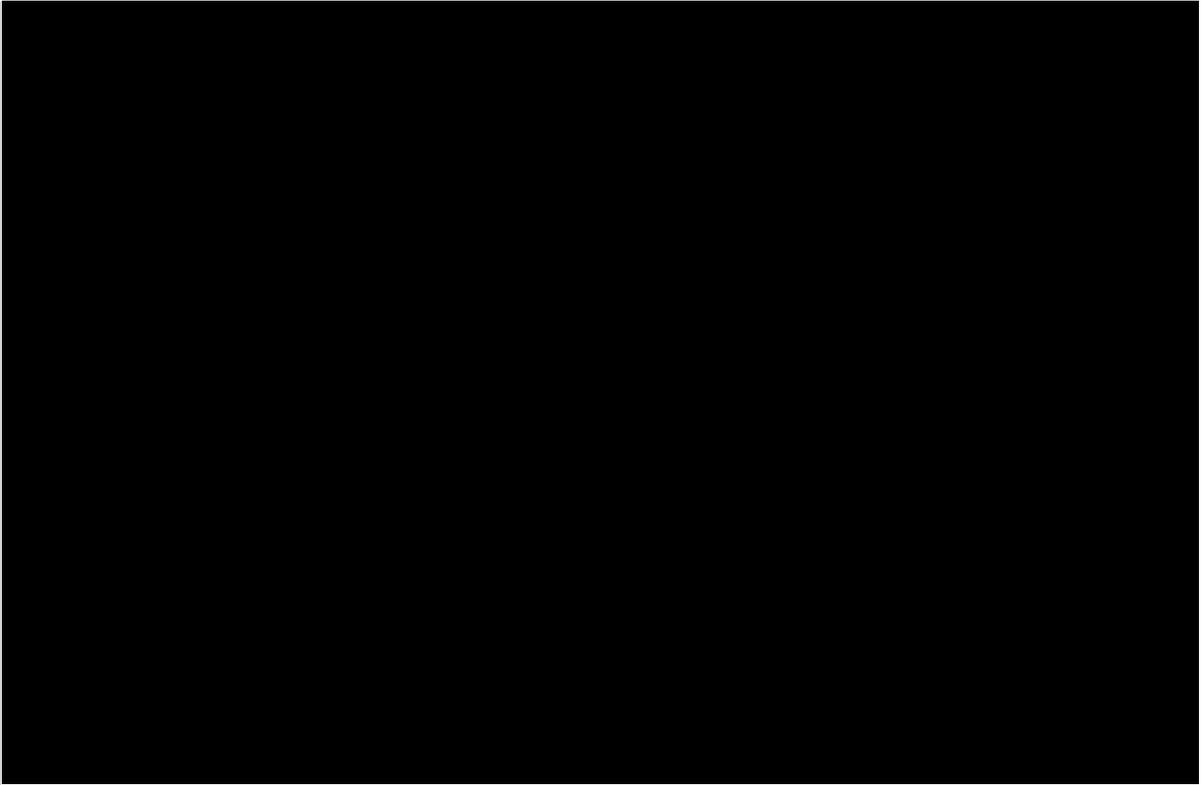
34. The Company, however, has not provided guidance past 2012. The uncertainties associated with a business such as Sirius XM's are simply too great to allow for reliable forecasts over the longer term. Indeed, the Company does not place much weight on its own internal long-term forecasts. Good evidence of this difficulty in forecasting the future of the Company is the utter failure of anyone to predict during the *Satellite I* proceeding that Sirius XM would find itself on the precipice of bankruptcy

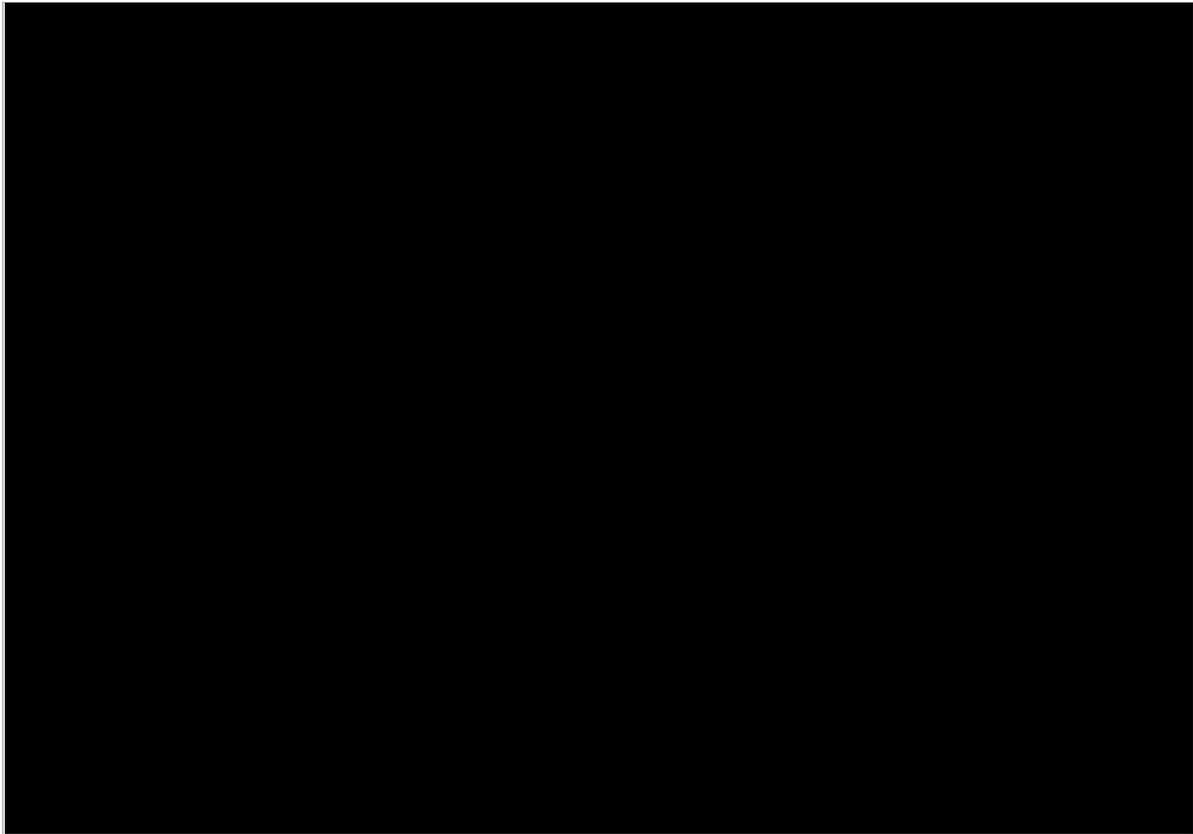
¹¹ If these results can be achieved, and the Company does not experience other setbacks, the Company will, for the first time in its history, be in a position to return capital to its equity investors. The Company has long depended on the public markets to raise the billions of dollars it needed to start and fund its operations. The Company has never returned capital to its investors through either a dividend or a stock buyback; long term investors in the Company have seen the value of their Sirius XM shares decline substantially over the last few years. A dividend or stock buyback is a way to return capital to equity investors and to encourage future equity investment in the Company.

within 12 months of the close of the proceeding. Even Sirius' own cautious optimism turned out to be incorrect in light of unforeseen developments.

35. In fact, the Company for years has had difficulty accurately predicting its future. As shown in the following charts, which compare the Company's internal five-year forecasts to its actual results, Sirius XM has year after year missed its long-term internal forecasts. This reality reflects the extreme difficulty in accurately predicting long-term results in this business.







36. In my own written direct testimony in *Satellite I*, I predicted: “Based on the consensus of widely quoted analysts’ estimates, Sirius will not turn free-cash-flow positive until 2008, and EBITDA positive and earnings positive until 2009.” ¶ 10. These prognostications, like our internal forecasts, proved to be unduly optimistic.

Furthermore, as discussed in greater detail in the expert testimony of Professor David Stowell (“Stowell testimony”), SoundExchange has had similar difficulty forecasting Sirius XM’s future, and, in fact, missed the mark by an even wider margin.

SoundExchange witness Sean Butson estimated a combined subscriber base of 33.3 million by 2010 for Sirius and XM.¹² As it turned out, the total subscriber base in 2010

¹² Written Direct Testimony of Sean Butson, 10/26/06, Appendices A & B. *See also*, *Satellite I* decision at p.49.

was only 20 million, and, of those subscribers, more than 3.5 million were on promotional trial subscriptions.¹³ Mr. Butson's other projections for 2010 similarly missed the mark: actual revenues were 42% below those projected by Mr. Butson and actual Free Cash Flows were 58% below his predictions.¹⁴ Mr. Butson revised these forecasted metrics in his rebuttal testimony, but still missed the mark by a wide margin.

37. Predicting the future of Sirius XM has become even more difficult than it was at the time of the *Satellite I* proceeding. This is primarily due to the current difficult economic climate and the significant financial uncertainty faced by the Company. While the U.S. auto market (with which Sirius XM's fortune is directly tied) has improved from the depths of the 2008-2009 recession, 2011 auto sales have "recovered" only to the level of the 1992 recession. The prospects for the strength of the recovery have dimmed recently as analysts and automakers have been revising **downward** their forecasts for 2012 auto sales; in fact, if these forecasts prove correct, auto sales for the four years from 2009-2012 will be at the lowest level since 1980-1983. This recent trend, along with concerns about sovereign risk and its effect on the U.S. financial system, as well as the lack of job creation and the malaise enveloping U.S. consumers, all pose significant threats to Sirius XM's ability to generate revenues. The tightened credit markets also reduce Sirius XM's access to capital, and could pose additional threats to the Company should it find itself once again unable to repay its debt. Most critically, as more fully discussed in the Meyer Testimony and that of William Rosenblatt ("Rosenblatt

¹³ 2011 Second Quarter Sirius XM 10-Q

¹⁴ Written Direct Testimony of Sean Butson, 10/26/06, Appendices A & B.

Testimony”), there are now a host of new competitors that were either in a fledgling state or non-existent at the time of the *Satellite I* proceeding that have dramatically changed the competitive environment in which the Company operates. Many of these new competitors have made significant inroads with car manufacturers and constitute a real threat to the Company’s core subscriber base – those who listen to Sirius XM in the car.¹⁵ Furthermore, these new competitors have shown the ability to raise billions of dollars in funding that will allow them to compete with Sirius XM year after year even if they are unable to become profitable.

E. Other Costs and Risks: Research and Development; Subscriber Acquisition and Retention

38. In an effort to stay competitive, Sirius XM continues to invest in research and development to improve its product offerings. The Meyer Testimony contains a more detailed discussion of these product improvements and their associated costs.

39. In addition to the need to expend substantial amounts of capital on research and development to simply remain competitive in the rapidly evolving marketplace, the Company also continues to spend vast sums of money in an effort to add new subscribers and retain existing ones. Over the 2008-2010 period, these costs came to nearly \$1.3 billion.¹⁶

¹⁵ Significant investments have been made by wireless operators in their data networks which position them to stream their content into cars and displace Sirius XM in the car market.

¹⁶ 2010 Sirius XM Radio Inc. Annual Report on Form 10-K, at p. 47.

40. It is important to note that while the Company did experience some notable efficiencies and synergies as a result of the merger of Sirius and XM, which contributed in large part to its recently-improved operating performance, many of those efficiencies and cost-savings were one-time or limited-duration only and have already been realized. So, while the Company's per-subscriber costs may have decreased over the last several years primarily as a result of the merger, we expect this downward trend to slow, and for those savings to level out and perhaps even to increase as we redouble our efforts to grow our subscriber base. On balance, while it is difficult to predict with any certainty, Sirius XM expects that its total operating expenses, including those that are unique to Sirius XM and not borne by our Internet-based competitors, will increase from their 2010 levels through the 2013-2017 licensing period.

41. In light of all of the foregoing, the Company's near bankruptcy in February 2009, the severe consequences of running out of cash, the increased difficulty of predicting the long-term cash needs of the Company, the Company's current \$1.5 billion deferred revenue liability, and the Company's increased size as a result of the merger, I believe it is prudent to maintain a large cash reserve – much larger than the \$100 million reserve that I testified was necessary (§ 23) in the *Satellite I* proceeding. The increased cash reserve is necessary to provide the Company with enough of a cushion to survive another downturn in the economy, a shock to our revenue stream, build replacement satellites, help secure new financing and, should we be unable to secure such financing, to repay the \$2.386 billion of debt that matures over the next four years.

Implications of a Royalty Rate Increase

42. Prior to the last rate-setting proceeding, the Company paid a royalty rate equivalent to some 2% of its revenue to SoundExchange. This rate was increased to 6% in 2007, and rises to 8% in 2012. Recently, SoundExchange boasted to the record labels that it succeeded in obtaining a 300% rate increase in the *Satellite I* proceeding and that it intends to seek another substantial increase in this proceeding. See SXM Dir. Ex. 6.

43. Should the Company achieve its budgeted revenue for 2012, it would pay approximately [REDACTED] to SoundExchange in royalties for that year alone (at an 8% royalty rate). A payment of this magnitude would represent a 28% increase over our 2010 payment of [REDACTED].¹⁷ The SoundExchange royalty payment has consumed a large percentage of the Company's earnings over the last term and, as currently structured, is an uncontrollable cost that is not linked to the value of music to subscribers.

44. We expect SoundExchange to seek a significant and immediate increase in the royalty rate as of 2013, conceivably to a level of 13% or higher. A rate of 13% would represent an increase of over 60% from the 2012 rate to be paid by the Company (and be more than double the rate paid in 2007). Our overall presentation in this filing demonstrates the impropriety of an increase of such magnitude – or anything like it. It is

¹⁷ While we charge many of our customers an additional monthly fee to cover the cost of the SoundExchange royalty, our ability to increase this fee is limited by the number of subscribers who would cancel or not renew their subscriptions if the fee was increased. This is a threat that is increasing due to the widespread availability of lower priced infotainment alternatives. Because we were operating under a rate cap that was holding our rates artificially low through 2011, adding an additional fee to customer invoices posed less of a risk to customer loss. In other words, we cannot continue to increase our prices without losing money. Viewing a recent lesson from the marketplace, on October 22, 2011, Netflix reported it lost 800,000 of its 23 million subscribers following an increase in its subscriber fees.

not only, as Dr. Noll demonstrates, economically unfounded; it would, in addition, be sufficiently material to pose a risk of disruptive hardship for the Company if it is unable to pay off its debt or access the credit markets once again, especially if current revenue levels are not sustained. While the Company's ability to access the credit markets did not seem like an imminent risk during the last proceeding, we have seen that assumptions about the direction of our business and the ability to obtain financing can be proven wrong.¹⁸ Since 2007, the Company has become only more dependent on the auto industry and its debt load remains substantial. At the same time, the competitive threats faced by the Company have dramatically increased – posing a real threat to the Company's subscriber base and its ability to attract new subscribers. In a challenging market, a material uncontrollable cost can impact both the terms on which the Company can borrow as well as its ability even to secure credit. In my estimation, the risks that the Company faces over the upcoming license term when factoring in all relevant considerations are greater than those faced in the past license term.

45. As more thoroughly discussed in the expert testimony of Professor David Stowell, and as we have seen by reviewing the Company's performance since the last proceeding, Wall Street analysts and corporate managers often fail to see the confluence of factors that can quickly undermine their business. In the 2008-2009 period, the increased royalty rates payable to SoundExchange, the price controls placed upon us by

¹⁸ SoundExchange's expert incorrectly posited at the last proceeding that the Company could just issue new stock instead of borrowing: "They [Sirius and XM] would not have to access the credit markets for additional funds by issuing new stock." *See* Butson Rebuttal at 16. This turned out to be wrong. The price of the Company's common stock (and its market capitalization) declined so significantly after the last proceeding that it even today is referred to as a "penny stock" by certain analysts.

the FCC, and the collapse of the capital markets and the economic recession all combined to trump the significant synergies we were able to achieve through the merger of the two companies, and nearly forced the Company into bankruptcy. Should the Company's subscriber base be materially impacted by the evolving competitive environment, by a significant decline in new car sales, or by any number of other risks and unforeseen factors, it may once again find itself in a state of financial distress, even if royalty rates are maintained at their current levels. An increase in the royalty rate, under such circumstances, significantly increases the likelihood of Sirius XM, once again, facing a potential disruption of its business.

Direct License Initiative

46. As noted, reflecting the challenging environment in which it operates, the Company has sought to reduce its costs by negotiating more favorable contracts with Howard Stern, the NFL, Oprah Winfrey, Bruce Springsteen, and others. As part of this effort, we also have sought to control the cost of music programming by negotiating royalty rates directly with individual record labels. We believe this approach has much to commend it, not only for Sirius XM, but for the record labels themselves.

47. In December 2009, I met with SoundExchange to discuss the possibility of entering into a license that would cover both our SDARS and Internet services under a single license. We have developed radios, and pricing plans, by which customers can receive our service either from our satellites, terrestrial repeaters, or the Internet; the transmission infrastructure is transparent to the consumer. With the advent of connected cars (as discussed more thoroughly in the Rosenblatt Testimony), consumers will increasingly be able to enjoy our service across multiple transmission infrastructures. A

multiplatform license would allow us to align our royalty arrangements with how we package our service to our customers. Sound Exchange told us they did not have the legal authority to engage in such multi-platform licensing discussions and suggested we contact the labels directly. Shortly thereafter, and following internal discussions regarding the possibility of seeking licenses directly from labels, we met with Music Reports, Inc. (MRI) to discuss and evaluate the prospects of securing such direct licenses. Starting in 2010, I attempted to meet with all of the major labels and many independent labels to discuss the possibility of direct licensing. Meetings with major labels were very difficult to arrange and for those that I could arrange, proved to be fruitless. Promises to discuss internally and get back to me largely resulted in complete silence. Proposals made went unresponded to. In meetings with former label executives (including former board members of SoundExchange), I learned that it was unlikely that any major label would “break ranks” and enter into discussions with us. Therefore, I focused the Company’s efforts on the independent labels. In the summer of 2011, we formally engaged MRI to assist us in contacting record companies to offer them the opportunity to enter into direct license agreements with us.

48. From our perspective, direct licensing offers an opportunity that relying solely on statutory licensing does not: letting the marketplace itself determine the reasonable level of fees for sound recording performance rights in a process in which individual licensors compete with one another for increased plays on Sirius XM. Such agreements also provide us with rate certainty beyond 2012 for at least some portion of our music use. We also have been developing certain product features that are not covered under the statutory license, such as single track recording and programming that

exceeds the sound recording performance complement. We operate a number of services other than our core satellite radio service – an Internet streaming service, a business establishment service, and a cable-television music service; for administrative simplicity we thought it would make sense to roll the rights for those services into a single direct-license agreement.

49. In turn, the direct license offers several advantages to record companies: (a) Sirius XM has an incentive to increase plays of the direct licensors' works, resulting in greater exposure for their artists' works and a greater share of the overall royalty pool; (b) the royalty statements we will provide will reflect an accurate count based on census reporting of all plays; (c) there is no deduction for SoundExchange's administrative fee; and (d) our royalty payments are made faster than those made by SoundExchange.

50. Perhaps most importantly for purposes of this proceeding, our licensing efforts provide the only direct evidence of market rates between a willing buyer and a willing seller for the music performed by the Company. As I explain below, SoundExchange itself acknowledged this in its flagrant attempts to interfere with our marketplace negotiations.

51. As described in the accompanying testimony of Ron Gertz, we worked with MRI to develop a form of direct license agreement (the "Direct License"), a sample of which is attached as SXM Dir. Ex. 7. MRI analyzed Sirius XM playlists to develop a list of the record companies whose artists we play most often. We sent our Direct License offer to those companies (other than the majors) in late July 2011, and have been negotiating final licenses since that time. As Mr. Gertz explains in more detail, the Direct License grants Sirius XM all of the rights necessary to operate our various services,

including through-to-the-listener public performance rights and reproduction and distribution rights to cover server copies and, in the event such functionality is introduced by Sirius XM, copies of songs saved on user devices. In exchange for these rights, Sirius XM has agreed to pay each directly-licensing record company its *pro rata* share of between 5% and 7% of revenue, with a revenue definition similar to that contained in the current SDARS regulations.¹⁹

52. To date, we have been successful in signing licenses with over 60 record companies representing over 7,000 artists, 9,000 albums, and 110,000 sound recordings. Although these companies are not “majors,” they are significant labels with important artists that we play on our service every day.

53. There is no doubt that we would have signed many more Direct Licenses were it not for interference from SoundExchange and industry associations, such as the American Association of Independent Music (A2IM), the American Federation of Television and Radio Artists (AFTRA), the American Federation of Musicians (AFM), and the Recording Academy. Indeed, we have been told as much by certain labels (*see, e.g.,* SXM Dir. Ex. 8, email from the label Signature Sounds informing MRI that “after reading about the positions of AAIM and NARAS on this issue, [Signature Sounds has] decided to stay with SoundExchange for now.”) When these organizations learned that we were negotiating directly with record labels, they immediately sought to discourage

¹⁹ The revenue definition makes certain modifications to make it applicable to a single record company rather than a collective like SoundExchange. It also clarifies that performances of under 30 seconds (generally “skips” on our webcasts where the person may be changing the channel or coming in at the end of a song) are not considered to be performances.

record labels from signing with us. A2IM President Rich Bengloff, who sits on the SoundExchange board with executives from each major label and the Recording Industry Association of America (RIAA), issued a public statement in response to the Direct License offer claiming that statutory (as opposed to direct) licenses are “good for the independent music label community,” and that “under direct licenses there are cases where independents have received less than equitable rates.” (“Statutory Rates Versus Direct Licenses for Digital Music Streaming,” Aug. 9, 2011, attached hereto as SXM Dir. Ex. 9.) Mr. Bengloff went on to exalt the role of SoundExchange: “The authority of SoundExchange to aggressively pursue the best possible statutory rates and handle all of the administration, including processing and auditing, results in having a central group to protect Indie rights as the statutory rate is working and Indie labels are benefiting from having this central voice.” He further made clear that SoundExchange would be seeking a rate in excess of 8% of revenue during this CRB proceeding. The underlying message was unmistakable: don’t break ranks by signing the Sirius XM direct license.

54. Three days later, SoundExchange was even blunter in its messaging to its constituency. In an August 11, 2011 “Statement on Satellite Radio Royalty Proceedings,” SoundExchange falsely asserted that in the prior CRB SDARS proceeding “[t]he Judges actually concluded that the appropriate ‘market rate’ was 13%,” and only dropped that rate to current levels based on “Sirius’s and XM’s precarious financial positions.” After painting a rosy picture of Sirius XM’s current and projected financial condition, the release went on to explain (in bold type): **“We . . . are planning to seek a substantial increase in the statutory rate. In other words, we plan to seek rates well in excess of the 2012 rate of 8%.”** The release went so far as to claim that “We believe .

. . our industry should expect to see a significantly increased statutory rate.” (This release is attached as SXM Dir. Ex. 10 hereto.) To reinforce its message, the release also pointedly observed that individual record label agreements of the type Sirius XM was soliciting would serve as evidence of prevailing market rates in this proceeding.

55. More recently, on October 27, 2011 in what appears to have been a coordinated attack on our direct licensing efforts, SoundExchange, the Recording Academy, and AFTRA, all released statements discouraging labels from licensing directly with Sirius XM (attached as SXM Dir. Ex. 6, 11, and 12 hereto). SoundExchange, after touting its success in the *Satellite I* proceeding of obtaining “a 300 percent increase in the rate paid by Sirius XM,” reiterated its belief that “the current royalty rates are artificially low” and that it will “seek a substantial increase in the next term.” The Recording Academy, through a letter from its president Neil Portnow, stated that Sirius XM’s efforts “will likely result in substantially reduced payments to artists and producers, a lowering of the value of performance royalties, and unnecessary conflict between artists and their labels.” Mr. Portnow went on to state that “it is in your interest to refrain from direct licensing. While Sirius may be offering positive terms, the long-term effect of accepting a rate lower than the compulsory rate could be to reduce rates overall in the future.” Finally, AFTRA (in a joint statement with AFM) stated that “Sirius XM is seeking to . . . lower the rates for music on the backs of artists and musicians” labeling our direct licensing efforts as “blatantly anti-artist and anti-musician.” The combined messaging could not be plainer: DO NOT sign direct licenses, at least at the rates offered; to do so would undermine SoundExchange’s efforts as the industry collective to ratchet rates up well beyond existing levels.

56. More recently, the Future of Music Coalition (FMC) weighed in to “applaud [their] artist colleagues for urging their members ... to not accept these direct licensing deals.” (This release is attached as SXM Dir. Ex. 13 hereto). FMC went on to note that “we are more powerful collectively than we are separately” and that “the statutory rate-setting process represents an opportunity for labels to work together to get the best rate possible.” In other words, don’t allow the forces of competition to interfere with the labels’ efforts to collude and charge supra-competitive rates.

57. It is, in my view, quite remarkable that in the face of this and undoubtedly other, undocumented pressure from these industry trade groups, we have been as successful as we have been to date in securing direct licenses.

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of)	
)	
DETERMINATION OF RATES AND TERMS FOR PREEXISTING SUBSCRIPTION AND SATELLITE DIGITAL AUDIO RADIO SERVICES	)	Docket No. 2011-1 CRB PSS/Satellite II
)	

DECLARATION OF DAVID J. FREAR

I, David J. Frear, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 28th day of November 2011 at New York, New York.


David J. Frear

October 2011: SoundExchange Statement on Sirius XM Direct Licenses and the Statutory License « SoundExchange

<http://soundexchange.com/2011/10/27/october-2011-soundexchange-statement-on-sirius-xm-direct-licenses-and-the-statutory-license/>

November 23, 2011

October 27th

SoundExchange recently received questions from artists and independent labels about Sirius XM's requests for direct licenses. Those offers are apparently being delivered by Music Reports Inc. (MRI), a company that represents the services who *use* music rather than the people and companies that *make* music. Indeed, MRI's website states that it strives to license music from music creators "**at the lowest possible cost.**"

We are not privy to the discussions MRI is having about these direct licenses. We can, however, provide some background about the statutory license for satellite radio, and what we do on behalf of the thousands of record labels and recording artists that we represent.

SoundExchange fights for artists and copyright owners

Unlike Sirius XM and MRI, we fight for royalty structures that recognize the vital role that the creators of music play for digital services. We represent everyone in the creative process – record labels and recording artists – and we spend countless hours and millions of dollars fighting for their rights. In the last satellite radio proceeding, we obtained a 300 percent increase in the rate paid by Sirius XM. MRI, by contrast, works with services, and in past rate proceedings has closely coordinated with digital music services that sought to lower rates for creators' music.

SoundExchange manages the statutory license on behalf of the industry, and believes the current rates for satellite radio are below-market.

The statutory rates for satellite radio are set in proceedings before the Copyright Royalty Board ("CRB") every five years. SoundExchange represents artists and rights owners in those proceedings and advocates for rates that give proper weight to the value of music, and proper compensation to rights holders. We've achieved dramatic increases in the statutory rates for webcasting and satellite radio in the past, and will always advocate to ensure the artist is paid rates that properly reflect the value of his or her music.

The current rates for satellite radio are based on a percentage of Sirius XM's gross revenues, as defined in the regulations. For 2011, the rate is 7.5 percent, and will go up to 8 percent next year. The proceeding to set rates for the next term is currently underway. Importantly, Sirius XM also owes *separate* royalties for its other platforms, such as webcasting. Those streams are *not* included in the 8 percent royalty rate described above.

As we've previously explained, SoundExchange believes the current rates are artificially low and will seek a substantial increase in the

next term. In the last rate setting proceeding, the CRB acknowledged that the evidence pointed to a market rate in the range of 13 percent, but then reduced the rate because of Sirius XM's financial condition at the time. We believe that it is no longer appropriate for musicians to be subsidizing Sirius XM.

Currently, artists participate *directly and immediately* in the royalties paid to SoundExchange under the statutory license. With direct licenses, they will not.

SoundExchange administers a statutory license designed by Congress to ensure that artists participate directly in the stream of royalties generated by the digital performance right. Under the statutory license, 45 percent of the performance royalties are paid directly to featured artists, whether or not they are "recouped" – or still owe money to their record labels. Recouped or not, the statutory license ensures artists are able to receive royalty payments from SoundExchange. In addition, through SoundExchange, 5 percent of performance royalties are paid to a fund for distribution to non-featured artists – again, without passing through a record label. The ability of artists to participate directly and immediately in this new and growing stream of revenue is a core policy of the statutory license.

SoundExchange is a non-profit organization with a passion for music

SoundExchange represents thousands of artists and labels, and is governed by a Board comprised of varying interests in the industry – half representing artists and half representing labels. As a non-profit organization, we are not overseen by any particular commercial interest. Instead, we advocate the interests of all creators. Our incentive is to ensure that artists receive their proper compensation, and our goal is to keep our operating costs as low as we reasonably can to maximize the royalties that we pay out to the creators and owners of music. We've been successful, paying more than \$800 million in performance rights royalties to date.

The statutory license, as administered by SoundExchange, is transparent and efficient for rights owners as well as artists

The statutory license is an extremely efficient tool for rights owners and artists as well as services, and generates value for everyone in the creative process, not just record labels. SoundExchange distributes tens of millions of dollars every quarter to artists and rights owners who owe nothing to SoundExchange other than keeping their paperwork up to date.

In addition, SoundExchange has one of the lowest administrative rates in the industry – if not the lowest. For 2010, our **administrative rate was 6.9 percent** – which covers rate settings, royalty accounting, oversight, enforcement and audits on behalf of all or our members and other activities that labels otherwise might have to undertake themselves. All of this is covered by our 6.9 percent admin rate.

We strive to be transparent, efficient and accurate in everything that we do. The way we distribute royalties is spelled out by statute and regulations – under rules that we advocate – and we've always sought the maximum degree of precision from services that we can get. Whenever possible, we distribute royalties according to exactly what a service played. We devote substantial resources to registering labels and artists to ensuring that every penny is distributed to its rightful owner, and we continue to dedicate resources to correcting the insufficient data we receive from services. Our mission is representing the creators of music, and it's a mission that we

embrace with passion.

SOUND RECORDING CATALOG LICENSE

This Agreement (the "Agreement") is entered into as of August 10, 2011 by and between SIRIUS XM RADIO INC., 1221 Avenue of the Americas, New York, New York 10020 (collectively along with its Affiliates, "Licensee") and SCI FIDELITY RECORDS, at 2060 Broadway St Ste 225, Boulder CO 80302-5226, US (collectively along with its Affiliates, "Label") (each referred to as a "Party").

WHEREAS, Label owns and/or controls certain sound recordings during the Term hereof (collectively, "Label's Catalog"); and

WHEREAS, Licensee operates a digital audio radio service consisting of a wide variety of music and non-music (e.g., news, weather, sports and talk) programming (the "Service(s)") in the Territory; and

WHEREAS, Licensee desires to obtain from Label a blanket license covering Label's Catalog for the rights set forth herein, and Label is willing to grant such rights to Licensee;

NOW THEREFORE, the Parties hereto agree as follows:

1. Grant of Rights:

(a) Service Programming: Label hereby grants to Licensee, solely in the Territory and solely during the Term, the right, through to the listener, to edit, reproduce, distribute, and publicly perform by means of digital audio transmission some or all of the sound recordings in Label's Catalog (the "Recording(s)") solely in connection with the Service (including, without limitation, as made available to subscribers via satellite radio, the Internet, multi-channel video programming distributors, and commercial business establishment services). The grant of rights will further extend to the public performance, reproduction, and distribution of Label's Catalog on or through devices that have the functional capability set forth on Exhibit A in connection with the Service. Label will be free to grant licenses to others.

(b) The Service operates pursuant to the statutory license at 17 U.S.C. §114(f) and 17 U.S.C. §112(c) (collectively, the "Statutory Licenses"). Label acknowledges, however, that this Agreement is a voluntary license, and Service may from time-to-time introduce product and programming features (artist-specific channels, for example) that extend beyond the Statutory Licenses. Label agrees that such features will be licensed hereunder, and that restrictions which apply under the Statutory Licenses will not apply in relation to Label's Catalog, including but not limited to: (i) the so-called "sound recording performance complement"; (ii) the publication of advance playlists; and (iii) the six-month limit on retention of ephemeral recordings.

2. Royalties:

(a) Service Royalty Pool. For each calendar quarter of the Term, Label's pro-rata share of royalties for the license granted hereunder to Licensee will be determined by multiplying the "Service Royalty Pool" for that quarter by a fraction, the numerator of which is the total number of "Transmissions" of identified Recordings from Label's Catalog in that quarter, and the denominator of which is the total number of "Transmissions" of all sound recordings performed on the Service in that quarter.

(i) As used herein: the "Service Royalty Pool" will mean [REDACTED] of revenue recognized by the Licensee in accordance with U.S. GAAP from:

(A) Subscription revenue recognized by Licensee directly from subscribers in the Territory for the Service; and

(B) Advertising revenues, or other monies received from sponsors, if any, attributable to advertising on channels other than those that use only incidental performances of sound recordings, less advertising agency and sales commissions.

(ii) The Service Royalty Pool will exclude:

(A) Monies or other consideration attributable to the sale and/or license of equipment and/or other technology, including but not limited to bandwidth, sales of devices that receive the Service and any taxes, shipping and handling fees therefor;

(B) Royalties paid to Licensee for intellectual property rights;

(C) Monies or other consideration received by Licensee from the sale of phonorecords and digital phonorecord deliveries;

(D) Sales and use taxes, shipping and handling, credit card, invoice, and fulfillment service fees;

(E) Bad debt expense; and

(F) Revenues earned by Licensee for the provision of: (1) current and future data services (e.g., weather, traffic, destination information, messaging, sports scores, stock ticker information, extended program associated data, video and photographic images, and such other telematics and/or data services as may exist from time to time); (2) channels, programming, products and/or other services offered for a separate charge where such channels offer only incidental or occasional performances of sound recordings; (3) channels, programming, products and/or other services provided

outside of the Territory; and (4) performances of sound recordings (and/or ephemeral recordings) that are exempt from any license requirement.

(iii) As used herein, a "Transmission" will mean each instance in which any portion of thirty seconds or more of a sound recording is publicly performed by digital audio transmission on the Sirius XM satellite radio service, but excluding performances of less than 30 seconds and performances that make no more than incidental use of sound recordings (including, without limitation, brief musical transitions in and out of commercials or program segments, brief performances during news, talk and sports programming, brief background performances during disk jockey announcements, brief performances during commercials of sixty seconds or less in duration, or brief performances during sporting or other public events).

(b) Methodology for Transmission Counts: Transmissions will be counted without respect to the number of subscribers receiving the performance of the sound recording. For example, without limitation, if a particular sound recording is transmitted on a particular channel or program only once during the reporting period, then there is one Transmission, and if the sound recording is transmitted ten (10) times on a particular channel or program during the reporting period, then there are ten (10) Transmissions.

(c) Direct "All-In" Royalties: All royalties hereunder will be payable directly to Label and not to a "Collective" (as described in section 370.1(h) of Title 37, Code of Federal Regulations). Such royalties will be inclusive of, and Label will be responsible for paying, all amounts payable to all third parties in connection with the use of the Recordings in the Service as provided herein, including but not limited to: (i) any artist(s); (ii) any producer(s); (iii) any sample owner(s); and (iv) any union(s) (including but not limited to AFM and AFTRA). (For clarity, royalties payable to Label hereunder include, without limitation, both the so-called "copyright owner's share(s)" and the so-called "performer's share(s)" of royalties). Licensee will be responsible for obtaining any required licenses from the owners of the musical compositions embodied in the Recordings in connection with their use in the Service and making all payments in connection therewith.

3. Accounting:

(a) Quarterly Accountings: Commencing with the first calendar quarter accounting period, Licensee will calculate and pay any royalties due hereunder to Label quarterly, within forty-five (45) days after the end of each calendar quarter during the Term and provide accounting statements in connection therewith. All royalty payments will be in U.S. Dollars payable to Label and sent to the Label's address as set forth above. If Label's pro rata share of royalties for a quarter is subsequently determined by Licensee to be less than the amount paid to Label for that quarter, then such payment will be deemed to be an overpayment. Label will reimburse Licensee on demand for any such overpayment. In the alternative, Licensee may deduct the amount of the overpayment from future amounts payable to Label under this or any other agreement. If Label's pro rata share of royalties for a quarter is subsequently determined by Licensee to be more

than the amount paid to Label for that quarter, then such payment will be deemed to be an underpayment, and Licensee will pay the underpayment to Label during the accounting period after the accounting period in which the underpayment is determined by Licensee.

(b) Audits: Licensee will maintain books and records concerning the use of Label's Catalog in connection with the Service. Label will have the right, upon ninety (90) days notice to Licensee, to designate an independent certified public accountant on Label's behalf, who will not be retained on a contingency basis, to examine those books and records, at its sole cost and expense, solely for the purpose of verifying the accuracy of royalty accountings hereunder, only once per accounting statement, only once per year, and solely during Licensee's normal business hours. Prior to commencing any such examination, Licensee, Label, and Label's auditor will enter into a confidentiality agreement to protect the confidential information of Licensee which will be exposed during the course of the examination.

(c) Audit Restrictions: Each accounting statement hereunder will be binding and not subject to any objection unless Label notifies Licensee of that objection within two (2) years after the date such statement is required to be rendered hereunder (and each accounting statement will be deemed rendered on time unless Label notifies Licensee to the contrary not later than sixty (60) days after the date on which such statement is required to be rendered). Label may not commence legal action against Licensee in respect of any accounting (or failure to account) unless Label commences such legal action in accordance with Section 7(c) within two (2) years after the date the applicable accounting is required to be rendered, and the scope of any such legal action will be limited to a determination of the amount of royalties, if any, payable to Label for such accounting concerned. Label's sole and exclusive remedy in connection therewith will be the recovery of the royalties Label is adjudged to be owed hereunder, if any.

4. Term And Territory:

(a) Term: This Agreement will commence as of the date first written above and will continue for a period of three (3) years (the "Initial Period"), after which it will renew automatically for successive periods of one (1) year, each a "Renewal Period," unless terminated by either Party as provided herein. The Initial Period, together with all Renewal Periods, if any, will constitute the "Term." Either Party may terminate this Agreement, effective as of the end of the Initial Period or any Renewal Period, by notice to the other not less than ninety (90) days prior to the conclusion of the then-current period of the Agreement.

(b) Territory: The "Territory" of this Agreement will mean the United States, its territories, possessions, commonwealths and military bases.

5. Representations and Warranties/Indemnity:

(a) Mutual Ability: Each Party represents and warrants to the other that: (i) it has full right, power and authority to enter into this Agreement and to perform its

obligations hereunder; (ii) this Agreement and its performance will not constitute a breach or default under any agreement to which such Party or its assets are bound; and (iii) no consent from any party is required for the execution or performance of this Agreement.

(b) Non-Infringement: Label represents and warrants that the use of Label's Catalog in the Services as provided herein will not infringe the rights, including but not limited to intellectual property rights or contractual rights, of any third party.

(c) Indemnity: Each Party hereto will indemnify and hold the other Party harmless from any third party claim, cost, or expense (including, without limitation, legal costs and attorneys' fees) arising out of a breach by the other Party of such Party's representations or warranties hereunder.

(d) Availability/Catalog File:

(i) Label represents and warrants that the entirety of Label's Catalog will be available for use by Licensee as provided herein during the Term.

(ii) Label will promptly deliver to Licensee (or Licensee's agent) an MS Excel spreadsheet including, without limitation, complete metadata for Label's Catalog (a "Label Metadata Spreadsheet"), inclusive of the following fields: title; artist; album; ISRC; UPC; duration; Distributing Label; Sub-Label; Label Catalog Number; and Initial Release Date. Label represents and warrants that it will similarly deliver updated Label Metadata Spreadsheets to Licensee promptly, but in no event later than once per month, during the Term.

(iii) Licensee will identify the Recording(s) in textual data by reference to the title of the Recording(s) and the featured recording artist, in a manner to permit it to be displayed to subscribers.

6. Confidentiality:

(a) Both Licensee and Label may disclose the existence of this Agreement, the identity of any and all Recordings subject to this Agreement, the scope of rights granted and the term and territory of the grant of rights.

(b) All other terms of this Agreement and information required to be disclosed pursuant to this Agreement will be considered confidential and may not be disclosed to third parties without the written consent of the other Party, provided, however, that:

(i) either Party may disclose such other terms of this Agreement to its employees, officers, directors, owners, agents, consultants, representatives, attorneys and auditors, in their capacity as such, on a need-to-know basis and subject to the confidentiality obligations set forth herein; and

(ii) either Party may disclose such other terms of this Agreement to third parties in the context of legal proceedings, government investigations, or compliance with federal or state securities laws or regulations (provided reasonable prior notice of such disclosure, if permitted by law, is given to the other Party and, in each case, the disclosing Party takes all reasonable steps to prevent impermissible further disclosure by recipients authorized hereunder).

7. Miscellaneous:

(a) Definitions: (i) "Affiliates" will mean, with respect to any specified person or entity, any other person or entity that now or in the future, directly or indirectly, through one or more intermediaries, owns or controls, is owned or controlled by, or is under common ownership or control with, such specified person or entity. As used in this definition, the term "control" of a person or entity means the ownership of at least fifty percent (50%) of the voting equity of that person or entity or possessing the power to direct or cause the direction of the management of that person or entity. (ii) "Business Day" will mean any day other than: (A) a Saturday or Sunday; and (B) a day in which the banks in New York City are authorized or required to close.

(b) Addresses and Notices: All notices hereunder must be in writing and sent by certified mail, return receipt requested, to the address of the Party set forth above, in order to be effective. Notices so sent will be deemed to be effective when mailed (except for notice of change of address, which will be effective upon receipt).

(c) New York Law & Venue: This Agreement will be governed by and construed in accordance with the laws of the State of New York, and the New York courts, state and federal (located in the borough of Manhattan), will have exclusive jurisdiction and venue over any disputes arising out of this Agreement.

(d) Notice Of Breach: Neither Party will be deemed to be in breach of this Agreement unless the non-breaching party has notified the breaching Party of the breach with specificity, and the breaching Party has failed to cure the breach concerned within thirty (30) days.

(e) Merger/No Oral Amendments: This Agreement sets forth the entire understanding between the parties with respect to the subject matter hereof, and all prior and contemporaneous agreements are merged herein. No modification of this Agreement, or waiver of any right hereunder, will be binding on either Party unless memorialized in a writing signed by the Party to be charged with such amendment or waiver.

(f) Counterparts: This Agreement may be executed in counterparts, all of which, when taken together, will constitute one and the same document. Facsimile or scanned signatures hereto will be deemed original for all purposes.

(g) Assignment: This Agreement may not be assigned in whole or in part by either Party without the prior written consent of the other Party. This Agreement will be binding upon the Parties and their permitted successors and assigns and will be binding on all Affiliates of Label (including, without limitation, when they cease to remain an Affiliate of Label).

(h) LIMITATION OF LIABILITY. IN NO EVENT WILL ANY PARTY BE LIABLE TO THE OTHER PARTY HEREUNDER FOR ANY AMOUNTS REPRESENTING ITS RESPECTIVE LOSS OF PROFITS, LOSS OF BUSINESS, INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY, CONSEQUENTIAL, OR PUNITIVE DAMAGES (EVEN IF PREVIOUSLY APPRISED OF THE POSSIBILITY THEREOF) IN CONNECTION WITH OR ARISING FROM THIS AGREEMENT OR RELATED ACTS OR OMISSIONS. NO PARTY MAKES ANY REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE SUBJECT MATTER HEREOF EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT.

(i) Severability. If any term of this Agreement is invalid, illegal or incapable of being enforced by any rule of law or public policy, all other terms of this Agreement will nevertheless remain in full force and effect.

ACCEPTED AND AGREED:

SCI FIDELITY RECORDS

By: 

Name (printed): MATT HEENAN

Title: GENERAL MANAGER

SIRIUS XM RADIO INC.

By: 

Name (printed): PATRICK DONNELLY

Title: EVP

EXHIBIT A
SERVICE ACCESS RULES

1. The Service may be accessed in any of the following ways:
 - (a) Through devices and applications which are authorized by Licensee ("Authorized Devices/Applications") which enable such subscribers to record a discrete number of individual sound recordings while listening to Service channels and retain such recordings only for so long as the user remains a subscriber;
 - (b) Through Authorized Devices/Applications which automatically record a discrete number of individual sound recordings from the Service (based on subscriber preferences) and present the recordings to the subscriber, on a non-interactive basis, as a customized "channel";
 - (c) Through Authorized Devices/Applications which record subscriber-designated blocks of Service programming for later playback by the subscriber;
 - (d) Through Authorized Devices/Applications which enable subscribers to select and listen to blocks of pre-recorded Service programming;
 - (e) Through Authorized Devices/Applications where the Service programming concerned has been "cached" (i.e., copied locally) for access when Authorized Devices are not connected to the Service; and
 - (f) Through Authorized Devices/Applications which enable one to fast-forward; skip; rewind; pause; and/or resume Service programming.
2. Notwithstanding the foregoing, Licensee will not:
 - (a) Take affirmative steps to enable Service subscribers to transfer Recordings to media other than Authorized Devices/Applications; or
 - (b) Take affirmative steps to enable Service subscribers to access Recordings after their subscriptions have expired or been terminated for any reason (provided that if a subscriber subsequently restores its subscription, then access to such Recordings may be re-instated).
3. For the avoidance of doubt, this Exhibit A is intended solely to illustrate the rights granted in this voluntary Agreement; it is not intended to describe the rights or limitations of the Section 112 and 114 statutory licenses, or to indicate what service offerings/features are allowed, required, or prevented or otherwise encompassed under the statutory licenses.

Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity
From: Jim Olsen <jim@signaturesounds.com>
Date: 10/27/2011 12:45 PM
To: Jake Terrell <jterrell@musicreports.com>

Jake,

After reading about the positions of AAIM and NARAS on this issue, we've decided to stay with Sound Exchange for now. Feel free to send along new information as it becomes available.

Best, Jim

On Thu, Oct 27, 2011 at 3:40 PM, Jake Terrell <jterrell@musicreports.com> wrote:

Hi Jim,

I hope you're doing well. SXM would like to implement a transition to direct licenses asap, so I'd be remiss if I didn't check in and see what I can do to help move this proposal along. Any news?

Thanks again & kind regards,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
p: 818.558.1400 x7108
f: 818.558.3474
e: jterrell@musicreports.com

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity
From: Jake Terrell <jterrell@musicreports.com>
To: Jim Olsen <jim@signaturesounds.com>
Date: 10/17/2011 12:56 PM

Hi Jim,

I don't mean to be a pest, but we think this direct Sirius XM deal is a significant opportunity for labels (indeed, more are signing up all the time), and so I'm hoping you and I can still coordinate and see about moving things along. What do you think?

Thanks again & best regards,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
p: 818.558.1400 x7108
f: 818.558.3474
e: jterrell@musicreports.com

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity

From: Jake Terrell <jterrell@musicreports.com>

To: Jim Olsen <jim@signaturesounds.com>

Date: 10/4/2011 1:10 PM

Hi Jim,

Just following up on our scheduling a call to further discuss this Sirius XM proposal. Do you have availability tomorrow (the 5th)?

Thanks again & all best,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
tel. [818 558-1400 x7108](tel:8185581400)
fax. [818 558-3474](tel:8185583474)
jterrell@MusicReports.com

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity

From: Jake Terrell <jterrell@musicreports.com>

To: Jim Olsen <jim@signaturesounds.com>

Date: 9/15/2011 3:29 PM

Hi Jim,

I hope you're doing well. I thought I'd touch base and see if you'd be up for scheduling a quick call to discuss this Sirius XM direct license proposal a bit further. As I mentioned below, getting a sense of what you've been paid by SoundExchange relative to Sirius XM is not readily apparent in the statement you provided. That said, I think sharing some further insight on this would be worth while as you further consider the proposal.

Please let me know when you'd be free to chat. Thanks again for your time.

Best regards,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
tel. [818 558-1400 x7108](tel:8185581400)
fax. [818 558-3474](tel:8185583474)
jterrell@MusicReports.com

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity

From: Jake Terrell <jterrell@musicreports.com>

To: Jim Olsen <jim@signaturesounds.com>

Date: 9/1/2011 11:21 AM

Hi Jim,

Thanks for this. It looks like this encompasses the label share of payments received; do you have corresponding "featured artist" share statements?

As I'm sure you've noticed, it's difficult to get a sense of which of these payments applied to Sirius XM Radio... upon receipt of the artist share statements we'll see what we can glean from them.

Thanks again,
Jake Terrell

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity

From: Jim Olsen <jim@signaturesounds.com>

To: Jake Terrell <jterrell@musicreports.com>

Date: 8/30/2011 12:34 PM

Jake,

I believe that this is the statement you need to do the comparison. I appreciate the additional information,

Best, Jim

On Tue, Aug 30, 2011 at 3:07 PM, Jake Terrell
<jterrell@musicreports.com> wrote:

Hi Jim,

Thanks for your response - I appreciate it. We do think there are a number of pluses to keep in mind when considering this direct license proposal.

In addition to avoiding SoundExchange deductions by licensing direct, Sirius XM will also provide detailed quarterly account statements (within 45 days after each quarter) on a "per play" basis, and afford you with a direct audit right. We believe that this will give you a much higher level of transparency into Sirius XM plays and royalties, when compared to the reporting by SoundExchange.

Furthermore, we would use your metadata to work with Sirius XM to help maximize the identification of your directly-licensed plays.

With all that in mind, along with the service enhancements provided for under this license (which allow for the potentiality of additional royalties), we believe that by licensing directly, labels may make more than they

would otherwise make when paid by SoundExchange under statutory licenses (after SoundExchange deductions). By the way, we have performed a label marketshare analysis of Sirius XM plays from July 2009 to June 2010 and would welcome the opportunity to review your SoundExchange statements covering those periods for purposes of comparing the royalties you received from SoundExchange to the Sirius XM plays of your recordings. If you would kindly send those along, we'll take a look and see about matching the two up for a comparison.

I hope these additional thoughts help, Jim. If I can answer any questions, please let me know.

Best regards,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
tel. 818 558-1400 x7108
fax. 818 558-3474
jterrell@MusicReports.com

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity
From: Jim Olsen <jim@signaturesounds.com>
To: Jake Terrell <jterrell@musicreports.com>
Date: 8/30/2011 12:01 PM

Hi Jake,

I did receive this request a few weeks back and have been weighing if we want to do this. Obviously the agreement with Sound Exchange has been favorable to this point and we're hesitant to move forward with this. If you have any additional information that might sway our decision, please let me know. Otherwise I think we'll probably sit on the sidelines and see how this plays out.

Best, Jim

On Tue, Aug 30, 2011 at 2:30 PM, Jake Terrell <jterrell@musicreports.com> wrote:

Dear Jim,

I'm writing to follow-up on the Sirius XM Radio license request

we initially provided on 8/10 (license reattached here for convenience). Have you had an opportunity to give this a closer look? If I can answer any questions to help move this along, please do let me know. If everything is in order, would you kindly return a signed copy to me via email or fax?

Our continued thanks for your time and attention. I look forward to hearing from you.

Best regards,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
tel. 818 558-1400 x7108
fax. 818 558-3474
jterrell@MusicReports.com

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Jim Olsen
Signature Sounds Recordings
PO Box 106
Whately, MA 01093
(413) 665-4036 X2
(413) 222-9651
Jim@signaturesounds.com
www.signaturesounds.com



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(413) 222-9651
Jim@signaturesounds.com
www.signaturesounds.com

Email

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9
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[Statutory Rates Versus Direct Licenses for Digital Music Streaming](#)

Posted in [News](#) by [A2IM](#)

An ongoing discussion in our community has been whether the independent music label community members are better off with statutory rates available to all labels or direct licenses, which need to be negotiated individually by each label or their distributor. This has been highlighted by certain services such as [Rhapsody](#) seeking direct licenses for non-interactive streams from music labels. Now we have heard on an unsolicited basis from members that Sirius XM Radio is contacting A2IM music label members seeking direct licenses instead of paying the statutory royalty rate to [SoundExchange](#) as available through the compulsory license.

SoundExchange was created to protect the sound recording copyrights of artists and music labels and last year collected \$250 million from [non-on-demand streaming services like Pandora, Music Choice and Sirius/XM](#). SoundExchange is an advocate for the highest possible royalty rates for non-interactive digital music streaming services (services like Pandora, Slacker, SomaFM, etc.) and then SoundExchange administers the collection and distribution of those royalties. SoundExchange is a not-for-profit governed by a board of artist and music label representatives. A2IM's President Rich Bengloff is on the board, as are two other independent label representatives and fellow A2IM members

In general statutory licenses have been good for the independent music label community as statutory licenses insure that all music label copyrights, whether those of the major labels or those of independent labels or artists, are treated equally and paid the same rate amount for each stream (play) of that music. Under direct licenses there are cases where independents have received less than equitable rates. The authority of SoundExchange to aggressively pursue the best possible statutory rates and handle all of the administration, including processing and auditing, results in having a central group to protect Indie rights as the statutory rate is working and indie labels are benefiting from having a this central voice.

Member have been calling to ask about the SoundExchange statutory license so we just want to advise our members that the Copyright Royalty Board ("CRB") set SoundExchange rate for 2011 is 7.5% of revenues and for 2012 will be 8% of revenues and for years subsequent to 2012 SoundExchange will be seeking a rate increase over the 8% of revenues rate in the CRB rate hearing. The SoundExchange statutory license covers non-interactive streaming and does not cover interactive uses of music such as on-demand streaming, downloads of music and other consumer interactive uses, which uses typically have a higher royalty value in the market place. It should also be noted, in addition to these rate considerations, that the effect on other revenue streams of these interactive streams has been the subject of numerous research reports; some noting interactive streams of music may in some cases have a revenue replacement effect while non-interactive digital broadcasts of music in many cases may prove to be promotional and lead to increased revenues from

other sources.

At the end of the day, while the statutory rate has ensured equitable treatment for independents, each music label must determine for themselves their own promotional and commerce plans and we respect that entrepreneurial spirit. We're just suggesting to you that before agreeing to any direct licenses please consider all factors and their effects on your music label's results, now and in the future, and make an educated decision. If you have any general generic business questions please always feel free to contact us at A2IM.

Related

- [The Value of a Copyright: A Letter From A2IM's Rich Bengloff](#)
- [Rhapsody Seeking Direct Licenses For Webcast Streaming – Take a Second Breath](#)
- [Copyright Royalty Board Sets Webcasting Rates for 2011-2015](#)

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August 2011: SoundExchange Statement on Satellite Radio Royalty Proceedings « SoundExchange

<http://soundexchange.com/2011/08/11/soundexchange-statement-on-satellite-radio-royalty-proceedings/>

November 23, 2011

August 11th

August, 2011 (see [October 2011 statement](#))

In recent weeks, SoundExchange has received many questions from our members about the statutory license royalty rates currently paid by Sirius XM for plays on satellite radio, as well as the status of the proceeding before the Copyright Royalty Judges to set new satellite radio rates. So we wanted to take this opportunity to give you an update.

As you may know, Sirius XM currently owes sound recording royalties equivalent to 7.5% of gross revenues (as defined in the regulations), and that rate is scheduled to rise to 8% in 2012. The Judges set that rate back in 2007, based primarily on their review of privately negotiated licenses in the marketplace. The Judges actually concluded that the appropriate “market rate” was 13% — but, based on what the Judges believed to be Sirius’s and XM’s precarious financial positions at that time, they adjusted the rate downward to the current levels.

The new proceeding to set the statutory rate for 2013-2017 is now underway. It is scheduled to begin in earnest later this year, and we can expect a decision from the Judges by the end of 2012.

We have long been preparing for this proceeding, and are planning to seek a substantial increase in the statutory rate. In other words, we plan to seek rates well in excess of the 2012 rate of 8%.

As in the past, we will present evidence of the rates reflected in current privately negotiated licenses in the marketplace. Those rates may play a very significant role in the outcome. Equally significant is the fact that SiriusXM – with its monopoly power in the satellite radio marketplace – has been announcing unprecedented earnings and profits. Financial indicators which may have justified a downward adjustment in the rates in 2007 have reversed. Today, we believe that there is no reason that the statutory rate should remain artificially subsidized any longer. SiriusXM’s own public financial statements, as well as the glowing projections they tout to their investors, make that much clear.

- Sirius and XM’s merger successfully closed and the consolidated company (which is now the nation’s only commercial satellite radio provider) has reduced its overhead costs.
- SiriusXM has gone from claiming to be on the brink of bankruptcy to experiencing record profits that are projected to grow even further in the coming years.
- SiriusXM’s revenues have risen dramatically over the past few years and are estimated to top \$3 billion in 2011.
- SiriusXM’s subscriber levels are at an all time high (currently about 21 million subscribers) and are projected to continue increasing by over 1 million per year for the foreseeable future.
- SiriusXM’s stock price has increased significantly since 2009, improving over 75% during the past 12 months (as of 8/10/11).

More listeners than ever access great music by signing up with SIRIUS-XM, and they’re coming to

hear YOUR tracks. Given their size, the amount of music they play, and their financial success, SiriusXM is one of the most significant payers of performance royalties to SoundExchange and as such, to you. In that regard, we have every interest in seeing satellite radio's success continue. But that success must be fairly shared with those who make the music that forms the very core of SiriusXM's business. We believe that if, as in the past, the Judges again review the evidence of marketplace licenses and consider SiriusXM's current financial position, our industry should expect to see a significantly increased statutory rate.

We are busily working toward that result, and will keep you all apprised of the progress of these important proceedings. SoundExchange will continue to fight vigorously on behalf of both artists and copyright owners to make sure that the products of their hard work and investment is appropriately valued when it forms the very backbone of services like SiriusXM.

Important notice from NARAS RE: Sirius

Thursday, October 27, 2011 at 03:36PM

Kimball

Dear Recording Academy Member:

It has come to our attention that satellite broadcaster Sirius/XM is seeking to bypass the standard system of paying royalties. If they are allowed to do so, it will likely result in substantially reduced payments to artists and producers, a lowering of the value of performance royalties, and unnecessary conflict between artists and their labels.

What's the issue:

Currently, satellite radio pays sound recording performance royalties to the nonprofit collective SoundExchange, which in turn pays 50% to the artists on the recording and 50% to the copyright owner (usually a record label). SoundExchange pays the artists the full 50%, even if the artist has unrecouped royalty balances, and also pays producers their share as directed by the artist. The system has resulted in an important new income stream for creators.

Sirius is now seeking to use the option of direct licensing with certain independent labels instead of using the system created by Congress that ensures fair payment to all parties. Artists should be concerned about direct licensing; 100% of the royalties would be paid to the record label which in turn may pay artists at a lower rate, subject to recoupment. And labels should be concerned as well; the lower rate being offered could have the effect of lowering the value of performance royalties to all parties.

What you can do:

If you are an artist signed to the independent label...

You can call your label today and request that it not direct license your recordings. In the interest of fairness and transparency, your label should continue to license through SoundExchange.

If you own or manage an independent label...

It is in your interest to refrain from direct licensing. While Sirius may be offering positive terms, the long-term effect of accepting a rate lower than the compulsory rate could be to reduce rates overall in the future. Creating downward pressure on the value of music may be good for Sirius/XM, but it's bad for artists and labels. Please see the following statement from the American Association of Independent Music: <http://a2im.org/2011/08/09/statutory-rates-versus-direct-licenses-for-digital-music-streaming/>

Thank you for considering this important matter to further our goals of ensuring creators are compensated fairly and the value of music is protected.

Kind regards,

Neil Portnow

President/CEO

The Recording Academy

Article originally appeared on Sound Advice Artist Management (<http://www.soundadvicemanagement.com/>).

See website for complete article licensing information.

AFTRA and AFM Alert Members to SiriusXMs Anti-Artist Licensing Offer

<http://www.aftra.org/F9EA13E58A564945B025B525075A9C63.htm>

November 23, 2011



Posted October 27, 2011

Los Angeles and New York (Oct. 27, 2011) The American Federation of Television and Radio Artists (AFTRA) and the American Federation of Musicians (AFM) alerted members of their respective unions about SiriusXMs direct license deal, which would set up independent labels to pay a performers share to the copyright owner the independent record label rather than the performer.

Since the beginning of satellite radio, Sirius and XM broadcast music under the statutory license established by Congress, and pay the required royalties to SoundExchange. SoundExchange pays half of those royalties directly to artists (45%) and to the AFM/AFTRA Fund for distribution to session performers (5%) and half to the record labels. Artists whether featured royalty artists or session singers or players, benefit from this system because performers get the 50% share Congress allocated to them directly and without recoupment.

Artists and labels both benefit from SoundExchange's transparent operations, low administrative costs, vigorous efforts to set fair license rates for music, and responsiveness to artist and label concerns. SoundExchange is governed by a Board composed equally of label and artist representatives, including the unions.

SiriusXM is seeking to undo all that, and lower the rates for music on the backs of artists and musicians. SiriusXM wants to bypass SoundExchange and pay the artists' and musicians' share to the label, explains AFM President Ray Hair. That move would send all 100% of the license fee to the label, cutting direct payment to performers right out of the equation.

The race by SiriusXM and independent record labels to grab performer copyright royalties hurts the music industry, continues Hair, it erodes the value of music industry-wide, where no one artists, musicians, or record companies can earn a fair living creating and investing in the music everyone wants to hear.

AFTRA National Executive Director Kim Roberts Hedgpeth said, This move is blatantly anti-artist and anti-musician. The statutory license established by Congress and the system administered by SoundExchange ensures transparency, efficiency, accountability and most important direct, non-recoupable payment to artists of their fair share of royalties for SiriusXMs use of their music.

Hair and Hedgpeth also called on members to let your labels know that you believe they should support the long-term value of music by refusing the SiriusXM offer and insisting on the statutory license administered by SoundExchange.

About AFTRA

American Federation of Television and Radio Artists, AFL-CIO, are the people who entertain and inform America. In 32 Locals across the country, AFTRA members work as actors, broadcasters, singers, dancers, announcers, hosts, comedians, disc jockeys, and other performers across the media industries including television, radio, cable, sound recordings, music videos, commercials,

audio books, non-broadcast industrials, interactive games, the Internet and other digital media. The 70,000 professional performers, broadcasters, and recording artists of AFTRA are working together to protect and improve their jobs, lives, and communities in the 21st century. From new art forms to new technology, AFTRA members embrace change in their work and craft to enhance American culture and society. Visit AFTRA online at <http://www.aftra.com>, and follow AFTRA on Facebook <http://www.facebook.com/aftrafanpage> and Twitter at <http://twitter.com/aftra>.

About the AFM

Founded in 1896, the American Federation of Musicians of the United States and Canada (AFM), AFL-CIO, is the largest organization in the world dedicated to representing the interests of professional musicians. With more than 90,000 members, the AFM represents all types of professional musicians, including those who record music for sound recordings, film scores, videogames, radio, television and commercial announcements, as well as perform music of every genre in every sort of venue from small jazz clubs to symphony orchestra halls to major stadiums. Whether negotiating fair agreements, protecting ownership of recorded music, securing benefits such as health care and pension, or lobbying legislators, the AFM is committed to raising industry standards and placing the professional musician in the foreground of the cultural landscape. For more information, visit the Web site at www.afm.org, and follow the AFM on Twitter <http://twitter.com/musiciansunion> and Facebook <http://www.facebook.com/afm.org>.

Media contacts:

AFTRA, Christopher de Haan, 323.634.6203, cdehaan@aftra.com

AFM, Honore Stockley, 315.422.4488 x104, honore@afm.org



Musicians' Digital Performance Royalties at Risk

Up Front

[FMC Statement on FCC Administrative Hearing in AT&T-Mobile Merger](#)
Press Release
Nov 22, 2011



Recording artists and indie labels: there's a movement afoot to change the way that you would receive your digital public performance royalties, and it's not a good one, especially for recording artists.

[Back in August](#), we blogged about the [news](#) that Sirius/XM was considering doing a direct licensing deal, expressing our serious displeasure with the move.

In recent days, the artist community — including [AFTRA](#), [AFM](#), [The Recording Academy](#), [AZIM](#) and [SoundExchange](#) — has been broadcasting the message to their members about the negative consequences of direct licensing deals for digital performance royalties. We applaud our artist

colleagues for urging their members signed to indie labels (or self-released artists) to not accept these direct licensing deals.

We here at FMC wanted to join in the chorus and explain to musicians and labels why the current statutory licensing structure is better for all stakeholders.

1. Direct payments to artists put at risk

Currently, Sirius/XM pays digital public performance royalties to [SoundExchange](#) for the music it plays; SoundExchange then distributes 50 percent of the royalties to the sound recording copyright owner (usually a label) and 45 percent to the featured performer. The non-featured performers receive the remaining 5 percent.

Under the current structure, the money doesn't pass through the record labels first; payments to performers are made **directly and simultaneously**, which means the performer gets his/her money for the digital performances whether they've recouped or not. And in some cases, performers are receiving checks with four or five figures on it, and the money keeps growing with each distribution.

If labels start to license to Sirius/XM directly, guess who gets all the money? The labels. Artists will no longer be paid directly and simultaneously via SoundExchange. Instead, their money would be passed through their label.

FMC has always argued that direct and simultaneous payments to artists is a good thing. We have lots of upstanding label friends, but history has shown that these passthroughs can lead to money being diverted to pay for album costs or other things. This arrangement lacks the same level of transparency that's available to artists when receiving a check directly from SoundExchange.

Even though it presents a huge logistical challenge to SoundExchange to seek out all the performers who are owed money, FMC thinks artists being paid directly is absolutely critical.

2. Artists and labels are paid more under the current structure

How much Sirius/XM pays SoundExchange is based on a rate set by the Copyright Royalty Board with input from stakeholders, in compliance with federal statute. Currently, Sirius/XM pays 7.5 percent of its gross revenue. The rates are currently set through 2012, after which they will be revisited to cover a period from 2013-2018.

Direct licensing deals means that Sirius/XM might pay a little bit less. While this might generate some savings for Sirius/XM, it's clearly not good for labels OR artists.

Then there's this. [Billboard reported in August](#):

The question arises if the labels will pay the artist half the royalty, or 50 percent, they receive for each time a song is played, or will some labels choose to pay them their artists the regular royalty rate, which typically ranges between 15 percent and 20 percent.

Yep. There's also a chance that, under this direct licensing arrangement, performers would see their royalty rates *reduced*. FMC cannot support such efforts to devalue the price of music.

3. Direct licensing deals leave musicians without a voice

SoundExchange is governed by an [18-person board](#) that includes 9 artist reps and 9 label reps. That means that musicians and labels have an equal say in how SoundExchange operates. (Remember, this is an organization that just paid out [\\$88 MILLION in one quarter](#), so we're not talking about chump change).

SoundExchange also has the power to audit licensees like Sirius/XM on behalf of everyone and make sure that they are paying correctly. If labels start to direct license, any errors made by Sirius/XM during playlist reporting would be much harder to discover, and only the biggest labels would have the resources to audit. We are more powerful collectively than we are separately.

If labels start direct licensing, artists will lose a voice in the discussions about licensing rates and payments because all the payments will be routed around SoundExchange — it'll just become a direct negotiation between two parties, and artists will be left out of the conversation completely. FMC was one of the artist-focused organizations that fought hard to ensure equal representation on the SoundExchange board, and artists and labels have benefited greatly from this power-sharing deal. We cannot support any effort that reduces our value in the stakeholder process.

4. Direct license deals might expand the rights

And finally, this move is also an attempt to expand what Sirius/XM is allowed to do with these licenses.

[According to Billboard:](#)

In moving to directly license masters, the company is seeking expanded licenses that will allow for more functionality. For example, it wants to allow subscribers to record programming blocks and be able to rewind and fast-forward that segment. It also is seeking to allow music to be cached locally on devices and applications that have that capability. In seeking the former, it is in effect asking for a waiver from the sound recording performance complement of the Digital Millennium Copyright Act, which limits how many times songs from an artist can be played within an hour.

That would make satellite radio much closer to on-demand services like **Rhapsody**, **MOG** or **Spotify**, which operate under an entirely different licensing structure. Even non-interactive services like Pandora currently pay a different rate than satellite radio. By bypassing SoundExchange, Sirius/XM could up paying an even lower fee for expanded offerings.

Here at FMC, we want artists to get the money they're owed for the use of their music on any platform. The statutory rate for digital performance plus direct payment via SoundExchange is an important piece of the compensation puzzle for creators. Bypassing it might benefit the bottom lines of major corporations in the short run, but it's a dangerous thing for performing artists.

- If you are a musician, we urge you to tell your labels you'd oppose any effort to re-direct your digital performance royalties through your label. In the interest of fairness and transparency, your label should continue to license through SoundExchange.
- If you are a label, we urge you to look closely at these deals, and remember that the statutory rate-setting process represents an opportunity for labels to work together to get the best rate possible.

Submitted by [Kristin](#) on October 28, 2011 - 11:32am

Tags: [Artist Compensation](#), [Performance Royalties](#), [digital performance royalties](#), [satellite radio](#), [SoundExchange](#),

Before the
COPYRIGHT ROYALTY BOARD
LIBRARY OF CONGRESS
Washington, D.C.

In the Matter of)
)
Adjustment of Rates and Terms for)
Preexisting Subscription and Satellite)
Digital Audio Radio Services)
_____)

Docket No. 2006-1 CRB DSTRA

WRITTEN DIRECT TESTIMONY OF DAVID J. FREAR

Introduction and Witness Background

1. I am an Executive Vice President and the Chief Financial Officer of Sirius Satellite Radio Inc. (“Sirius”). I submit this statement in support of Sirius’ direct case. As described in this statement, Sirius is a provider of satellite digital audio radio service (“SDARS”). The Sirius SDARS offers a variety of digital quality radio programming primarily targeted to subscribers in their cars, other vehicles, homes and on the go.

2. I offer this testimony:

- To describe the enormous financial costs and investments Sirius has made, and risks it has faced, in order to bring to the public a new and improved way to obtain programmed audio entertainment, anywhere in the 48 contiguous United States, any time, including, among other things:
 - the extensive investment that Sirius has been required to make to create from scratch a new transmission system, literally from the ground up (and from space down)—from its broadcast facilities, to satellites in outer space, to its terrestrial repeater network, and to specially designed antennas and radios;
 - the significant, ongoing financial risks and funding requirements facing Sirius as a result of this substantial investment;

- the huge costs of building distribution partnerships, establishing Sirius as a mass consumer brand and acquiring subscribers; and
 - the costs we incur to create compelling, exclusive and branded talk, entertainment and sports programming; and the extensive value we add to music programming through our experienced on-air hosts and music format managers, branding our music channels, securing limited run features with legendary musical talent, and live performances in our studios. These costs are incurred in order to convince subscribers who have multiple music listening choices, including free alternatives like terrestrial radio, to buy a new technology radio and to pay \$12.95 a month to receive our audio entertainment.
- To provide detailed financial information about Sirius, including information about the costs used by Dr. John Woodbury in his analysis of an appropriate license fee; and
 - To offer Sirius' view on the appropriate fee for the sound recording performance right, specifically why Sirius believes that the appropriate fee is at the low end of the range described by Dr. Woodbury in light of the many highly conservative assumptions used by Dr. Woodbury.

3. I have held my current position since June 2003, when I joined Sirius. My responsibilities include (i) managing the financial and accounting aspects of all areas of Sirius' business including the satellite and terrestrial transmission infrastructure; the development and manufacture of Sirius chipsets and radios; the costs of subscriber acquisition, customer care, sales and marketing; as well as the costs of program acquisition, creation and branding; (ii) oversight for the company's information technology (IT) function, including our subscriber management system described in the testimony of Michael Moore; (iii) audit and tax functions, including compliance with public financial disclosures and securities regulations; (iv) the planning and procurement for our next-generation satellite program and (v) supervision of our treasury and investor relations functions, which include balance sheet management and relationships with the Wall Street community.

4. Prior to joining Sirius, I was Executive Vice President and CFO for SAVVIS Communications, a global managed network services provider with operations in 44 countries.

Prior to joining SAVVIS, I was Senior Vice President and CFO for Orion Network Systems, an international satellite services company, where I assisted Orion in raising over \$850 million to fund the construction of the company's global satellite system. Prior to joining Orion Network Systems, I was the Chief Financial Officer of Millicom, a leading worldwide developer and operator of cellular telephone and telecommunications services. I previously held various management positions at Bear, Stearns & Company, Credit Suisse, Transway International and Deloitte & Touche. I hold a Master of Business Administration degree from University of Michigan Graduate School of Business Administration, as well as a Bachelor of Arts degree also from University of Michigan.

The Risks of the Satellite Radio Business

5. Satellite businesses are extremely risky. I know this first hand from my work at Sirius and Orion Network Systems. Further, I have followed the satellite radio industry closely since its inception in the early 1990s. I first met and began a dialog with Sirius in 1993. I was offered the Chief Financial Officer position in 1997 but declined given the overwhelming technological, business and funding risks that the industry faced during its pre-launch phase, and the potentially insurmountable competitive position of terrestrial radio which obtains its sound recordings for free and does not have to design and distribute radios in order to allow listeners to hear its service. I am also familiar with the testimony of satellite industry expert Roger Rusch, our Chief Executive Officer, Mel Karmazin, and our Senior Vice President, Engineering, Terrence Smith, which accurately describes these risks. First, Sirius was required to obtain the requisite regulatory authorizations. Then, the satellites themselves had to be designed, constructed, launched into orbit, and tested. This required an enormous up-front investment before commercial operation could begin and revenues could be generated. As further explained

by Terrence Smith, limits on satellite reception in certain areas required Sirius also to invest in a network of terrestrial repeaters to fill potential coverage gaps.

6. In Sirius' case, this satellite-related investment risk was further exacerbated because Sirius offered a wholly new consumer service utilizing innovative technologies, requiring it to simultaneously fund the design and development of compatible customer equipment to permit subscribers to receive its service, as detailed in the testimony of John Douglas Wilsterman and Robert Law. In the beginning, Sirius had to rely on third parties to design equipment. These third parties did not have experience in designing satellite radios and, given the relatively small impact satellite radio would have on their businesses, were not always motivated to devote adequate resources to the development tasks; hence Sirius was required to establish its own internal research and development program to develop radios and chipsets for its equipment. In fact, Sirius faced an enormous challenge in 2001 when critical problems surfaced with the chipsets being developed and manufactured for Sirius by Agere Systems, Inc. (the successor to the micro-electronics group of Lucent Technologies, Inc.). These chipsets were the core component of the radios that receive our broadcasts. With our planned operational launch not far away and XM Satellite Radio approaching its operational launch, Sirius did not have working radios. This setback delayed Sirius' commercial launch, pushed back our automotive OEM programs by several years, helped XM Satellite Radio get to market before us with more advanced chipsets and radios (creating a meaningful early competitive lead for XM in both number of subscribers and brand awareness), and ultimately forced Sirius to recapitalize its balance sheet and exchange approximately 91% of its debt for equity, considerably diluting the then existing shareholder base.

7. Moreover, Sirius was required to enter a market to compete against a terrestrial radio industry with a combined \$20 billion in revenue and \$11 billion in free cash flow, which among other things, obtains its musical recordings for free. In short, we were required to develop a compelling programming offering that would convince consumers to pay for a service analogous to one they already received for free. We learned early on that simply having the right to perform music and sound recordings did not mean that consumers would pay for our service. Performances of music are available, for free to the listener, from multiple sources, most notably terrestrial radio, but increasingly a plethora of internet radio stations and podcasts. In order to drive sufficient subscription demand and earn a reasonable return on capital for our shareholders, we found that we needed to invest heavily in non-music programming, such as name-brand sports programming from the NFL, NBA, NHL and NASCAR and well known personalities like Howard Stern, Barbara Walters and Martha Stewart. We have also had to invest in brand name news programming like CNN, Bloomberg, and Fox News. Further, as Steve Blatter testifies, we needed to “do music better” than our free terrestrial radio and Internet radio competitors. In order to provide a meaningfully superior music service, we had to offer deeper playlists and a broader spectrum of music genres programmed by format managers with considerable knowledge of their formats. In order to further drive listener loyalty to our music channels, the channels needed branding and personality which we achieved by featuring best-in-class on-air hosts and a strong celebrity presence. We invested in a leading edge programming software platform to allow our on-air hosts to create and record programming and to manage our entire multichannel programming service. Further, our sound quality had to be better than the competition while we still needed to extract as much capacity as possible from our allocated

spectrum to broadcast all this content. This required additional and ongoing investment in compression and multiplexing technologies.

8. Meeting these funding needs required Sirius to make capital expenditures for property, plant and equipment totaling almost \$1.3 billion through June 30, 2006 with an uncertain ultimate return on investment. As discussed below, Sirius has also incurred and continues to incur substantial and increasing operating costs.

9. Although Sirius began to invest in its business as early as 1990, and had invested more than \$1 billion prior to commercial launch, Sirius could not begin to provide service until 2002. Subscriber growth has been steady, but slower than projections at the time when we reached our initial agreement with SoundExchange. In a forecast prepared at the time of the initial agreement with SoundExchange and publicly filed in connection with the company's 2003 recapitalization, the company expected to generate \$1.4 billion in revenues, incur net losses of \$757 million and require, \$82 million in cash flow for its operations through 2006. In fact, through 2006 Sirius is expected to generate approximately [[]] less revenue, losses are expected to be [[]] higher and the company's operations are anticipated to require [[]] more cash than expected.

10. Sirius has suffered and continues to suffer substantial losses. Sirius' accumulated deficit totaled \$3.4 billion through June 30, 2006. Net losses are expected to continue to accumulate until 2009. [[]]

]] Further, Sirius will not even erase its aggregate net losses within the time horizon generally forecast by Wall Street analysts. As financial expert Armand Musey testifies, increasing sound recording performance fees may further delay these dates, which will likely

have an adverse effect on Sirius' investors and the company's ability to obtain any additional financing.

11. As is clear from my testimony, projections are uncertain estimates that often are not realized. In the projections noted above, Sirius expected to be cash flow break-even by 2005. It is now late 2006 and we have still not achieved that goal. Reaching the goals described above depends on continued growth of customer demand in the face of an uncertain market for subscription SDARS service, Sirius' competitive positioning vis-à-vis terrestrial radio, the possible growth of new technologies, and the potential for technical and operational problems with our novel technology as well as our satellites and repeater network. At the time of the original royalty agreement with Sound Exchange, industry forecasts for subscriber, revenue and free cash flow growth were far more bullish than where we stand today, further evidence that commercial-free music was not enough to drive demand for satellite radio and to turn it into a viable long term business.

The Costs of the Sirius Service

12. The costs to authorize, design, deploy and operate a SDARS system are vastly different from, and many times greater than, those faced by a traditional radio broadcaster or programmer. Sirius has developed an innovative technology that permits the nationwide broadcast of digital quality radio services to fixed and mobile radios. The costs of bringing this new technology to the market are enormous. To get its radios into vehicles and into the hands of consumers, Sirius must operate a consumer electronics business and an automotive electronics business. We must also sell the Sirius service directly to subscribers, pay subsidies and other costs to acquire those subscribers, and then bear the expenses of servicing and billing those

subscribers. Sirius must also, of course, provide quality programming that is sufficient to induce potential subscribers to pay for the service and to retain our existing subscribers.

Satellite and Terrestrial Transmission System and License Costs

13. License: As one of two winning bidders in the FCC license auction of 1997, Sirius paid \$83.3 million to acquire its license from the Federal Communications Commission (“FCC”) to operate a national satellite radio system.

14. Satellites: Sirius has invested approximately \$950 million in its first generation satellite infrastructure. Sirius invested approximately \$800 million to design, construct, and deploy its three in-orbit satellites in order to deliver its radio offerings to subscribers. Our three orbiting satellites and one ground spare satellite were designed and built by Space Systems/Loral with an intended useful life of 15 years. The capital costs of Sirius’ three orbiting satellites, including the costs associated with satellite launches, ranged from approximately \$259 million to approximately \$273 million each. The fourth satellite, currently on the ground as a spare, cost approximately \$130 million, and long-lead time parts for a potential fifth first generation satellite cost approximately \$15 million. Sirius has invested an additional \$18 million in the tracking, telemetry and control (“TT&C”) system which is used to control operation of the satellites. Sirius performs TT&C for our orbiting satellites by an earth station in New Jersey and additional stations in Panama and Ecuador, as described in the testimony of Terrence Smith. Sirius TT&C equipment has a useful life of 3 or 15 years and depreciation of the TT&C equipment is included in Sirius’ reported satellite depreciation. Satellite, launch vehicle and TT&C depreciation expenses for fiscal years 2004 and 2005 and the first half of 2006 totaled [[

]], respectively.

15. Next Generation Satellites: Sirius expects to replace its existing in-orbit, three satellite constellation by the end of 2012. We recently adjusted the useful lives of two of the in-orbit satellites to 13 years (from 15 years) to reflect how we intend to operate the constellation. In June 2006, Sirius entered into an agreement with Space Systems/Loral for the design and construction of a new satellite, the first satellite in the planned new constellation. Sirius expects the total cost of this new satellite—including the launch vehicle, launch insurance and manufacture of the satellite—to be approximately \$260 million, and the total cost of the next generation satellite program to be approximately \$1 billion.

16. Terrestrial Repeaters: Sirius' network of approximately 140 terrestrial repeaters rebroadcasts its signals in areas where satellite reception may be impaired as explained by Terrence Smith. Sirius has invested approximately [[]] million in its repeater network through June 30, 2006. Sirius has also budgeted to begin an expansion of our terrestrial repeater network and, beginning in 2006, to replace equipment at our existing terrestrial repeater sites. The expected useful life for repeater equipment ranges is 5 or 15 years. Terrestrial repeater depreciation expenses for fiscal years 2004 and 2005 and the first half of 2006 totaled [[]], respectively.

Non-Satellite System Capital Costs

17. Sirius has made the following major capital investments that are not directly related to its satellite distribution system or reception of its transmissions:

- Sirius has invested approximately [[]] million to date in its custom subscriber management system ("SMS") to integrate customer service, subscriber management and billing operations. As discussed in the testimony of Michael Moore, the SMS establishes an electronic interface for information exchanged

with automobile manufacturers, automobile dealers, consumer electronics retailers and radio manufactures and facilitates subscriber interaction through the Internet. It also permits remote activation and deactivation of Sirius radios as well as parental controls to block adult content. In addition, representatives of Sirius' customer care service provider are permitted online access to its billing and account system. The expected useful life of SMS-related assets ranges between 3 and 7 years. Depreciation expenses related to customer care and billing for fiscal years 2004 and 2005 and the first half of 2006 totaled [[]], respectively.

- Sirius has invested approximately [[]] million in leasehold improvements, primarily to its premises in New York City, and [[]] million in equipment for its National Broadcast Studio. The expected useful life for these investments ranges between 2 and 15 years. Depreciation expenses related to leasehold improvements for fiscal years 2004 and 2005 and the first half of 2006 totaled [[]], respectively. Depreciation expenses related to the broadcast studios for fiscal years 2004 and 2005 and the first half of 2006 totaled [[]], respectively.
- Sirius has invested [[]] million in furniture, fixtures, vehicles, and other property, plant and equipment. The expected useful life for these assets ranges from 2 to 7 years. Depreciation expenses related to furniture, fixtures and other PP&E for fiscal years 2004 and 2005 and the first half of 2006 totaled approximately [[]], respectively.

Operating Expenses:¹18. Operating Expenses Related to Satellite Distribution System and Service

Transmission: Total operating expenses for the satellite distribution system and service transmission were approximately \$33.2 million in 2004, \$29.8 million in 2005 and \$26.7 million in the first half of 2006. These expenses consisted primarily of service transmission costs, personnel costs, broadcast engineering, and costs associated with the engineering, operation and maintenance of the satellites, repeaters and TT&C system. Additional breakdown of Satellite & Transmission costs is provided in the following chart (dollars in thousands).

Dollars in thousands

Satellite and Transmission Operating Expense	2004	2005	First Half 2006
[[
]]
Total	\$33,198	\$29,798	\$26,699

The uplink expense includes the expense of third-party transponder leases to serve the terrestrial repeater network. This expense is comparable to the expense we would incur if we were delivering the Sirius service using leased transponders on an existing commercial satellite to

¹ Sirius has granted equity incentives, often in the form of stock options, warrants, or restricted stock units ("RSUs"), to certain employees and third parties. Many of these grants were to third parties such as car manufacturers and an exclusive retailer to encourage them to partner with SIRIUS and to install and/or sell Sirius products. Major non-music content providers also received equity grants in order to encourage them to sign exclusive contracts with SIRIUS early on, including the NFL and Howard Stern. These rights are expensed in accordance with Generally Accepted Accounting Principles and the expenses are included in the individual operating expenses outlined in the following pages.

cable head ends and other fixed distribution systems and it is my understanding that it is comparable to the expense incurred by a digital cable radio service for that purpose. The 2004 satellite expense includes in-orbit insurance, discontinued in August, 2004. The 2006 satellite expense includes an \$11 million loss on the disposal of satellite parts. These long-lead parts had been acquired as a precautionary measure in case Sirius ever needed to procure a fifth first generation satellite. In 2006, Sirius determined that these parts were obsolete and wrote off the net book value of these parts. The telecom transmission costs include transmission to the uplink facility and transmission of programming originated outside of the New York studios. The broadcast engineering expenses highlight the value that Sirius brings to its programming. The expenses include a department that works 24 hours a day, 7 days a week, with live studio operations, the operation of master control systems, studio maintenance engineering and support for the Sirius digital audio software system that is used to create and manage our more than 125 channels and is accessed by about 300 users around the country including format managers, on-air hosts and broadcast coordinators.

19. Consumer Equipment Development Costs: As explained in the testimony of Terrence Smith, John Douglas Wilsterman and Robert Law, subscribers receive Sirius' service through a choice of specialized radios and antennas. Sirius began by contracting out chipset and product design and development but quickly learned that if it wanted the work done right, it had to do it itself. Thus, we were required to establish our own chipset and product design departments. In essence, we found that we needed to enter the consumer electronics and automotive electronics businesses. FM modulated receivers enable the Sirius service to be received through existing FM radios. New three-band radios installed in vehicles permit reception of AM, FM or satellite broadcast with the push of a button. Sirius has recently

introduced two portable radios, the Sirius S50 (introduced in October 2005) which offers portable listening of recorded Sirius content and MP3s anywhere; and the Sirius Stiletto 100 (introduced in September 2006) which offers truly live listening of SIRIUS Satellite Radio and was designed to incorporate a “buy button” which allows subscribers to bookmark songs they like for later purchase on line. Sirius continues to refine and improve the dedicated integrated circuits used in its radios and its radio, themselves. Because Sirius uses a new and previously untested technology, the company has been required to incur substantial portions of the equipment design and manufacturing costs to ensure that compatible radios will be available to meet customer demand. Our expenses for engineering design and development in 2004, 2005 and the first six months of 2006 totaled \$35.5 million, \$66.3 million and \$35.2 million, respectively.

20. Sirius has incurred approximately [[]] for its chipsets since inception. In the future, Sirius will continue to incur additional chipset and product development costs associated with advanced generation products. In addition, as I explain below, Sirius provides substantial equipment subsidies and other funding to encourage sales of its equipment by various types of vendors.

21. Customer Service Center and Billing: Customer care and billing expenses include costs associated with our contractor’s full time operation of Sirius’ customer service center and subscriber management system, including personnel. This system is described in the testimony of Michael Moore. The total expenses included in customer care and billing in 2004, 2005 and the first half of 2006 equaled \$22.8 million, \$47.2 million and \$29.9 million, respectively.

22. Programming: Sirius' programming and content expenses for 2004, 2005 and the first half of 2006 totaled \$87.3 million, \$118.1 million, and \$383.0 million², respectively. These expenses include license fees to third parties that provide non-music content, costs associated with production of Sirius' music and non-music programming, costs of on-air talent and live performances, advertising revenue shares for non-music programming, and the cost of programming personnel.

- The programming expense data also include musical work and sound recording performance license fees. The ASCAP, SESAC and SoundExchange fees are actual fees paid. Our existing license with ASCAP remains in effect until December 31, 2006 and we are currently negotiating a new agreement with ASCAP. As I discuss below, these numbers are very conservative. Sirius has not accepted ASCAP's existing offer, because Sirius believes that the offer significantly over-states the value of the musical work public performance right. We have an interim license with BMI and accrue BMI fees equal to ASCAP. The sound recording fees are those actually paid to SoundExchange under our agreement that expires in 2006. In each case, there is a timing difference each year between the amount of royalty expenses accrued (for accounting purposes) and the amount of cash payments made for musical work and sound recording license fees.
- The programming cost data reflect a continued increase in the costs for non-music programming. Much of this is exclusive satellite radio content, which we have found is essential to drive subscriptions. As I discuss below, management concluded that it was essential to our business to acquire exclusive and other brand-name programming to differentiate Sirius from the many other sources of audio entertainment available, mostly

² Programming and Content expense for the first six months of 2006 included approximately \$226 million of equity expense related to 34.4 million shares of Sirius Common Stock granted to Howard Stern and his agent in January 2006.

for free, to consumers. As a result, Sirius has entered into agreements with Howard Stern, Martha Stewart, the National Football League, NASCAR, the National Basketball Association, the National Hockey League, and many others, to provide talk, entertainment and sports programming. We have also entered into agreements with Eminem, the Metropolitan Opera, Lance Armstrong and other “action sports” stars, Elvis Presley’s estate, Jimmy Buffett, The Who, and the Rolling Stones, among others, to enhance and add value to our music programming.

Dollars in thousands

Programming Expenses	2004	2005	6 mo. 2006
Total	\$87,252	\$118,076	\$382,979

The “other” category includes primarily programming costs related to our non-satellite services.

23. Sales and Marketing and Subscriber Acquisition: A large share of Sirius’ expenses relate to the acquisition of subscribers. Our activities include direct sales and marketing, conducted by our in-house sales and marketing personnel, advertising, sponsorships, consumer promotions, brand building activities, commission payments to distributors and retailers, and other payments to distributors and retailers to reimburse them for marketing and promotional activities. These activities are further described in the testimony of Michael Moore, John Douglas Wilsterman and Robert Law. Among other items, a large share of these expenses include direct subscriber acquisition costs, which include hardware subsidies, certain sales and activation commissions, and hardware-related incentives paid to manufacturers, automobile dealers and others to provide incentives for the marketing and installation of Sirius subscriber

equipment. Unlike terrestrial radio listening which simply requires a broadly available AM/FM radio, in order to listen to our service Sirius subscribers must purchase a new radio from a retailer or as a factory installed option in a new car. Sirius must subsidize the cost of these radios in order to encourage the purchase and installation of our radios.

Dollars in thousands

Sales and Marketing and SAC Expenses	2004	2005	6 mo. 2006
Sales and Marketing	\$202,848	\$212,741	\$103,174
Subscriber Acquisition Costs	\$206,851	\$399,350	\$249,606

If we were a business that simply provided our programming to third-party distributors to handle distribution to subscribers as well as all of the subscriber based functions, I would expect our total sales and marketing expense would be substantially less than \$5 million.

25. General and Administrative and Other Expenses: General and administrative expenses, include rent and occupancy costs, information technology expenses, corporate overhead, and the cost of general and administrative personnel. Our G & A expense also includes allowance for bad debts, which we expect to increase as a direct percentage of our revenue. Sirius' G & A expenses for 2004, 2005 and the first half of 2006 totaled \$57.9 million, \$87.6 million, and \$68.2 million, respectively. A significant portion of our G&A expense results from IT infrastructure and the corporate finance and accounting resources required to serve the multiple functional areas of our business including customer care & billing, as well as relationships with our radio manufacturers and distribution partners (retail and automotive OEM). In the future, bad debt expense will represent an increasing portion of our G&A expense as our subscriber base and subscription revenues increase.

Revenues

26. The Sirius subscription fee is \$12.95 per month, however, we offer discounts to subscribers who pre-pay for a period of one year or longer, discounts to subscribers who have more than one subscription, and mail-in rebates to attract subscribers. Advertising is only offered on our non-music channels (our music channels are commercial free) and is a relatively small part of our business. In addition, we receive some revenue from the direct sale of Sirius equipment.

Dollars in thousands

Revenue	2004	2005	6 mo. 2006
Subscription Revenue	\$62,881	\$223,615	\$252,817
Advertising Revenue	906	6,131	15,463
Equipment Revenue	2,898	12,271	6,788
Other Revenue	169	228	1,674
Total Revenue	\$66,854	\$242,245	\$276,742

At the time of Sirius' 2003 recapitalization and at the time of the initial agreement with SoundExchange, the company expected total revenues of \$819 million in 2006, as compared to our current guidance for total 2006 revenue of \$615 million.

Sirius' Fee Proposal

27. Sirius proposes a sound recording performance and ephemeral recording fee equal to .88% of its gross revenues from subscriptions and from advertisements on music and comedy formatted channels.

28. Sirius' proposal is based on the bottom end of the range described in Dr. Woodbury's testimony. The PSS benchmark on which the Sirius fee proposal is based includes both the public performance and ephemeral recording rights at issue in this proceeding.

Accordingly, the Sirius fee proposal covers both rights.³ In fact, Sirius believes that the many significant conservative assumptions in Dr. Woodbury's testimony and the application of the applicable statutory factors in this case more than justify a fee at or below the low end of the range described by Dr. Woodbury. It is worth noting again that the comparable fee paid by terrestrial radio (a principal competitor to Sirius) for the right to perform sound recordings is zero. I have also reviewed Sirius' proposal for the payment and audit terms applicable to this proceeding and believe they are reasonable and should be adopted. Sirius has systems in place to comply with the proposed notice and recordkeeping terms and requiring different obligations would work a significant hardship on Sirius.

Application of the Digital Cable Radio ("Music Choice") Benchmark

29. The first benchmark used by Dr. Woodbury is the digital cable radio rate set by the Librarian of Congress in 1998 following the first "pre-existing services" CARP as revised by agreement of the parties in 2003.

30. Dr. Woodbury clearly explains that analysis of a benchmark in rate setting requires careful adjustments to account for differences between the benchmark and the rate being set. This is particularly true when translating a rate based on a percentage of revenue, for the simple reason that revenues must cover all of the costs and inputs of a business, and it is not reasonable to compensate one input for revenue attributable to other inputs. To use a simple phrase, not all revenue is created equal.

31. Of course, just because the applicable digital cable radio percentage of revenue rate must be translated to a lower rate to account for the enormous additional costs incurred by satellite radio doesn't mean that the record companies and artists are paid less, as Dr.

³ In any event, to the extent the server copies are used only to facilitate the public performances licensed in this proceeding, those copies have no value apart from the performances and there is reason to charge an additional fee for those copies.

Woodbury's example explains. Given Sirius' substantially larger revenues, the proposal being made by Sirius will provide much greater compensation to SoundExchange than the compensation paid by the digital cable services under the 7.25% rate.

32. In performing his translation from the digital cable radio rate to a reasonable rate for Sirius and XM, Dr. Woodbury has used many highly conservative assumptions to be sure that he can have great confidence that the range he presents does not understate the appropriate fee that should be set. In fact, these assumptions provide compelling reasons to set the SDARS fee at the low end of Dr. Woodbury's range. I discuss below several of the most significant conservative assumptions used by Dr. Woodbury:

- Dr. Woodbury's analysis does not include any allowance for a return on the investment made by Sirius and XM in their transmission infrastructure. In light of the risk involved, these investments would be expected to generate a significant return, and return on investment is generally recognized by economists as a "cost" in economic analysis. Sirius has made much greater investment in its transmission infrastructure than the digital cable radio services, which are distributed by third parties using excess capacity in pre-existing infrastructures that have been developed for other purposes.
- Dr. Woodbury recognizes that Sirius incurs sizable costs to provide high quality, exclusive and brand name talk, sports and entertainment programming. These costs have been incurred because management, in its business judgment, concluded that such programming was essential to draw subscribers needed to ensure the survival of Sirius and allow it to succeed. Sirius could neither succeed nor survive solely as a music programming service. The benchmark cable radio

services do not incur these costs. Under the principle that “all revenue is not created equal,” the revenues attributable to these costs should not be assessed to generate fees payable for the sound recording performance right, except to the extent that these costs cause a greater use of that right, which will be a small fraction of the total expenditure. Although Dr. Woodbury calculated the adjustment merited by these costs, he did not incorporate the adjusted rate in his range of rates. The substantial investments Sirius has made in bringing unique, compelling programming to subscribers in association with well-known brand names like the NFL, NHL, NBA, Howard Stern and many more is what drives subscriptions and subscription revenues. By not including an adjustment for these essential costs in his range of rates, Dr Woodbury’s range is very conservative.

- Dr. Woodbury recognizes the sizable costs incurred by Sirius to enhance and add substantial value to its music programming. These include the costs paid to operate branded channels based on the music of a single, well-known band or artist (such as Eminem’s Shade45, and the special feature Rolling Stones Radio and The Who channels), the costs paid for well-known personalities who host programs on our music channels (such as Tony Hawk), the costs paid for our first-rate on air talent, who engage the audience, and the high production costs and technology that contribute to the sound of our channels. These costs have been incurred because management, in its business judgment, concluded that subscribers would not pay a subscription fee for the kind of music programming available on digital cable radio services. There is no better evidence of that than the digital cable radio services themselves, which originally attempted to sell their

programming as a premium paid add-on to cable television service. They quickly discovered that the market would not support that business model and now offer their service to cable and satellite systems to offer their subscribers for no added cost as part of the basic package of television programming. The benchmark digital cable radio services do not incur these costs. Under the principle that “all revenue is not created equal,” the revenues attributable to these costs should not be assessed to generate fees payable for the sound recording performance right, except to the extent that these costs cause a greater use of that right, which will be a fraction of the total expenditure. Again, as in the case of our costs for exclusive talk, news and sports programming, Dr. Woodbury does not adjust his range of fees for this difference between Sirius and the benchmark, adding further to the conservative nature of his range.

- Dr. Woodbury counts all music channels and the Sirius comedy channels as having 100% compensable programming. In fact, many of the channels contain a great deal of programming that is not subject to the sound recording performance fee. This includes talk, discussion and interview features on the branded channels (such as Faction, with its action sports personalities; limited special feature channels that include interviews, backstage content and the music of legendary musicians and bands). It also includes channels like Metropolitan Opera Radio, which features live performances and archival recordings owned and directly licensed by the Metropolitan Opera to Sirius, and other channels that feature live performances (like Margaritaville and Rolling Stones Radio). It is my understanding that the benchmark digital cable radio services lack such non-

compensable programming, or if they include it, they do not include nearly as much as Sirius.⁴ Moreover, because the digital cable radio services lack on-air talent such as the hosts used by Sirius, they likely perform more music in any given period of time on any given channel than Sirius does. The assumption that all music and comedy channels are 100% compensable is a very conservative assumption.

Application of the Musical Work Benchmark

33. Dr. Woodbury offers as an upper end for his fee range an agreement between XM and ASCAP for the musical work performance right for compositions licensed by ASCAP. Although I do not know XM's financial details, I know from Sirius' experience with its ASCAP agreement that the ASCAP-XM agreement charges about [[]] of gross revenue.⁵ The ASCAP-XM agreement significantly over-states the value of the musical work performance right, and as such is properly viewed only as an upper bound for any range to be considered by this Court and not as the rate that should be adopted.

- Sirius entered into a similar agreement with ASCAP for a period ending in 2006. We did so in 2002, at a time when Sirius expected music to constitute a much greater part of the Sirius service than it now does.
- The early ASCAP agreement was based on the then existing ASCAP agreements with terrestrial radio stations. Those agreements charged music stations 1.615% of adjusted gross revenue and talk stations .24% of adjusted gross revenue for

⁴ I also understand that sound recordings recorded prior to 1972 are not protected by copyright law and are not subject to the statutory license or the fee to be set in this proceeding. However, I understand that the digital cable radio services also perform such recordings.

⁵ The ASCAP-XM agreement nominally charges [[]] of a defined "adjusted gross revenue" but the adjustments lead to a lower percentage (about [[]]) of overall gross revenue.

“incidental” performances. It is easy to see that the calculus would be different for a service with relatively more music channels than for a service with relatively fewer music channels. With a 50%-50% music-talk split, those rates would result in a fee of about [[]] of adjusted gross revenue, or about [[]] of overall gross revenue.⁶ Of course, it is worth noting that the comparable fee paid by terrestrial radio (a primary competitor of Sirius) for the right to perform sound recordings is zero.

- The principle that “not all revenue is equal” is not properly taken into account in either the old agreement Sirius made with ASCAP or the XM-ASCAP agreement. While the economic validity of that principle is undeniable, Sirius recognized that establishing that principle would require litigation, and Sirius was not in a position to litigate with ASCAP in 2002. Sirius had just launched its service, was trying to complete its recapitalization, and it needed to attend to its business. It could not afford the distractions and costs of music license litigation.
- I do not know what prompted XM to extend its agreement with ASCAP. However, I can only assume that it did not want to conduct litigation on multiple fronts with the record companies and with ASCAP. It was clear from statements made in the press by the record companies that they would seek far more extreme fees than the agreement offered by ASCAP.

34. In any event, Dr. Woodbury explains why the musical work benchmark likely overstates substantially the fee that should be charged for a sound recording performance right. I note in particular that although musical works copyright owners are entitled to compensation for

⁶ Applying the same ratio between adjusted gross revenue and gross revenue that we encountered under our ASCAP agreement.

pre-1972 recordings and live performances, sound recording copyright owners are not.

Conclusion

35. As I have described, Sirius has invested a tremendous amount of money, effort and creative resources in its satellite and terrestrial distribution system, radio and chipset development, development of a new distribution chain, marketing efforts and program offerings. To bring this new service to the public, Sirius has incurred accumulated deficit of \$3.4 billion and to date has raised over \$3.8 billion in capital from investors. Yet, Sirius has yet to earn a profit or even turn EBITDA positive. It has incurred and continues to incur substantial losses. Any “break even” point for its investors is well in the future and subject to continuing significant regulatory, technical and marketplace risks. The imposition of excessive licensing fees as a result of this proceeding will exacerbate the financial challenges facing Sirius. Sirius respectfully urges the Court to adopt Sirius’ fee proposal.

10-K”), and May 10, 2007 Form 10-Q (for quarter ending March 31, 2007) (“the 1Q 2007 10-Q”). A copy of the 2006 10-K is attached as SIR Exhibit 47 to this Written Rebuttal Testimony and a copy of the 1Q 2007 10-Q is attached as SIR Exhibit 57 to this Written Rebuttal Testimony.

Subscriber Projections

4. I have reviewed the projections submitted by Sean Butson in connection with SoundExchange’s written direct case. Based on my knowledge of Sirius’ business and its financial planning, I find these projections to be vastly overoptimistic and unrealistic, particularly in light of more recent developments and trends.

5. In his October 30, 2006 Written Direct Testimony, Mr. Butson projected that Sirius would end 2006 with 6,326,307 subscribers. See Butson WDT, App. A, at 3 l. 5. In fact, Sirius ended 2006 with only 6,024,555 subscribers, a difference of over 300,000 in a period of about two months after the projection was rendered. As I discussed in my testimony at trial (see, e.g., June 11, 2006 Tr. at 380, June 12, 2007 Tr. at 107-08), it was during this time period that we observed a significant slowdown in the retail channel, and in December 2006, Sirius itself was required to lower its 2006 year-end subscriber guidance from 6.3 million to 6.0 million. This change in the guidance highlights the difficulty of projecting subscriber growth even over a relatively short period, let alone over a number of years.

6. Mr. Butson also projected that Sirius would end 2007 with 9,373,572 subscribers. See Butson WDT, App. A, at 3 l. 5. I understand that Mr. Butson conceded at trial that this projection was unrealistic; I concur with that assessment. In fact, Sirius’ current guidance for year-end subscribers for 2007 is “over 8 million.” Thus, even for the current year, the difference between Sirius’ guidance and Mr. Butson’s projection is on the order of 1,300,000 subscribers.

Needless to say, the absence of these projected subscribers will have a material negative effect on Sirius' revenue, cash flow, and EBITDA, among other metrics.¹

7. Sirius does not currently provide longer term guidance with respect to subscriber growth, primarily because such projections are inherently uncertain, particularly for companies like Sirius that are in the early stages of their commercial launch. In fact, earlier this year we suspended our previous long term revenue guidance. While we have some models (usually in the form of Excel spreadsheets) that go out for longer periods, senior management and I generally do not focus on these later years, which are inherently speculative and less relevant for our immediate business decisions, nor do we as a management team make judgments about what particular assumptions should be used (as we do, for example, with respect to our guidance for the current fiscal year). Rather, to the extent that subscriber estimates for later years are considered, we often consider the consensus view of the various analysts who cover the company. My group regularly follows the reports of these analysts.

8. As I testified during the trial of the direct phase of this case, we became aware during the last quarter of 2006 and the first two quarters of 2007 of a significant slowdown in the demand for satellite radio, particularly on the retail side. Among other effects, and as previously discussed, this caused us to lower our 2006 year-end subscriber guidance. In addition, reflecting both the lower starting point and what appears to be softening demand, our 2007 year-end

¹ For illustrative purposes, using the \$10.46 monthly total average revenue per user ("total ARPU") disclosed in the 2007 1Q 10-Q (at 25), the loss of one million subscribers over the course of a full year would result in a decrease in revenue in excess of \$125,000,000 ($\$10.46 * 12 * 1,000,000$). While this reduction would not fully occur in the first year (because, as Mr. Butson correctly notes, subscribers join over the course of the year, rather than all at once), it would be felt every subsequent year until the subscriber deficit was made up, if that ever occurred. As discussed below, this appears highly unlikely given the unrealistic subscriber projections by Mr. Butson for each year of the upcoming license term.

subscriber guidance initially provided in late February 2007 was significantly lower than it would have been otherwise. At this time, we are not providing any guidance as to revenue or subscriber growth beyond 2007. Further, since we initially provided our 2007 year-end subscriber guidance, we have not seen any sign of a reversal of softening demand on the retail side.

9. We do not have any operative internal projections for subscriber growth for later years at this time. In view of the retail slowdown discussed above, the models that were prepared in the ordinary course of business and produced to SoundExchange in connection with the discovery in this case are now too optimistic to be relied upon. Moreover, since last fall, analysts covering the industry have noted the slowdown in subscriber growth and have adjusted their subscriber growth estimates accordingly.

10. Using data supplied by our vendor, InSync Analytics, my staff has prepared, under my supervision, a statement showing the consensus of satellite radio analysts with respect to projected gross subscriber additions (“gross adds”).² For every year in the upcoming license term, there is an enormous discrepancy between the current analysts’ consensus and Mr. Butson’s projections of gross adds.³ These differences are reflected in the table below (all numbers in thousands):

² “Gross adds” are incoming subscribers, which may be reported by channel (OEM or retail) or cumulatively. “Net adds” reflect the deduction of subscribers who are lost or “churned” during the same time period.

³ Certain analysts do not project out as far as 2012; thus, the data points are more limited in the later years.

Projected Sirius Gross Adds

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Cumulative</u>
Butson	4,857	5,570	6,102	6,478	6,856	7,230	37,093
Consensus	<u>4,076</u>	<u>4,415</u>	<u>4,935</u>	<u>5,415</u>	<u>5,799</u>	<u>6,093</u>	<u>30,733</u>
Difference	781	1,155	1,167	1,063	1,057	1,137	6,360

Over the six-year license term, the analysts' consensus reflects more than 6 million fewer gross adds than projected by Mr. Butson.

11. While the projections of gross adds in the analysts' consensus are themselves uncertain, and may also prove to be overly optimistic, as projections concerning this industry often have been, we are not aware of, nor do we have internally, any subscriber gross adds projections that we believe to be more reliable than the foregoing analysts' consensus. The analysts' consensus is much more realistic than the Butson projections relied upon by both Dr. Pelcovits and Dr. Ordover and is the considered opinion of analysts who actively follow satellite radio and regularly publish their views.

12. In order to provide a fuller picture of Sirius' financial outlook, we have used the consensus gross adds projections referenced above to create the income statement attached as SIR Exhibit 58. This is based principally on our standard internal model, as previously produced to SoundExchange, extended out to 2012. Using the analysts' consensus for gross adds, and our internal model for loss of subscribers or "churn," the following differences are apparent for end-of-year subscribers (in thousands):

Projected Sirius End-of-Year Subscribers

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Butson	9,374	12,204	14,675	16,724	18,467	19,954
Model	<u>[[8.192</u>	<u>10.232</u>	<u>11.926</u>	<u>13.878</u>	<u>15.676</u>	<u>17.266</u>
Difference	<u>1,182</u>	<u>1,972</u>	<u>2,749</u>	<u>2,846</u>	<u>2,791</u>	<u>2,688]]</u>

Mr. Butson’s year-end subscriber projections exceed the more realistic figures in the model by an average of nearly [[2.4]] million subscribers per year, every year during the license term.

13. The subscriber figures discussed above are used by the model to project subscriber and activation revenue for each year. With respect to revenue, SIR Exhibit 58 differs from the prior iterations of the model provided to SoundExchange in discovery in that it does not include the price increase that was planned for 2007, but ultimately rejected by management based on market conditions and the difficulty of competing against free radio. Thus, consistent with our current expectations, there is less revenue per subscriber than previously planned. In addition, we have adjusted the anticipated advertising revenue to be consistent with the analysts’ consensus and more in line with the actual results that are being achieved.⁴ Finally, particularly in later years, we have been required to make various admittedly uncertain assumptions as to costs that might ensue (e.g., for contract renewals).

14. For all of these reasons, and particularly in the later years of the term, SIR Exhibit 58 must be considered somewhat speculative, as any long-term projection in this industry necessarily would be. However, it is significantly more realistic than Mr. Butson’s projections,

⁴ Notwithstanding the predictions of continuing growth in Mr. Butson’s report and elsewhere, Sirius’ advertising revenue not only declined as a percentage of total revenue in the first quarter of 2007, as compared to the same period in 2006, it declined slightly in absolute dollar terms. See SIR Ex. 57 (2007 1Q 10-Q, at 1) (reporting first quarter 2007 advertising revenue of \$6.7 million, down from \$7.3 million in the same quarter in 2006).

and the resultant differences are quite stark. For example, with respect to total revenue, the differences are as follows (all numbers in millions of dollars):

	<u>Projected Sirius Revenue</u>					
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Butson	\$1,076	\$1,552	\$2,008	\$2,428	\$2,807	\$3,153
Model	[[960	1,242	1,535	1,888	2,184	2,492
Difference	\$116	\$310	\$473	\$540	\$623	\$661]]

As this chart demonstrates, Mr. Butson has over-estimated Sirius’ revenue during the license term by over [[\$2.7]] billion, as compared to the results that we obtained using our model (based on consensus gross adds and advertising revenues). The magnitude of these discrepancies renders Mr. Butson’s model -- and all of the conclusions that he and other SoundExchange experts derive from it -- fundamentally unreliable and misleading.⁵ Further, differences that would otherwise be readily apparent in free cash flow, EBITDA and net income are obscured by Mr. Butson’s use of the extremely high sound recording royalty sought by SoundExchange (the unrealistic subscriber and revenue assumptions substantially offset the high royalties). The disruption to our business that would be caused by higher royalties using realistic assumptions for subscriber and revenue growth (as opposed to Mr. Butson’s assumptions) is discussed below.

Response to Dr. Pelcovits

15. I have reviewed the proposed non-music programming cost benchmark put forward by Dr. Pelcovits in his Amended Written Direct Testimony (“Pelcovits AWDT”). See pp. 8-11. This testimony reflects a fundamental lack of knowledge of the satellite radio business

⁵ Although I have not attempted to catalogue them all in this report, other material discrepancies are apparent when one compares the Butson model and SIR Exhibit 58. For example, SIR Exhibit 58 shows that Sirius will not have positive free cash flow until 2010 as opposed to 2009 as predicted by Mr. Butson.

and includes multiple assumptions that lead to an enormously over-stated result, even if one were to assume that the market prices for non-music content were an appropriate benchmark for a section 801(b) fee. Most notably, Dr. Pelcovits: (i) analyzed a year that will bear no resemblance to the license period at issue in this case, (ii) failed to account for the significant value considered in the contract price of non-music content deals in excess of the value of a pure content license, such as the benefits of associating Sirius with valuable brands and additional promotional benefits, and (iii) failed to offset the expected advertising revenues associated with non-music channels that is not generated from music programming.

16. It is well known in the industry, and by those who purport to follow the industry, that programming costs will not increase in proportion to revenue. For example, Mr. Butson does not show programming costs increasing directly with revenues. Dr. Pelcovits himself recognizes that the non-royalty music programming costs incurred by Sirius and XM will not scale with revenue, AWDT at 3 n.7, but ignores that principle in connection with our non-music programming costs.

17. I start by observing that Dr. Pelcovits' analysis of Sirius' non-music, non-Stern programming costs in 2006 had an obvious omission that caused him to overstate our non-music, non-Stern programming expenditures by \$82.9 million. Although, in adjusting out the cost of our Howard Stern channels, Dr. Pelcovits subtracted the \$224.8 million stock grant that was expensed in January 2006, he failed to subtract the \$82.9 million expense that we also recognized in 2006 for the Stern incentive stock grant. The inclusion of this grant in our 2006 programming expense is discussed on pages 34 and F-30 of the 2006 10-K. If all Stern costs were removed from our 2006 non-music programming costs, the total non-music programming

cost would be ~~[[\\$128.8 million]]~~ This would be ~~[[20.2%]]~~ of Sirius' revenues from 2006, rather than the ~~[[33.2%]]~~ stated by Dr. Pelcovits.

18. Because Sirius' revenues will be lower in 2006 than in any of the years during the license period (as reflected in the projections in SIR Exhibit 58), our non-music programming costs as a percentage of revenue will be higher in 2006 than at any time during the license term. Thus, for example, we project our non-Stern, non-music programming costs to be ~~[[14.8%]]~~ of revenue in 2007 and ~~[[7.8%]]~~ of revenue in 2010.

19. Further, Dr. Pelcovits' analysis fails to recognize that Sirius obtains substantial value from its non-music programming contracts that it does not receive from the sound recording performance right, such as brand affiliation and promotional benefits. Sirius also enters into its non-music programming deals with the expectation that it will earn advertising revenues that help defray the cost of those deals. Similar advertising revenue is not available from our music programming, which must remain commercial free in order to help us differentiate it from terrestrial radio.

20. It is possible to recreate Dr. Pelcovits' non-music programming cost benchmark analysis to correct for his improper use of 2006 figures to represent the 2007-2012 license term, and his failure to recognize the fact that the cost of our non-music contracts is offset by our advertising sales revenues. I also use our projections of the musical works royalty and our non-royalty music programming costs during the license term, instead of Dr. Pelcovits' estimates. Otherwise, I follow Dr. Pelcovits' method, using our non-Stern, non-music programming expenses. Dr. Pelcovits was correct to exclude the Stern deal, which, as I discuss below, was one of a kind and was made at a critical time in the company's development. The corrected analysis, based on numbers from the updated projections described above, and our split of Stern,

non-Stern costs, is set out in the attached Exhibit 60. As shown in the chart, the weighted average sound recording license fee that results over the entire license term is ~~[[1.41%]]~~ of revenue. This analysis does not take into account the many other benefits we receive from our branded non-music content agreements discussed above, which means that the results of this re-analysis still will overvalue the sound recording performance right.

21. While the considerations discussed above are pertinent to all of our branded content deals, there were also unique considerations that affected our decision in October 2004 to enter an into agreement with Howard Stern. At the time, Sirius was lagging far behind XM in subscriber growth, revenue, brand awareness, and most other relevant metrics. We were also lagging substantially behind XM in terms of our critical relationships with auto manufacturers and retailers. After Howard Stern announced his intention to leave terrestrial radio, we were aware that his representatives were having conversations with XM. Given the relatively tenuous state of Sirius' business at that time, and our weakness as compared to XM, we were concerned that the loss of Howard Stern to XM could prove fatal to Sirius' future business prospects. As proven by subsequent events, including the media attention, the effect on our relationships with OEMs and retailers, and the effect on our subscriber base, the signing of Howard Stern was a unique event in the history of our company; nothing before or since has had the same impact.

Disruption

22. Mr. Butson's testimony also suggests that the rate increase proposed by SoundExchange would not be disruptive to our business. See Butson WDT at 3-4. That testimony is wrong, for multiple reasons.

23. First, Mr. Butson based his position in large part on the contention that Sirius was "fully funded," which he apparently defined to mean a non-zero cash balance based on

realization of the assumptions in his model. See Butson WDT at 23 (suggesting that Sirius was fully funded because it had \$792 million in available cash to cover \$783 million in anticipated free cash flow losses). Mr. Butson’s analysis fails because, as demonstrated below, he has overestimated Sirius’ likely revenues by hundreds of millions of dollars per year. More fundamentally, as the CFO of a public company the size of Sirius, I would not approve a budget that contemplated going down to \$9 million in cash. In my view, such a plan would be irresponsible; I believe that most CFOs would concur. Because the consequences of running out of cash would be so severe, my standard is to maintain an available cash reserve of at least \$100 million, as I believe this to be the functional equivalent of zero in light of the size and complexity of Sirius’ business and the uncertainties confronting it. Thus, for multiple reasons, Sirius would not be “fully funded” (or even close to it) if the rate increases proposed by SoundExchange were adopted.

24. A more subtle question is the point at which a rate increase from the present approximately 2.5% rate would be disruptive to our business. At the 0.88% sound recording royalty rate proposed in our direct case, our cash position would reach a low of approximately **[[\$190]]** million, providing a prudent cushion for running a still-developing business. As set out in Exhibit 59, we have calculated that, using the same assumptions and forecast model discussed above, a sound recording rate rising as high as **[[4.2%]]** would eliminate this safety net, dropping us to the functional zero point in cash reserves discussed above, and would require us to attempt to access the capital markets to fund the rate increase, even assuming no other adverse events or further unanticipated slowdowns.⁶ If we were unable to raise significant additional capital,

⁶ By discussing disruption, I do not mean to suggest in any way that Sirius would consider a rate of **[[4.2%]]** or higher to be reasonable or otherwise compliant with the Section 801(b) factors. The testimony that we have submitted demonstrates why rates at those levels

**RESTRICTED – Subject to Protective
Order in Docket No. 2006-1 CRB DSTRA**

and/or if the cost of doing so were too great, we would be forced to attempt to compensate for the higher rates by cutting back on other necessary expenses or eliminating capital expenditures that contribute to the growth of the business. Any of these courses would be disruptive to our business. For the reasons discussed above, we have determined that the other theoretical option — a price increase -- simply is not viable in the face of competing with free radio. Lastly, from a competitive perspective, terrestrial radio is a free service that accounts for 97% of radio listening today and does not pay a sound recording royalty. As a fledgling service trying to win customers from free radio, any fee disrupts our ability to effectively compete, adversely affecting us and our ability to generate payments to Sound Exchange.

(Continued . . .)

would not be reasonable.

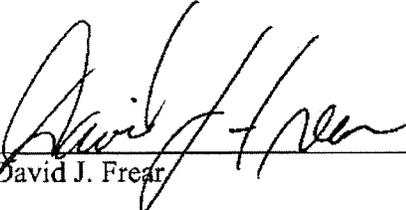
**Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.**

In the Matter of)
)
)
)
Adjustment of Rates and Terms for)
Preexisting Subscription and Satellite)
Digital Audio Radio Services)
_____)

Docket No. 2006-1 CRB DSTRA

DECLARATION OF DAVID J. FREAR

I, David J. Frear, declare under penalty of perjury that the statements contained in my Written Rebuttal Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 24th day of July 2007 at New York, New York.



David J. Frear

Before the
COPYRIGHT ROYALTY BOARD
LIBRARY OF CONGRESS
Washington, D.C.

On Behalf of Music Choice:
PAUL M. FAKLER, ESQ
Moses & Singer LLP
406 Lexington Avenue
New York, New York 10174-1299
(212) 554-7800
pfakler@mosessinger.com

In the matter of: °
Adjustment of Rates and Terms ° Docket No.
for Preexisting Subscriptions ° 2006-1
Services, ° CRB DSTRA
and °
Satellite Digital Audio Radio °
Services °

Room LM-408
Library of Congress
First and Independence Avenue, S.E.
Washington, D.C. 20540
Tuesday,
June 12, 2007

The above-entitled matter came on for
hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES:

On Behalf of Sound Exchange:
DAVID A. HANDZO, ESQ
MICHAEL B. DeSANCTIS, ESQ
JARED O. FREEDMAN, ESQ
THOMAS J. PERRELLI, ESQ
MARK D. SCHNEIDER, ESQ
Jenner & Block
601 Thirteenth Street, N.W.
Suite 1200 South
Washington, D.C. 20005
(202) 639-6060
dhandzo@jenner.com
On Behalf of XM Satellite Radio, Inc.:
BRUCE RICH, ESQ
JONATHAN BLOOM, ESQ
TODD LARSON, ESQ
BENJAMIN MARKS, ESQ
BRUCE S. MEYER, ESQ
RALPH MILLER, ESQ
Weil Gotshal & Manges
567 5th Avenue
New York, New York 10016
(212) 310-8238
On Behalf of Sirius Satellite Radio,
Inc.:
BRUCE G. JOSEPH, ESQ
KARYN K. ABLIN, ESQ
MATT J. ASTLE, ESQ
JENNIFER L. ELGIN, ESQ
THOMAS W. KIRBY, ESQ
MICHAEL L. STURM, ESQ
JOHN WYSS, ESQ
Wiley Rein
1776 K Street, N.W.
Washington, D.C. 20006
(202) 719-7528
bjoseph@wileyrein.com

I N D E X

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David Frear				
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By Mr. Schneider	48		197	
John Woodbury				
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41	Bond Offering		57	58
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1 PROCEEDINGS
 2 9:29 a.m.
 3 CHIEF JUDGE SLEDGE: Good morning.
 4 We'll come to order.
 5 MR. DeSANCTIS: Your Honor, before
 6 we start today's questioning, may I raise a
 7 couple of housekeeping matters?
 8 CHIEF JUDGE SLEDGE: Yes.
 9 MR. DeSANCTIS: It's actually more
 10 than a housekeeping matter. It's my -- I'm
 11 pleased to announced that SoundExchange has
 12 reached a settlement with Music Choice.
 13 CHIEF JUDGE SLEDGE:
 14 Congratulations.
 15 MR. DeSANCTIS: On all issues.
 16 CHIEF JUDGE SLEDGE: That is good
 17 news.
 18 MR. DeSANCTIS: Thank you, Your
 19 Honor. We will be submitting --
 20 CHIEF JUDGE SLEDGE:
 21 Congratulations. Thank you very much. That's
 22 great.

1 Court that we could begin our direct case on
 2 Thursday morning, without it being held
 3 against our time in light of the recent
 4 events.
 5 CHIEF JUDGE SLEDGE: We will
 6 advise you of that after the lunch break.
 7 MR. DeSANCTIS: Thank you, Your
 8 Honor.
 9 CHIEF JUDGE SLEDGE: Yes, sir.
 10 We're going to take a two-minute recess.
 11 (Off the record.)
 12 CHIEF JUDGE SLEDGE: Mr. Wyss.
 13 MR. WYSS: Thank you, Your Honor.
 14 Could Mr. Frear please return back to the
 15 stand.
 16 CHIEF JUDGE SLEDGE: Good morning.
 17 WHEREUPON,

18 DAVID FREAR
 19 WAS CALLED FOR EXAMINATION BY COUNSEL FOR
 20 SIRIUS SATELLITE RADIO, INC. AND, HAVING BEEN
 21 PREVIOUSLY SWORN, WAS EXAMINED AND TESTIFIED
 22 AS FOLLOWS:

1 MR. DeSANCTIS: We will be
 2 submitting a short notice of settlement today,
 3 filing with the Court.
 4 Relatedly, that raises some
 5 scheduling issues. As late as Friday, the
 6 Sirius had indicated that they were putting on
 7 their two experts on Wednesday, and Music
 8 Choice was going to go on Thursday. Friday
 9 afternoon, Sirius informed us they were
 10 putting their experts on on Tuesday.
 11 CHIEF JUDGE SLEDGE: As soon as
 12 the fact witnesses finished.
 13 MR. DeSANCTIS: Right, if we get
 14 there. And Music Choice now isn't going on
 15 Wednesday, so we were prepared to start with
 16 our direct witnesses on Monday. We've been
 17 able through significant effort to -- we've
 18 been able to get to the point where we can put
 19 our witnesses on on Thursday and we are asking
 20 the indulgence of the Court, not that we -- if
 21 we get through Wednesday, if we stop before
 22 Wednesday, we would ask the indulgence of the

1 DIRECT EXAMINATION (CONTINUED)
 2 BY MR. WYSS:
 3 Q Mr. Frear, I just want to clear up
 4 thing that came from the questioning from the
 5 Court yesterday. You were asked whether it
 6 was possible to update the chipset investment
 7 number from the number that appeared in your
 8 statement. You said you hadn't done that and
 9 you weren't sure if it was available. Were
 10 you able to get that information?
 11 A I was.
 12 Q And could you tell the Court,
 13 explain to them the update of the investment
 14 since the time of your report?
 15 A In the second half of 2006 and in
 16 the first quarter of 2007, we invested an
 17 additional \$6.5 million in chipset
 18 development.
 19 Q Now in your report you talk about
 20 the technological risks and in particular in
 21 paragraph, I believe it's 15 of your report,
 22 I'm sorry, paragraph 14 of your report. You

1 describe the intended useful life of 15 years
2 for your three satellites and one ground
3 sphere. Do you remember that?

4 A I do.

5 Q Is that still the expected life of
6 those satellites?

7 A It is for one of the satellites.
8 The other two satellites have had their lives
9 shortened by two years.

10 Q And what is the financial impact
11 on the company of the two-year shortening of
12 expected life?

13 A It requires that we begin the
14 replacement cycle for those satellites two
15 years earlier and so we will spend about \$600
16 million two years earlier than we otherwise
17 would have and that imposes additional
18 carrying costs in the company and an estimate
19 of those costs would -- our bonds traded at
20 about 10 percent. So if you were to finance
21 that for two years with that it would impose
22 about an additional \$120 million costs on the

1 cars and they happen to come with radios. So
2 we have to convince people to go out and buy
3 something they don't normally buy which is
4 this new radio. And then we have to convince
5 them to pay for it once they turn it on.

6 So it's -- the competition is
7 really on two fronts in terms of convincing
8 them to do things that they don't normally do:
9 buy radios and pay for the right to listen to
10 the radio.

11 Q And in your statement you discuss
12 the financial wherewithal of the terrestrial
13 radio business that you're facing. Does that
14 impact you?

15 A You know, they are a formidable
16 competitor. \$20 billion in revenues, among
17 them, as well as \$11 billion in free cash
18 flow. They really do -- are able to throw a
19 lot at us that they've launched with their HD
20 radio stations, a \$250 million advertising
21 campaign behind them. There are 1500 of these
22 stations, 1200, I'm sorry, out there today and

9

11

1 company.

2 JUDGE WISNIEWSKI: During what
3 period of time?

4 THE WITNESS: During the two-year
5 acceleration period. So for instance, we are
6 building Sirius-5 now and are likely to begin
7 Sirius-6 in the next couple of months and both
8 of those satellites are coming about two years
9 earlier than we had otherwise planned.

10 BY MR. WYSS:

11 Q Now in paragraph seven of your
12 written statement, you discuss the issue of
13 the competition between Sirius and terrestrial
14 radio. Would you please explain to the Court
15 the nature of the competition that Sirius
16 faces from terrestrial radio?

17 A Well, I think as I mentioned
18 yesterday terrestrial radio represents about
19 97 percent of radio listening in the country.
20 And they are a free service. They're free in
21 two ways really, that no one really buys a
22 radio any more. What they buy are clocks and

1 they are commercial-free.

2 So what we're now facing is this
3 \$20 billion behemoth who used to play just
4 commercially-laden music stations and is now
5 offering commercial-free music stations to
6 listeners around the country.

7 Q And do you happen to know what
8 terrestrial radio pays for its sound
9 recordings of music?

10 A They don't pay anything for either
11 the regular commercial broadcast stations, nor
12 do they pay anything for the commercial-free
13 digital stations.

14 Q Now in paragraph seven of your
15 written statement, you discussed how Sirius
16 had to change its programming over the years
17 in order to compete with terrestrial radio.
18 Could you just briefly describe to the Court
19 the nature of the evolution of the programming
20 at Sirius?

21 CHIEF JUDGE SLEDGE: Mr. Wyss, can
22 I interrupt you just a moment. I've been

1 puzzling over your last question. The fact
2 that Congress gives a subsidy to terrestrial
3 radio by not paying royalties, what part of
4 the legal standard is that?

5 MR. WYSS: Your Honor, that
6 relates to the issue of disruption to our
7 business in terms of the competition we face
8 with terrestrial radio.

9 CHIEF JUDGE SLEDGE: Where does
10 that fit? You're not giving me an answer.

11 MR. WYSS: Letter D, minimize
12 disruption impact on the structure of the
13 industries.

14 CHIEF JUDGE SLEDGE: That refers
15 to the royalty set in this case.

16 MR. WYSS: That is correct, Your
17 Honor.

18 CHIEF JUDGE SLEDGE: Where do we
19 consider the subsidy given to terrestrial
20 radio?

21 MR. WYSS: Well, I believe you
22 consider in setting the radio here, the

1 service was 100 channels, 60 of commercial-
2 free music and 40 of news, talk, and
3 entertainment programming.

4 Since then, we have added 35 more
5 channels to the service. Virtually all of
6 them talk channels adding sports content,
7 adding Martha Stewart, adding Howard Stern,
8 that we have added eight music channels to the
9 service, but what we have been finding is that
10 people like talk radio and in terms of from a
11 listening perspective, but probably more
12 importantly from a branding perspective that
13 Sirius has formed alliances with a number of
14 brands, not only in the music side, but also
15 on the talk programming side to help drive
16 awareness for satellite radio and drive
17 subscription behavior.

18 Q And when you were just music
19 programming how was the company doing?

20 A At -- well --

21 MR. SCHNEIDER: I withdraw my
22 objection.

13

15

1 disruptive impact on the satellite radio
2 industry which must face competition from
3 terrestrial radio which pays nothing for sound
4 recordings. So it is that disruptive impact
5 that the Court should take into account.

6 CHIEF JUDGE SLEDGE: I hear you,
7 but that doesn't make sense to me in light of
8 the language of the statute.

9 BY MR. WYSS:

10 Q My question was could you describe
11 to the Court the evolution of programming at
12 Sirius in order to respond to the competition
13 from terrestrial radio?

14 A When I first started talking to
15 Mr. Margolies about the business in the first
16 half of the '90s, it was conceived as that
17 time is solely a music service with CD quality
18 sound, ergo the name of the company at that
19 time which was CD Radio. As time went on, Mr.
20 Margolies found that he needed to diversify
21 that program offering and so actually as of
22 the date of launch of the service that the

1 THE WITNESS: The company wasn't
2 in service when it was just music programming.
3 It was actually still a concept at that time.

4 BY MR. WYSS:

5 Q Okay, and when the early years,
6 when you joined there, how was Sirius doing
7 with the primarily music programming, the 60
8 and 30, whatever the channels were?

9 A Subscription rates were slow. The
10 service launched in 2002. I joined in 2003.
11 There were about 120,000 subscribers at the
12 time and while our friends at XM seemed to be
13 doing all right, that things at Sirius were
14 very slow. And in order to sort of galvanize
15 the attention of the listening public, we felt
16 we needed to diversify that program offering
17 to things like the NFL, things like the NBA,
18 recognized brands that actually got us
19 something that we could sell to the people who
20 were going to go through the doors of a big
21 box retailer to buy new technology product.

22 Q And in your view, what was the

1 most significant programming change that you
2 made at Sirius?

3 A Well, far and away it was Howard.
4 When we announced Howard in October of 2004,
5 the attention of the media around it was
6 staggering. It was front page news in
7 virtually every newspaper in the country. It
8 made all the nightly news broadcasts, that he
9 was on magazine covers. The PR people that we
10 have estimate that there were five billion
11 impressions between newspapers and magazines
12 in the United States alone.

13 During the fourth quarter of '04
14 when we announced the holiday season of '05,
15 his show was getting the launch. He spent a
16 half an hour on Letterman. Twice he did a
17 half an hour on Larry King. He had a segment
18 on 60 Minutes. It was really sort of a
19 staggering media blitz.

20 Q Now in your written statement you
21 also mention that it is necessary for you to
22 do music better. What did you mean by that?

1 to bring Underground Garage to Sirius with
2 Eminem, to bring Shade 45 to Sirius. The
3 channel affiliations that we've done with
4 Jimmy Buffet for Margaritaville or Elvis or
5 the occasional channels are more promotionally
6 oriented, whether it's with the Stones or with
7 the Who or with Pink Floyd and the new one
8 we're launching with the Grateful Dead, have
9 all been ways to bring actually brands into
10 the programming process and something that
11 fans affiliate with.

12 Q In paragraph --

13 CHIEF JUDGE SLEDGE: I will
14 interrupt you there again.

15 Yesterday, I wasn't clear on your
16 description of the live celebrity artists who
17 co-produce channels. I understand the dead
18 celebrity artists can't be doing this, but we
19 had heard, for instance, that the XM with
20 Dylan, he gives them playlists to play. What
21 is the role of co-producers with Sirius on
22 these high profile artists?

17

19

1 A There was a conception early on in
2 the company that there was actually going to
3 be no program staff. It was actually going to
4 be just computerized music and again this was
5 really still in the formative stages before
6 the license award.

7 And as David and the management
8 team that was developing dug deeper into what
9 was required to compete, they realized that
10 just computerized music playing wasn't really
11 going to do it, that they had to provide what
12 the guys in programming call texture or grit,
13 whether it's the jocks or whether it's the way
14 the stations are named and branded, the way
15 they're programmed that it just can't be
16 driven off of a computer, that people who
17 actually understand and have a feel for the
18 music have to bring it to life for people.

19 And then we found that in order to
20 sell music that we had to do some brand
21 affiliations along the way and so the deals
22 that we did with Steven Van Zandt, you know,

1 THE WITNESS: Well, it depends.
2 So what they do -- Jeff Lorber, for instance,
3 if you're a jazz fan, that Jeff Lorber has
4 been around the jazz scene for many years, and
5 Jeff comes in and I think it's every weekend
6 does a three-hour show where he goes in and
7 literally he's the jock. He picks the music.
8 He puts it all up there.

9 The collaboration with Eminem on
10 Shade 45 goes less to what's actually played
11 than what's going on a minute to minute basis
12 as opposed to what's actually going on in his
13 area of rap. So he will bring artists that
14 he's developing within his label, whether it
15 be Stat Quo or G Unit or 50 Cent and bring
16 them actually into Sirius, they'll do live
17 shows with the jocks that we've hired from
18 that genre and you know, actually participate
19 with the audience in playing the songs that
20 they like.

21 So it ranges a little bit from the
22 role of just pure jock to sometimes the role

18

20

1 of being more of a creative advisor. Steven
 2 Van Zandt is a creative advisor with respect
 3 to not only Underground Garage, but also
 4 another channel called Outlaw Country that he
 5 feels like the country music market hasn't
 6 been well represented by terrestrial radio and
 7 that there are country music stars on the edge
 8 of country that are sort of between pop and
 9 old standards that people that are doing new
 10 things with country. So he has programmed a
 11 channel and brought a lot of those artists
 12 into participate in the channel.

13 CHIEF JUDGE SLEDGE: Thank you.

14 BY MR. WYSS:

15 Q Mr. Frear, paragraph 28 of your
 16 written statement, you indicate that you have
 17 reviewed the payment and audit terms in the
 18 proposal made by the services in this case, is
 19 that correct?

20 A That's correct.

21 Q And since the preparation of your
 22 written statement, have you also had a chance

1 with the -- with sound recording performances.
 2 There's on hour talk and entertainment
 3 channels there really are virtually no
 4 performances across them. We don't have music
 5 channels with commercials. I don't know what
 6 their intention is with respect to equipment
 7 revenue.

8 I don't know why we would pay a
 9 royalty based on the equipment revenue. We
 10 have other services that we're into in the
 11 telematics navigation, Green Weather and Rear
 12 Seat Video markets wouldn't seem to me that
 13 those should be included in the rate base.

14 And we received royalties from our
 15 Canadian affiliate for the services they
 16 provide up there. They're providing royalty
 17 payments to the appropriate people in Canada.
 18 I don't know why that income would have an
 19 additional royalty applied to it.

20 So as it relates to the rate base,
 21 it seems to be very broad and far reaching.
 22 They've got terms in there with respect to

21

23

1 now to review the payment and the audit terms
 2 being proposed by SoundExchange?

3 A I have.

4 Q And could you briefly describe
 5 some examples of the reasons why you believe
 6 the services proposal is superior?

7 A This is on the terms?

8 Q Yes, the terms.

9 A You know the rate base is somewhat
 10 troubling on SoundExchange's proposal that
 11 there are references to subscribers as opposed
 12 to revenue. I think in the way that they've
 13 defined subscribers it may be difficult to
 14 implement. We'd certainly have to do some
 15 systems work along with it.

16 They also make reference to
 17 revenues that are entirely unrelated to SDARS.
 18 And I'm not quite sure what that means. For
 19 instance, the advertising revenues that come
 20 from our talk channels seems to be, they're
 21 certainly related to our SDARS service, but
 22 they don't really seem to have anything to do

1 penalty rates on late payments that seem to at
 2 least in my commercial experience, be far at
 3 odds with what I normally find in commercial
 4 agreements. Most of our commercial agreements
 5 have no late payment charges at all. If there
 6 are late payment charges, they tend to be in
 7 the half of one percent to one percent per
 8 month range.

9 And then there's something kind of
 10 funny about the language. It seems that once
 11 you're late, you're always late and you're in
 12 default and you're subject to other damages
 13 even if you made the payment which I don't
 14 understand. Usually, if there's been a late
 15 payment you cure it, but their language
 16 doesn't seem to provide for an appropriate
 17 cure.

18 CHIEF JUDGE SLEDGE: If you make a
 19 late payment late, you don't pay a late fee?

20 THE WITNESS: If you make the late
 21 payment late, and you pay the late fee, you
 22 still haven't discharged your breach from what

22

24

1 I can tell.

2 CHIEF JUDGE SLEDGE: That's not
3 what I understood you to say.

4 BY MR. WYSS:

5 Q How about the audit provisions?

6 A So the audit rights, I don't want
7 to say that they're unworkable, but they would
8 require us, I think, to have funded and
9 staffed a separate IT and audit team to
10 support them. I think if it's important to
11 SoundExchange's constituency, that they have
12 the expanse of audit rights that they're
13 seeking. I think that's something that
14 perhaps they should fund the capability of
15 doing that.

16 All of our major partners have
17 audit rights. The Best Buy has audit rights.
18 Radio Shack, Ford, Chrysler. They tend to be
19 structured around, they can come in, you know,
20 maybe once a year. It is only one company
21 that comes in. It isn't multiple the way that
22 I read the SoundExchange rights. Bob Dylan

1 as being the creative works of the people that
2 we've hired to program those channels and we
3 don't really want to effectively publish what
4 we're playing on each of our stations so that
5 if somebody happens to think a station is
6 particularly good, they can grab the statement
7 and go program their own channel.

8 Q Now in paragraphs 27 and 28, you
9 discuss the level of the fees that have been
10 proposed by the satellite radio services in
11 this case. And I think you believe they're
12 fair and reasonable, according to your
13 statement. Is that correct?

14 A It is correct.

15 Q And would you explain to the Court
16 why you believe them to fair and reasonable?

17 A Well, you know, we are at a
18 substantial competitive disadvantage to
19 terrestrial radio and the fees factor into
20 that, that they are costs we have to recover
21 in our business. They affect our pricing that
22 we've established a price point in the

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1 could come in and audit us and Sony could come
2 in and audit us and then Led Zeppelin, whoever
3 owns their recordings could come in and audit
4 us.

5 And what our history has been so
6 far with our partners is that they tend to
7 come in once, they audit a couple of years all
8 at one time. It's very efficient for both
9 sides. And works fine. So the audit rights
10 I think are a real burden for the company, but
11 if it's important to SoundExchange's
12 constituency, we'll find a way to work with
13 them. There are just significant increased
14 costs and we'd want to carve those people out
15 of the business to that we're able to operate
16 our business on a day-to-day basis without
17 disruption.

18 Q How about the confidentiality of
19 the SOAs that's addressed in their proposal?

20 A You know, I guess I don't really
21 know why they'd want it to be public.
22 Certainly we view the music that we're playing

1 marketplace and are working hard to defend
2 that price point against a free product.

3 What I think is really fair,
4 what's really fair is to put us on an even
5 basis with terrestrial radio, but we made the
6 proposal that we made in the range of .88 to
7 2.35 percent and there's -- I'm not going to
8 sit here today and tell you that I don't
9 believe that to be a fair rate. That's what
10 we provided in our case and I believe that's
11 what's fair.

12 Q And the .88 percent proposal,
13 roughly 1 percent, what does that translate to
14 as a financial impact on Sirius over the term
15 of the license period here at issue?

16 A Of course, Sirius over the term
17 it's approximately \$115 million in payments to
18 SoundExchange.

19 Q And if that were to double from
20 one percent to two percent, what would be the
21 effect?

22 A Each percent you add would be

26

28

1 about \$130 million over the term.

2 Q Have you had a chance to review
3 the

4 --

5 CHIEF JUDGE SLEDGE: Please repeat
6 that last answer.

7 THE WITNESS: Each percent that
8 you add would add about \$130 million in
9 payments to SoundExchange over the term.

10 BY MR. WYSS:

11 Q What additional content benefits
12 or exclusivity benefits do you get for those
13 additional fees?

14 A None. I mean that's one of the
15 really tough things about this is that to the
16 extent that the rate increases, it's simply
17 increased costs with no additional programming
18 benefit to the subscribers. There's nothing
19 for us to sell in addition to what we've
20 already been selling.

21 Q Now have you had a chance to
22 review the level of fees proposed by

1 We have to do something and so there are only
2 two somethings at the moment that I can think
3 of. One is to try and come up with a rate
4 that is sensitive to the amount of music that
5 we pay such that we can actually stop playing
6 as much music as we do and therefore control
7 what would be runaway costs for the music.
8 And it doesn't seem to do much to maximize the
9 availability of creative works to the public.

10 The second thing is to do
11 something that -- Mel told our investors in
12 the first quarter call what we really can't do
13 which we've been talking to the market about
14 raising prices over the last couple of years.
15 Now we thought we could do that, but with the
16 softness that we see in the market which I
17 testified to yesterday in talking about the
18 way that we have cut our subscriber estimates
19 at Christmas time last year by a very
20 substantial amount, that he announced in our
21 first quarter call that competing against free
22 with a \$12.99 price point is a pretty tough

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1 SoundExchange in this proceeding?

2 A I have.

3 Q And what would be the effect if
4 the SoundExchange proposal were adopted?

5 A The SoundExchange proposal is
6 staggering to me. I think it is destructive
7 for both parties, that you know on the same
8 basis that I calculated \$115 million number,
9 looking at their proposal it would be over
10 \$2.5 billion. And that's just a staggering
11 claim against our business. It will defer the
12 time at which we can get to free cash flow.
13 It will defer the time to which we can reach
14 profits and would transfer in my view a
15 staggering sum of \$15 billion of shareholder
16 wealth from Sirius shareholders to
17 SoundExchange.

18 Q You mentioned destructive to both
19 companies. How is it destructive to the
20 record industry and artists?

21 A Well, we can't -- you know, if
22 that were to come to pass, we can't not react.

1 thing to do.

2 If we were to see the
3 SoundExchange proposal adopted, that you know
4 that would end up requiring us to stay cash
5 neutral to raise prices by 40 to 50 percent.
6 I don't believe demand would stay the same.
7 I think that demand would drop precipitously
8 and I think that not only would you again be
9 limiting the people listening to the music, I
10 think it's in all likelihood that you would
11 actually reduce the overall revenues in the
12 business and there would be, in fact, less
13 money to pay to the artists.

14 MR. WYSS: Your Honors, at this
15 point I would offer into evidence SIR Exhibit
16 39 which is the written direct testimony of
17 Mr. Frear.

18 (Pause.)

19 CHIEF JUDGE SLEDGE: Any objection
20 to Exhibit 39?

21 MR. SCHNEIDER: No objection.

22 CHIEF JUDGE SLEDGE: Without

1 objection, the exhibit is admitted.
 2 (The document, having
 3 been marked previously
 4 for identification as
 5 SIR Exhibit No. 39, was
 6 received in evidence.)
 7 MR. WYSS: Your Honor, we would
 8 move for confidential treatment of the numbers
 9 that have been blacked out in the restricted
 10 version. There was both a public version and
 11 a restricted version that were filed and we
 12 would move to confidential treatment of the
 13 blacked out numbers as competitively
 14 sensitive.
 15 (Pause.)
 16 Why didn't you introduced the
 17 restricted version then?
 18 MR. WYSS: Excuse me?
 19 CHIEF JUDGE SLEDGE: Why did you
 20 introduce the restricted version?
 21 MR. WYSS: Because we would
 22 introduce it -- I'll introduce both the public

1 goes well beyond, you know, the basic
 2 financial statements that people frequently
 3 associate with chief financial officers.
 4 They actually have a very
 5 competent Controller who does that kind of
 6 work. My role at the company has been very
 7 strategic in its nature. Maybe one of the
 8 indications of that is the fact that they have
 9 me in charge of the rocket scientists who are
 10 building the next generation satellite
 11 constellation. So I regularly engage in
 12 dialogues with Mel, as well as Jim Meyer, who
 13 runs our sales and operations organizations;
 14 Scott Greenstein, who runs our programming and
 15 marketing inside the organization.
 16 In strategic matters, their
 17 fundamental decision making is to what
 18 products we should develop, what kind of
 19 things should go on the air or it's a very
 20 interactive dialogue. And it ranges far and
 21 wide.
 22 CHIEF JUDGE SLEDGE: My last

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1 version for the public and the restricted
 2 version for the Court, so the Court has the
 3 benefit of the confidential information that
 4 is it in the testimony.
 5 CHIEF JUDGE SLEDGE: Motion to
 6 apply the protective order is denied.
 7 MR. WYSS: I have no further
 8 questions, Your Honor.
 9 CHIEF JUDGE SLEDGE: Mr. Frear,
 10 I'm going to interrupt the sequence a minute
 11 or two to understand the context of some of
 12 your testimony. First of all, your testimony
 13 is much broader than the chief financial
 14 officer. We've heard from a number of
 15 different titled people with different
 16 precedent adjectives to vice president.
 17 What does executive vice president
 18 connote?
 19 THE WITNESS: Well, Your Honor,
 20 with all due respect I'm not sure that I
 21 actually know. It is simply a title that
 22 Sirius had available. My role at the company

1 question is your testimony a minute ago about
 2 the competitive disadvantage with terrestrial
 3 radio, what is that competitive disadvantage?
 4 Most of what you have talked about are areas
 5 that are independent and not affected by
 6 royalties. So how does the amount or level of
 7 the royalties apply to what you're talking
 8 about a competitive disadvantage?
 9 THE WITNESS: Well, they are an
 10 entrenched competitor who totally dominates
 11 the market and we need to win listeners away
 12 from them in order to have a viable business.
 13 So we've determined that to do
 14 that we need to take a price point to the
 15 market of \$12.95 and then do our level best to
 16 build sales distribution, brand, technology
 17 and so forth and so on and content to provide
 18 an experience for the consumer that is unique
 19 and compelling, that again, this is a consumer
 20 base out there that is not accustomed to
 21 paying for this service. They believe they
 22 get it for free today.

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1 So anything that we do to drive
2 the cost of delivering that up without
3 expanding the brand or expanding the content,
4 enhancing the product in some way to make it
5 more relevant, more interesting, more vital,
6 to consumers, places us at a disadvantage.

7 Rising royalties is money that we
8 have to offset in some way, either by cutting
9 costs someplace else. By playing less music
10 or by raising prices in all of those, have
11 some sort of effect.

12 CHIEF JUDGE SLEDGE: So your
13 answer is that royalties are like all of your
14 costs and increased costs require either
15 result -- increased costs either require
16 increased revenue or result in increased
17 losses?

18 That's the answer of the impact of
19 the royalties on your competitive
20 disadvantage?

21 THE WITNESS: Increased costs is
22 the percentage of our revenues. So that, for

1 royalties? Just like you do with Howard
2 Stern?

3 THE WITNESS: It requires that the
4 other side would want to do that as well, so
5 yes, if both sides wanted to do that, it's a
6 potential outcome yes. I'd agree with that.

7 CHIEF JUDGE SLEDGE: Anything else
8 you can think of to answer my question?

9 THE WITNESS: The overwhelming
10 factor for us is to be driving equipment
11 prices down and keeping the monthly charge as
12 contained as we can in order to compete
13 against free, that both things represent an
14 expenditure by consumers that they are not
15 used to making today.

16 CHIEF JUDGE SLEDGE: The equipment
17 costs have nothing to do with royalties?

18 THE WITNESS: They don't have
19 anything to do with royalties. They do have
20 something to do with consumer demand that for
21 instance, if we charged \$1,000 for radio,
22 fewer consumers would buy it than if we

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1 instance, many of our programming arrangements
2 are fixed cost arrangements and so as we drive
3 the subscriptions that we're actually driving
4 a more efficient PNL along the way.

5 The only content that is at a
6 variable rate or the royalties that we pay to
7 the PROs as well as the proposed royalties to
8 we paid to SoundExchange.

9 CHIEF JUDGE SLEDGE: Is that any
10 more variable to any other cost you have?

11 THE WITNESS: Well, so for
12 instance, Howard Stern is a fixed cost. It's
13 a lot of fixed cost.

14 CHIEF JUDGE SLEDGE: Fixed because
15 you've agreed to it?

16 THE WITNESS: That's correct.
17 It's a fixed dollar amount so that as our
18 revenues rise, it's a smaller percentage of
19 our revenues over time.

20 CHIEF JUDGE SLEDGE: Well, you
21 have the option to have a fixed cost to your
22 royalty by entering into an agreement on

1 charged \$10 for radio. So you'll read about,
2 hear about subscriber acquisition costs, the
3 dominant portion of those costs are actually
4 subsidies that we pay to buy the chipsets down
5 and to buy the radio manufacturing cost down
6 to a level that we believe will be attractive
7 to the consumers.

8 We have to be careful about how
9 far we do that. We'd love to sell \$5 radios.

10 CHIEF JUDGE SLEDGE: Let me cut
11 you off. It's perfectly reasonable that you
12 see those as costs that affect your business,
13 but it's not reasonable that that cost that
14 has nothing to do with royalties is part of
15 our role in trying to decide --

16 THE WITNESS: I'm sorry, sir. I
17 was answering your question with respect to
18 the competitive balance between terrestrial
19 radio --

20 CHIEF JUDGE SLEDGE: My question,
21 let me make sure you understand my question.
22 My question is I don't understand where you're

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1 saying that there is a competitive imbalance
2 with terrestrial radio that can be affected by
3 royalties.

4 THE WITNESS: Well, in the markets
5 in which I've competed in commercially, I've
6 found that if I have to pay a cost that my
7 competitor does not have to pay that that puts
8 me at a disadvantage.

9 So a good example would be when I
10 was at Orion Network Systems and in order to
11 establish a communications facility on the
12 CitiBank branch I had to put a satellite dish
13 up there with an 8 watt radio to transmit to
14 the satellite. The minimum price I could
15 drive that down to was about \$3,000 an
16 installation.

17 When the phone companies came
18 along with a \$500 router that could be hooked
19 up to a telephone line and accomplish the same
20 thing, it put me at a significant disadvantage
21 and impacted the way in which I could compete
22 against them. So the royalties is a cost

1 away from what we proposed. I think that the
2 \$115 million that we pay over the term at the
3 .88 percent level is an awful lot of money and
4 it is money that the terrestrial radio doesn't
5 have to pay, but it is a proposal we made and
6 I stand by the proposal.

7 JUDGE SLEDGE: And a big argument
8 for that is because Congress has decided to
9 subsidize terrestrial radio.

10 THE WITNESS: Well, it is a
11 factor. I think that to me the arguments that
12 we're making and proposing to the rate have
13 more to do with the law that covers our
14 service than terrestrial radio, but we do have
15 to consider the fact, especially under the
16 disruption standard that there is in fact a
17 competitive balance between satellite radio
18 and terrestrial radio.

19 If we don't succeed in taking
20 listeners away from satellite -- I'm sorry --
21 terrestrial radio, we don't accomplish any of
22 the things that are sought in this --

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1 input to the business, especially where we've
2 got a situation where the guy dominating the
3 market pays nothing. And we pay an amount
4 which actually, I think, is a substantial
5 amount of money. I think \$115 million is a
6 huge amount of money. And that's a
7 competitive difference with the guy I'm trying
8 to take listeners away from He's trying to
9 stop me.

10 CHIEF JUDGE SLEDGE: So to level
11 that playing field, two options are -- the two
12 options are that terrestrial radio pays a
13 royalty over which we have no control or you
14 pay a lower royalty than otherwise over which
15 we do have control?

16 THE WITNESS: Well, a fair
17 royalty. And we've provided --

18 CHIEF JUDGE SLEDGE: A fair
19 royalty depends on who's doing the talking,
20 doesn't it?

21 THE WITNESS: It certainly does.
22 And again, as I said before, I'm not backing

1 maximizing the availability of creative works.
2 We don't get there if we take the listeners
3 away from terrestrial radios. We have to
4 fight to get them.

5 CHIEF JUDGE SLEDGE: Thank you.

6 JUDGE WISNIEWSKI: Actually, if I
7 could follow up on one thing that you said.
8 You had indicated that your content deals were
9 flat dollar amounts per annum. Is that wholly
10 true with respect to all of your content
11 deals?

12 THE WITNESS: There are fixed
13 amounts that different content partners have
14 negotiated different payment arrangements, so
15 that for instance with the NFL that we've got
16 one that scales dramatically. You know --

17 JUDGE WISNIEWSKI: Let's take that
18 one in particular. In addition to those flat
19 fees, aren't there stock options that go to
20 the NFL depending on revenue currently?

21 THE WITNESS: Could I do the fees
22 first and then we'll do the options?

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1 JUDGE WISNIEWSKI: Sure.
 2 THE WITNESS: So the NFL does
 3 pretty well with its broadcast rights. I
 4 mean, they get billions from the television
 5 guys for the broadcast rights, and they
 6 recognize as we were talking with the
 7 Broadcast Committee that Sirius wasn't in the
 8 same position as the major networks in order
 9 to make payments. So they were actually
 10 looking for, you know, a number of \$30 million
 11 a year and the way that they decided to
 12 structure that is something where the payments
 13 were very low in the first couple of years and
 14 then higher in the last couple of years in
 15 order to average it out.

16 JUDGE WISNIEWSKI: Is it
 17 backloaded?

18 THE WITNESS: Yes, absolutely. So
 19 with respect to the stock side of things, you
 20 know, they did feel like they were going to
 21 drive subscriptions for satellite radio. We
 22 believed that they were correct. The two of

1 marketing efforts with the teams. You know,
 2 the fact is is not many of them actually ended
 3 up coming in that way. There were very few
 4 trackable subscribers in that sense. We found
 5 that consistently throughout.

6 People affiliate with the programs
 7 and we hear about it back from the retailers.
 8 You know, we hear about it from the car
 9 dealers and they tend not to save those buck
 10 slips and turn them in order to evidence where
 11 they learned about it.

12 JUDGE WISNIEWSKI: Well, you were
 13 certainly not opposed as a matter of principle
 14 when you did that deal to having this variable
 15 component to the compensation.

16 THE WITNESS: No, I have no
 17 problem especially with where you can track
 18 the ability to retain -- to attract
 19 subscribers to paying commissions on it. So
 20 we pay commissions to our retailers, you know,
 21 for the activations of radios that do that.
 22 We provide promotional programs to automobile

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1 us did have a difference of opinion on how
 2 that would manifest itself. We thought that
 3 while we wanted to engage all of the teams in
 4 direct marketing efforts that we thought for
 5 the most part that people would simply go to
 6 the big box retailers to buy radios because
 7 that's where they go to buy technology
 8 products.

9 You know, some of the members of
 10 the NFL thought that there might be these
 11 directly trackable subscribers where there
 12 would be promotion codes, there would be buck
 13 slips that would go into the program guides at
 14 the football games and people would keep their
 15 buck slip and then they would present them at
 16 retail outlets. That's not what consumer
 17 behavior is.

18 So the bounty-based warrants were
 19 structure for directly and trackable
 20 subscribers. There were \$33 million bounty-
 21 based warrants that were set aside for the NFL
 22 in the first three years for all these joint

1 dealers to get them to upsell to longer term
 2 plans and things like that. We're happy to
 3 pay commissions for delivered activations.

4 JUDGE WISNIEWSKI: Thank you.

5 THE WITNESS: I'm sorry, and the
 6 NFL equity was actually structured to deliver
 7 I believe at the time it was the stock
 8 equivalent of about \$50 per subscriber, which
 9 is at the high end of our commission scale,
 10 but one we were willing to pay.

11 CHIEF JUDGE SLEDGE: Mr. Rich, any
 12 questions?

13 MR. RICH: No.

14 CHIEF JUDGE SLEDGE: Cross
 15 examination by SoundExchange.

16 CROSS EXAMINATION

17 BY MR. SCHNEIDER:

18 Q Good morning, Mr. Frear, my name
 19 is Mark Schneider, and I represent
 20 SoundExchange. I have a few questions for you.

21 A Good morning.

22 Q If I may just start with that last

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1 point you were talking about. It's true, is
2 it not that under your Howard Stern contract
3 that the subscribers he brings in, various
4 thresholds, the more money he makes?

5 A It's true. Howard and his agent
6 felt strongly that they were going to drive
7 publicity, drive awareness, and drive people
8 into the stores and they were unwilling to
9 agree to a contract that had a directly
10 untrackable subscriber concept. They knew
11 they were going to drive people through the
12 stores and they wanted a benchmark against the
13 -- against what our original expectations for
14 the business were, and they wanted to compare
15 that later on to see if we did better because
16 they thought they would be a substantial
17 contributor to our success. And we agreed
18 with them.

19 Q And it's also the case, is it not,
20 that you were perfectly free in this case, to
21 propose a lump sum royalty, if you so chose?

22 A Yes.

1 BY MR. SCHNEIDER:

2 Q Now in your written statement, you
3 provide cost on revenue information for
4 Sirius, for 2004, 2005, and for half of 2006,
5 correct?

6 A Yes.

7 Q And you recently updated that for
8 the rest of 2006?

9 A Yes.

10 Q And you discuss in your testimony,
11 the assets the company has incurred over those
12 years, correct?

13 A Yes.

14 Q Don't you agree for a start-up
15 company like Sirius, looking at a year or two
16 like that, is not the best way to analyze the
17 business' future prospects?

18 A So I would agree that reporting on
19 its past is not necessarily indicative of its
20 future.

21 Q And could you agree that to
22 evaluate Sirius' business, you really have to

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1 Q You chose, in fact, to propose a
2 royalty based on -- that would change, based
3 on the number of subscribers that the
4 companies attract?

5 A We chose to propose a royalty that
6 we felt was consistent with our existing cost
7 structure as well as something that was
8 defensible under the 801(b) standards.

9 Q That wasn't the question I asked.
10 I guess I asked you chose to propose a royalty
11 that in lump sum terms would rise as the
12 number of subscribers that your company
13 attracts --

14 A No, that's no correct.

15 JUDGE ROBERTS: Are you talking
16 about for Howard Stern?

17 MR. SCHNEIDER: No, I'm sorry.
18 I'm talking about the proposal in this case.

19 THE WITNESS: We chose to not
20 present something in lump sum. We chose to
21 present a percentage of revenue.

22 MR. SCHNEIDER: Thank you.

1 look at the longer term and the future,
2 correct?

3 A You have to look at the continuing
4 investments that will be required by the
5 business to actually build a long-term viable
6 successful business, that's correct.

7 Q And in your testimony, you discuss
8 the losses incurred by investors in Sirius
9 over the last I don't know, 15, 17 years,
10 correct?

11 A The losses incurred by the
12 company, that's correct.

13 Q Yes. And that's the accumulated
14 deficit figure you refer to at page six,
15 paragraph ten of your report?

16 A The accumulative deficit is the
17 accumulated losses of the company, that's
18 correct.

19 Q And just to be clear, that's not
20 money that Sirius owes to a bank or owes to
21 anybody?

22 A Well, that money was raised and so

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1 the -- so I'd say actually that's incorrect.
 2 That the money was raised from investors.
 3 Investors are looking for a return on their
 4 investments, so if we raise money from the
 5 debt markets, we raise money from the equity
 6 markets, we take that money and we spend it on
 7 operating expenses as well as capital
 8 expenditures. Those things all eventually end
 9 up in the accumulated deficit.

10 Of course, the undepreciated
 11 investments we've made in property plan
 12 equipment satellites and things like that
 13 aren't yet reflected in the accumulated
 14 deficit, but investors in my experience do
 15 expect a positive return on investment. And
 16 all of that money was raised from somebody
 17 else.

18 Q You don't have a legal obligation
 19 to pay that money back to anyone.

20 A We have a legal obligation to pay
 21 back our debt, and we certainly have fiduciary
 22 obligations with respect to our shareholders.

1 absolutely a measure of our current operation.

2 Q I'm sorry, but that figure is the
 3 total deficit, is not. We're not sure what is
 4 last years in reflection of the amount that
 5 you lost last year?

6 A No. Again, the accumulated
 7 deficit is over the 17-year history of the
 8 company.

9 Q You would encourage today's
 10 investors to purchase Sirius stock, would you
 11 not?

12 A We would.

13 Q And it always part of Sirius'
 14 business plan that it would accumulate losses
 15 at the beginning?

16 A That's correct.

17 Q Until it acquired a sufficient
 18 amount of customers to become an efficient
 19 operation?

20 A That's correct.

21 Q And that happened more slowly than
 22 you anticipated in fact?

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1 I believe those are rooted in returns for
 2 them.

3 CHIEF JUDGE SLEDGE: Corporate law
 4 has certainly given investors a pretty high
 5 ranking among assets of the company.

6 MR. SCHNEIDER: Indeed they do,
 7 and my point was simply that this accumulated
 8 deficit figure is not like a bank note that is
 9 a legal obligation to pay off --

10 THE WITNESS: If you went to
 11 investors with the proposition that we're
 12 going to blow three billion dollars of your
 13 money and we're not going to give you a nickel
 14 back, I don't think you would get any.

15 MR. SCHNEIDER: Right, you
 16 wouldn't raise the money.

17 THE WITNESS: Yes.

18 BY MR. SCHNEIDER:

19 Q These losses are not a measure of
 20 the current operation of Sirius?

21 A They absolutely are. We've lost
 22 \$1.1 billion dollars last year. That's

1 A It did.

2 Q Now in your report, you don't
 3 provide data addressing Sirius' business
 4 prospects between 2007 and 2012, do you?

5 A I do not.

6 Q Well, such data is available, is
 7 it not?

8 A So there are models available.
 9 There are financial analysts that work in my
 10 staff whose job it is to regularly model the
 11 business and go through it. As a matter of
 12 corporate governance, what the management team
 13 does is we have an annual operating budget and
 14 we spend most of our time on that budget. We
 15 don't actually sit down as a team with Mel and
 16 Jim and Scott, I don't sit down as a team and
 17 look at multi-year subscriber projections and
 18 multi-year revenue and cost projections on a
 19 regular basis and adopt a formal long-term
 20 plan.

21 Q Let me show you what I've marked
 22 for purposes of identification as Sound

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1 Exchange Exhibit No. 41.
 2 (Whereupon, the above-
 3 referred to document was
 4 marked as SX Exhibit No.
 5 41 identification.)
 6 CHIEF JUDGE SLEDGE: Mr. Frear,
 7 let me make sure that I understood your next
 8 to last answer. Your direct testimony does
 9 not apply any direction, any projections
 10 during the term of this license?
 11 THE WITNESS: It does not.
 12 CHIEF JUDGE SLEDGE: Thank you.
 13 BY MR. SCHNEIDER:
 14 Q Are you familiar with this
 15 document, Mr. Frear?
 16 A I am.
 17 Q And what is this document?
 18 A Well, this is a pitch book that
 19 was put together for a bond offering that we
 20 attempted about two years ago.
 21 Q And are you familiar with this
 22 document in the normal course of your business

1 received in evidence.)
 2 BY MR. SCHNEIDER:
 3 Q If I can have you turn to page six
 4 of that document? I believe that you
 5 testified that this document is over two years
 6 old at this point, correct?
 7 A That's correct.
 8 Q Are these bullet points or star
 9 points you list on page six, are they still
 10 true today?
 11 A I believe that they are.
 12 Q Turn to page seven, looking at
 13 that very first sentence, do you still believe
 14 that the potential for satellite radio is huge
 15 today?
 16 A I do.
 17 Q And turning to page eight, do you
 18 still believe that Sirius radio's position for
 19 exclusive long-term growth?
 20 A Well, it's conservatively less
 21 explosive than it was two years ago because
 22 the business is growing quite a bit in the

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1 at Sirius?
 2 A I'm sorry?
 3 Q Are you familiar with this
 4 document as part of the normal course of your
 5 business at Sirius?
 6 A I'm not sure -- I'm familiar with
 7 the document and we prepared the document in
 8 the context of approaching the market for a
 9 bond offering.
 10 MR. SCHNEIDER: Thanks. I move
 11 Sound Exchange Trial Exhibit No. 41 into
 12 evidence.
 13 CHIEF JUDGE SLEDGE: Any objection
 14 to Exhibit 41?
 15 MR. WYSS: No objection, Your
 16 Honor.
 17 CHIEF JUDGE SLEDGE: Without
 18 objection, it's admitted.
 19 (The document, having
 20 been marked previously
 21 for identification as SX
 22 Exhibit No. 41, was

1 last two years. But I do believe that it's
 2 still positioned for good, long-term growth.
 3 Q And turning to page 27, looking at
 4 the PowerPoint slide on top of that page, do
 5 you see those star points there?
 6 A I do.
 7 Q And you still believe that Sirius
 8 presents an attractive business model for the
 9 reasons set out in that PowerPoint slide?
 10 A For the most part. The one used
 11 in 2007 is something that in fact is not going
 12 to happen and we've recently suspended
 13 providing guidance on when we will achieve
 14 positive pre-cash flow.
 15 Q Turning to page five of your
 16 report.
 17 A Yes. Direct testimony?
 18 Q Yes, direct testimony, yes.
 19 A Paragraph five or --
 20 Q Page five, paragraph seven. It's
 21 the paragraph you spoke about with counsel
 22 earlier.

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1 Do you recall that?

2 A Yes.

3 Q And you make a series of

4 statements in here about things you learned in

5 the course of your experience at Sirius,

6 looking at the third sentence, you learned

7 that having the right to perform music didn't

8 mean that consumers would pay. Do you see

9 that?

10 A I do.

11 Q And then four or five lines down

12 from that you found that you needed to invest

13 heavily in nonmusic programming, do you see

14 that?

15 A I do.

16 Q And a couple of lines below that

17 you had to invest in brand name news

18 programming. Do you see that?

19 A Yes, I do.

20 Q And then five lines from the

21 bottom your music channels needed branding, do

22 you see that?

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1 A Yes, I do.

2 Q As to none of these points do you

3 provide any further testimony or data in your

4 report, is that fair?

5 A Honestly, I'd have to read the

6 entire report to be able to respond. But it

7 is my testimony.

8 Q And you have no analysis or data

9 to support that testimony is my only point.

10 It's just your view of these points?

11 A It's certainly my business

12 judgment as well as the business judgment of

13 the other management members that I work with

14 every day.

15 Q And then turning to page 14, page

16 14. Paragraph 22. The bottom bullet point

17 there is a similar kind of claim that

18 exclusive satellite radio content which we

19 have found is essential to drive

20 subscriptions. Do you see that?

21 A I do.

22 Q And then you say, "as I discussed

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1 below, management included was essential to

2 our business." Do you see that?

3 A I do.

4 Q I couldn't find what you were

5 referring to there. Can you point me to your

6 discussion of management's conclusions?

7 A Perhaps it was meant to say as I

8 discussed above, back in paragraph, page five,

9 paragraph seven.

10 Q Okay. Once again you don't

11 provide, you don't provide in this report any

12 data to support this. This is just your

13 judgment having the position you have in the

14 company?

15 A My business judgment is informed

16 by again the other management members that I

17 work with day to day.

18 Q I'm sorry to have you jump around.

19 If I could return to SoundExchange Exhibit 1.

20 And ask you to go back to page 27.

21 Do you see the bullet that says --

22 excuse me, do you see the bullet that says

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1 "significant operating leverage"? Do you

2 understand that to mean that the business has

3 high fixed costs and low variable costs, is

4 that fair?

5 A Yes.

6 Q And that's still true today?

7 A Excuse me?

8 Q That is still true today?

9 A We have high contribution margins

10 and we have very stable fixed costs that don't

11 grow at the same rate as the revenue does and

12 so you get significant operating leverage by

13 virtue of being structured that way.

14 Q And what's a contribution margin?

15 A Contribution margin would be a

16 revenue minus our customer billing costs and

17 minus the revenue share residuals and

18 royalties that we take.

19 Q What's the significance of that

20 metric?

21 A Well, it is an easy way of

22 modeling the business. All the costs below

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1 that line we view as period costs that people
2 can make assumptions as to sales marketing
3 costs, G&A costs, research and development
4 costs, programming costs, and how they are
5 going to grow over time. Those costs aren't
6 going to change at the same rate as our
7 revenues or our subscribers do.

8 So in the last couple of years
9 what we've found is is that our contribution
10 margin as a percentage of our revenue has
11 stayed relatively stable right around the 70
12 percent range. And our other costs of the
13 business haven't grown anywhere near as fast
14 as the revenues are growing, and so in essence
15 the EBITDA losses of the business are
16 shrinking each year.

17 Q All that is a good thing I gather?

18 A It is a good thing.

19 Q And what's the long-term EBITDA
20 margin?

21 A It's a reference to earnings
22 between interest, taxes, depreciation, and

1 A Well, depending on the outcome of
2 these proceedings, yes.

3 Q Let me show you what I'll mark for
4 purposes of identification as Sound Exchange
5 Exhibit No. 42.

6 (Whereupon, the above-
7 referred to document was
8 marked as SX Exhibit No.
9 42 for identification.)

10 Are you familiar with this
11 document?

12 A Honestly, I can't say that I am
13 familiar with the document, although the
14 information contained within it is information
15 that I have seen before in various forms. I
16 don't recall having seen it in this form.

17 Q Let me direct your attention to
18 page 12 of the document, which is Bates
19 stamped 40785.

20 A That's the 2006 estimated industry
21 subscriber growth?

22 Q Yes. Is this a graph that you are

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1 amortization. A 40 to 50 percent EBITDA
2 margin is what we've estimated here.

3 Q And is that a good thing as well?

4 A It will be a good thing if we get
5 there, yes.

6 Q And why would it be a good thing
7 when you get there or if you get there?

8 A Well, you know, margins in this
9 range are what many investors in media and
10 communications companies are looking for.
11 Terrestrial radio has a 55 percent free cash
12 flow margin. They have about a 45 percent
13 EBITDA margin, and so we in addition to
14 competing for listeners, we compete for
15 capital in the market place. We compete for
16 the cost of capital. So if investors don't
17 think that we are going to get to the same
18 kind of levels as other investment choices
19 that they have, they will charge us more to
20 get their capital.

21 Q And do you still think you will
22 get there?

1 familiar with?

2 A Actually, no.

3 Q Is the data within the graph
4 itself something that you are familiar with?

5 A Not other than I understand what
6 satellite radio, DBS, and cable are.

7 Q So you -- you don't have any
8 knowledge of the extent to which satellite
9 radio has grown as compared to DBS and cable?

10 A I believe that our rate of growth
11 is higher than theirs, which is normally what
12 you would expect in the business that has a
13 small denominator in the fraction you are
14 using to calculate the growth rate.

15 Q And turn to the next page of the
16 document. Is that a graphic that you are
17 familiar with?

18 A Again, the same answer as the
19 previous page. So I'm not -- I'm not familiar
20 with this although I am familiar with all the
21 names and I think I understand what it means.

22 Q And are you familiar with the

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1 statistic that satellite radio is growing
2 substantially at a greater pace than the other
3 media listed here? Internet, DBS, and so on?

4 A I believe that's what the page
5 says, yes.

6 Q Is that -- but do you also have an
7 opinion about whether that is so?

8 A For me, it doesn't mean anything.
9 You know, the fact that you have got a 95
10 percent growth rate on an incredibly small
11 amount of revenue is a good thing. You're
12 growing. You're almost doubling. But if
13 you're doubling from a dollar to two dollars,
14 then it doesn't do much to reduce the losses
15 that in 2006, when satellite radio revenues
16 were, you know, about doubling, we were on our
17 way to a \$1.1 billion loss which was the
18 greatest loss on our history.

19 CHIEF JUDGE SLEDGE: Can you
20 answer the question?

21 THE WITNESS: He might have to
22 rephrase the question or re-ask it. I'm not -

1 of the slide or whether you had seen the slide
2 before. I was asking whether facts
3 represented on this slide are facts that you
4 are familiar with?

5 A I have no reason to think these
6 facts are wrong, but I wouldn't say -- I have
7 no idea what internet advertising growth is or
8 DBS growth or cable growth, or anything else.
9 Those aren't industries that I follow.

10 Q So that would be a no?

11 A Pardon me?

12 Q That would be a no then? You're
13 not familiar with the facts?

14 A I'm not familiar with this slide.

15 CHIEF JUDGE SLEDGE: You're not
16 answering the question.

17 THE WITNESS: Maybe I'm confused.

18 CHIEF JUDGE SLEDGE: The question
19 is are you familiar with these facts?

20 THE WITNESS: No.

21 BY MR. SCHNEIDER:

22 Q Let me show you what has been

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1 -
2 BY MR. SCHNEIDER:
3 Q I asked if you were familiar with
4 the conclusion reached by that presentation,
5 which is that satellite radio is growing at a
6 faster pace than the other media listed there?

7 A I don't believe this page presents
8 a conclusion. I simply think it is an array
9 of facts.

10 Q And are those facts that you are
11 familiar with?

12 A So again, I don't mean to be
13 argumentative, so I'm sorry if I seem so. I
14 don't remember this presentation. I don't
15 know who made it nor do I know who prepared it
16 or the points that they were making on it. So
17 for me, it's just a representation of what I
18 assume to be properly calculated numbers, but
19 I really don't know what the point of the
20 slide was.

21 Q Perhaps I wasn't clear. I wasn't
22 really asking whether you knew about the point

1 marked for purposes of identification as
2 SoundExchange Exhibit 43.

3 (Whereupon, the above-
4 referred to document was
5 marked as SoundExchange
6 Exhibit No. 43 for
7 identification.)

8 MR. WYSS: Your Honor.

9 CHIEF JUDGE SLEDGE: Mr. Wyss?

10 MR. WYSS: My understanding is
11 this is very recent. This is the current
12 operating budget plan and that this is highly
13 confidential and highly competitive and
14 sensitive information. We would request the
15 Court be cleared at this time.

16 I'm making that motion because I
17 anticipate questions that might include
18 information in here that is highly competitive
19 and sensitive.

20 CHIEF JUDGE SLEDGE: Any

21 objection, Mr. Schneider?

22 MR. SCHNEIDER: I have no

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1 objection to the motion. I can inform the
2 Court I am going to ask questions about the
3 particular slides that no doubt the company
4 would view as confidential.

5 CHIEF JUDGE SLEDGE: The motion to
6 apply the protective order to answers to
7 questions on Exhibit 43 is granted.

8 MR. WYSS: Thank you, Your Honor.

9 (Whereupon, the proceedings went
10 into Closed Session.)
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1 should be marked Trial Exhibit 28. I
2 apologize.

3 BY MR. SCHNEIDER:

4 Q Did you answer the question? What
5 is "guidance"?

6 A "Guidance" is when we talk to Wall
7 Street and talk to the public, we provide
8 indications of some of our operating metrics
9 and financial performance measures that we
10 would expect in the future. And so the
11 guidance is a reference to those items.

12 Q And who attends these calls or
13 meetings?

14 A They're public calls, so actually
15 anyone can attend. We webcast them.

16 Q And from the company side, who
17 attends the meetings?

18 A From the company side, Mel
19 Karmazin attends, Scott Greenstein, Jim Meyer,
20 myself, Paul Blaylock, and Patrick Donnelly.

21 Q Now, since your report was filed
22 in October, you've reported results for 2006,

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1 MR. SCHNEIDER: I'll deliver this
2 while we're waiting.

3 BY MR. SCHNEIDER:

4 Q Let me show you what I've marked
5 as SoundExchange Trial Exhibit 45. Let me
6 start by asking you -- you used the term
7 before "guidance." What is "guidance"?

8 CHIEF JUDGE SLEDGE: He can answer
9 that question, Mr. Wyss.

10 MR. WYSS: He certainly can. I
11 just -- and I apologize, this is more of a
12 housekeeping matter, Your Honor. I think this
13 is the same document as SX 28, and I just
14 wasn't -- which I think is already in evidence
15 under SX 28. And I was concerned about the
16 record being confused by having two identical
17 documents having two different numbers, so I
18 just -- it's a housekeeping matter that I
19 raise.

20 MR. SCHNEIDER: Thank you very
21 much. I apologize to the Court. Indeed, it
22 was an exhibit with Mr. Karmazin, and it

1 correct?

2 A That's correct.

3 Q And you reported results for the
4 first quarter '07, correct?

5 A That's correct.

6 Q And you had a successful first
7 quarter '07.

8 A Yes, we did.

9 Q And you were able to reiterate all
10 of the guidance you issued at the end of the
11 fourth quarter '06, is that correct?

12 A I believe that is correct.

13 Q Let me refer to page 5 of Exhibit
14 28. And looking at the last paragraph of your
15 presentation, does that refresh your
16 recollection as to whether you reiterated all
17 of your guidance from the end of last year?
18 I'm looking at the last sentence. I'm sorry.
19 "As disclosed in the press release, we are
20 reiterating all of our guidance for 2007,
21 including revenue approaching \$1 billion,
22 subscribers over eight million, average

1 monthly churn of 2.2 to 2.4 percent, and SAC
2 per growth add of approximately \$95." Do you
3 see that?

4 A Yes, I do. And the word "growth"
5 is a typographical error. It should say
6 "gross." Gross add.

7 Q And that's an accurate statement,
8 the statement you make there?

9 A It is.

10 Q And you also talked about some new
11 guidance to investors in this call, did you
12 not?

13 A I -- well, I don't believe so, but
14 perhaps you can -- perhaps I'm not remembering
15 it correctly.

16 Q On page 2, there's Mel Karmazin
17 speaking. On the paragraph it says, "On the
18 retail front," about three-quarters of the way
19 to the bottom of the page, do you see that?

20 A Yes, I do.

21 Q Now, it says, the last sentence --
22 next-to-the-last sentence, "We're scaling our

1 CHIEF JUDGE SLEDGE: Where is that
2 on the page?

3 MR. SCHNEIDER: No, I don't see it
4 on the page. I apologize. Let me just ask
5 the question without referencing this
6 document.

7 BY MR. SCHNEIDER:

8 Q What does "fully funded" mean?

9 A "Fully funded" means that we have
10 sufficient cash on our balance sheet or access
11 to sufficient credit availability to meet all
12 of the cash requirements of our existing plan.

13 Q And is Sirius fully funded today?

14 A It is.

15 Q And is that something you report
16 to the world in guidance?

17 A I don't know that we actually
18 include it in guidance, but we do include it
19 in all of our SEC filings.

20 Q And turning to page 7 of the
21 transcript, the last Mel Karmazin statement
22 about two-thirds of the way down the page, do

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1 business, managing our costs, accomplishing
2 our goals of more than \$200 million in the
3 first quarter revenue, and well positioned to
4 approach \$1 billion in revenue for the year."
5 Do you see that?

6 A Yes.

7 Q Is that a form of guidance, that
8 \$1 billion? Is that a form of guidance?

9 A Yes, the \$1 billion is a form of
10 guidance. That's correct. But you made the
11 statement that we provided new guidance. Was
12 that the reference that --

13 Q Is that not new?

14 A No, that's not new.

15 Q So that's a reiteration of prior
16 guidance?

17 A That's correct.

18 Q On page 5 of this presentation --

19 A Of the transcript?

20 Q Yes, of the transcript. What does
21 the concept of fully funded mean?

22 A That means that we have --

1 you see that?

2 A The last statement?

3 Q By Karmazin.

4 A Yes, I do.

5 Q Yes. Eight million year-end subs
6 -- that's guidance that Mr. Karmazin offered?

7 A To over eight million, that's
8 correct.

9 Q Over eight million. And that
10 remains true today?

11 A Yes, it does.

12 Q If I can return to your report --

13 A That's the written direct
14 testimony?

15 Q The written direct statement, yes.
16 On page 6, paragraph 9, you point out in this
17 paragraph that Sirius' losses in 2006 were
18 greater than what Sirius had anticipated in
19 early -- in 2003 and earlier years, is that
20 fair?

21 A Yes, I see that.

22 Q And one of the reasons for those

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1 greater losses is the number of subscribers
2 did not grow as quickly as Sirius had
3 anticipated, is that correct?

4 A I believe that's correct, yes.

5 Q Is it also the case that one of
6 the reasons for those greater-than-expected
7 losses is that Sirius spent more on non-music
8 content after 2003 than it had anticipated or
9 budgeted for in 2003?

10 A One of many, many reasons, yes.

11 Q Hadn't budgeted for the Howard
12 Stern deal, for example.

13 A At the time of the preparation of
14 the recapitalization plan 2003 -- I wasn't
15 there for the preparation of that plan, but I
16 don't believe they had contemplated hiring
17 Howard Stern at that time.

18 Q And the fact that that deal may
19 have contributed to greater losses doesn't
20 make it in your mind a bad deal, does it?

21 A It does not.

22 Q Now, on page 7, paragraph 11, in

1 A That's my understanding, yes.

2 Q Let me direct your attention to
3 page 3 of the report, paragraph 5. There's a
4 heading entitled "The Risks of the Satellite
5 Radio Business," do you see that?

6 A Yes.

7 Q And following that there's a
8 section devoted to what you understand the
9 risks to be in business, is that fair?

10 A Yes.

11 Q And I believe you spoke about that
12 actually in your direct testimony earlier this
13 morning as well. Your conclusion is that
14 satellite businesses are "extremely risky,"
15 looking at the first sentence.

16 A That's correct.

17 Q Now, financial analysts quantify a
18 company's risks, do they not?

19 A Some do, yes.

20 Q Are you familiar with the term
21 "weighted average cost of capital"?

22 A Yes, I am.

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1 your report, you say that projections are on
2 certain estimates and often are not realized.
3 Do you see that?

4 A I do.

5 Q And I take it that's designed in
6 part as an explanation for why you haven't
7 provided any projections in your report, is
8 that fair?

9 A Well, I don't remember having
10 contemplated that when we were preparing the
11 written statement, no.

12 Q In any event, you rely on such
13 projections, for example, in your 2007 budget,
14 correct?

15 A Yes, we do. Yes.

16 Q And you offer investors guidance
17 as to the future course of the company based
18 on such projections, correct?

19 A That's correct, yes.

20 Q And you understand that in this
21 proceeding the Court is called upon to set a
22 rate that will apply through 2012, correct?

1 Q And what is that?

2 A It's a -- it's a term that's used
3 to look at a company. They consider the costs
4 of their debt capital. They consider the
5 appropriate cost of the equity capital. They
6 look at the mix of debt and equity in the
7 capital structure and then calculate what is
8 believed for that entity to be its weighted
9 average cost of capital.

10 Q It's fair to say that's a measure
11 of risk, is it not?

12 A Well, indirectly, yes. The
13 measure of risk I think is actually contained
14 in -- generally in the beta that's used in
15 arriving at the equity component of weighted
16 average cost of capital. And to some extent
17 the rate that they assume for the debt
18 financing also reflects perceived risk in the
19 company, yes.

20 Q Are you familiar with the
21 testimony of J. Armand Musey that was provided
22 in this case?

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1 A I've read his testimony, yes.
 2 Q In fact, you relied on it in your
 3 own testimony, did you not?
 4 A I probably did. It was a long
 5 time ago.
 6 Q Are you familiar with the fact
 7 that Mr. Musey used the weighted average cost
 8 of capital as a measure of the risk to
 9 investors of investing in Sirius Radio?
 10 A I don't specifically recall it,
 11 but I believe that he probably would have.
 12 Q And do you think that's a fair way
 13 to use the weighted average cost of capital?
 14 A I think that in order to translate
 15 a company's business plan into something that
 16 equity investors can understand, especially a
 17 company in the development stage like Sirius,
 18 that you do need to use weighted average cost
 19 of capital in that analysis, yes.
 20 Q Let me show you what has been
 21 marked as SoundExchange Trial Exhibit 45. I
 22 will represent to you that this is the

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1 complete section of Mr. Musey's testimony
 2 involving historical risk profile.
 3 (Whereupon, the above-
 4 referred to document was
 5 marked as SX Exhibit
 6 No. 45 for
 7 identification.)
 8 A Okay.
 9 Q Looking at it, does it refresh
 10 your recollection about his analysis?
 11 A It does.
 12 Q Now, when you analyze risk in your
 13 own report at pages 3 and on, you didn't
 14 provide any quantification of the risk, did
 15 you?
 16 A No, I did not.
 17 Q But Mr. Musey did, in fact,
 18 provide quantification of the risk.
 19 A He did, yes.
 20 Q And looking at page 11 of his
 21 report, do you see the chart there on the
 22 bottom?

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1 A I do.
 2 Q And focusing around the period
 3 1998 where Mr. Musey summarizes analysts'
 4 views that in 1998 satellite radio firms had
 5 a WACC of 25 percent, do you see that?
 6 A I do.
 7 Q That's consistent with the view of
 8 a very risky investment at that period,
 9 correct?
 10 A I believe that at that time the 25
 11 percent return reflected the risks that these
 12 people saw for the business at that time, yes.
 13 Q And is not that consistent with
 14 your own analysis on paragraph 5 that
 15 satellite businesses are extremely risky?
 16 A Well, as you indicated, I provided
 17 no quantification of my perception of risk.
 18 Q And trawling us to the other end,
 19 the right-hand side of this chart, in 2006,
 20 Mr. Musey, summarizing the estimates, has --
 21 has the WACC at, I don't know, around 11
 22 percent, is that fair?

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1 A That's what it says. That's
 2 correct.
 3 Q Which makes it only slightly more
 4 risky today than -- as an investment than an
 5 investment in terrestrial radio, for example,
 6 is that correct?
 7 A Well, I don't have any idea what
 8 WACC they're using for terrestrial radio. And
 9 my experience with analysts is that they
 10 actually use weighted average cost of capital
 11 to chase prices in the market. And so if
 12 prices are running up, and they're running
 13 beyond their recommended range, and they all
 14 don't want to be left off the bandwagon, one
 15 of the things they manipulate in their models
 16 is they drop the weighted average cost of
 17 capital.
 18 Nothing may have changed in the
 19 business, but they're busy chasing a valuation
 20 benchmark. And so for me this chart actually
 21 doesn't say anything -- anything. Not to me.
 22 Q And just to be inclusive, on the

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1 fourth line of page 11, Mr. Musey does list
2 what he says is the WACC associated with
3 terrestrial radio at .85 to 95, do you see
4 that?

5 A I do.

6 Q So 11 would be higher than that,
7 but not nearly as high as 25.

8 A Yes, I think that, you know, for
9 me one of the elements that's missing, you
10 know, from this is what I think is a yawning
11 gap in expected equity returns. That the
12 terrestrial radio companies are very mature
13 companies that borrow that generally have
14 investment grade ratings on them, they borrow
15 money at very tight spreads to Treasuries.

16 Those are tax-affected rates, and
17 they're a very high -- they can be a very high
18 proportion of their capital structure, because
19 of generating all this free cashflow. So, you
20 know, they're going to come out lower.

21 You know, and, again, Wall Street
22 firms in my experience, in the four years that

1 me may use varying assumptions for comparing
2 proposals with dissimilar cashflows.

3 As long as they're using the same
4 WACC in, you know, Column A that they're using
5 in Column B to compare the two dissimilar
6 cashflows, it produces a fair comparison. The
7 absolute level of the WACC is, you know,
8 probably not all that critical to the
9 decisions that we're actually making.

10 Q So WACC is a measure of risk. Mr.
11 Musey uses it. You don't know yourself what
12 Sirius' current weighted average cost of
13 capital is. And is it fair to say that no
14 witness that Sirius presents in this
15 proceeding is able to testify about Sirius'
16 current weighted average cost of capital?

17 A Well, no. If you ask me what I
18 thought our -- an appropriate WACC for us was,
19 I would tell you.

20 CHIEF JUDGE SLEDGE: That's wasn't
21 the question. The question was: has any
22 witness of Sirius presented any evidence of

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1 I've been at Sirius, I have watched them chase
2 price in the market with weighted average cost
3 of capital. And so I don't place any -- for
4 me, just for me, somebody else might, but just
5 for me, as I look at our business, I don't
6 place any emphasis at all on what the analysts
7 specify as lack.

8 Q So I take it that at least this
9 part of Mr. Musey's analysis does not -- is
10 not helpful to you?

11 A It's not helpful to me in running
12 the business that Wall Street analysts think
13 that the WACC has gone down or that it is at
14 any particular level. I tend to not look at
15 their assumptions of risk as I run a business.

16 Q In fact, you don't know, is that
17 correct, what percentage weighted average cost
18 of capital Sirius is using in its current
19 modeling?

20 A I actually, in my day-to-day work,
21 I generally don't use weighted average cost of
22 capital. Many of the analysts that work under

1 weighted average cost of capital?

2 THE WITNESS: Not that I am aware
3 of, unless it's in Mr. Woodbury's testimony or
4 perhaps in Mr. Musey's testimony.

5 CHIEF JUDGE SLEDGE: Well, of
6 course, that certainly is testimony presented
7 by Sirius.

8 THE WITNESS: Yes. And I
9 apologize, I'm not familiar with all of the
10 testimony presented from our side of the case.

11 CHIEF JUDGE SLEDGE: Maybe I'm
12 lost in the absolute versus relative comments
13 you made just a moment ago, but it seems like
14 there's a conflict in your statement very
15 recently that the weighted average cost of
16 capital is a measure that should be used in
17 analyzing developing companies like Sirius and
18 your present statement that the weighted
19 average cost reflects the analysts chasing the
20 actual price of the market, and, therefore, I
21 don't think it's good for anything. Is there
22 not a conflict in those two statements?

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1 THE WITNESS: There's a little bit
2 of tension between them. I'll acknowledge
3 that. In order for -- with a company like
4 Sirius that's losing tremendous amounts of
5 money, and also spending huge amounts of cash,
6 that we're not generating any positive
7 cashflow today -- and, fundamentally, what a
8 discounted cashflow analysis does is, in fact,
9 bring future cashflows back to the present.

10 Overwhelmingly -- and it's used
11 for stock valuation, and the analysts have to
12 do it; otherwise, they can't logically
13 explain, you know, how they get to the price
14 of the stock. What overwhelmingly affects
15 that valuation is something called the
16 terminal value.

17 So they go out to the end of their
18 model, whenever the end of their model is, and
19 the end of their model might be 2010, it might
20 be 2012 or 2015, and they look at the free
21 cashflow or the EBITDA of the company at that
22 point in time and then they put a multiple on

1 \$3.75 of that \$4, with the cashflows in
2 between today and the date that he calculates
3 terminal value would represent the balance of
4 the \$4.

5 So it's a common mechanism people
6 use to try and take what's a complex future
7 business plan that has a lot of uncertainty in
8 it and try and boil it down to one number for
9 equity investors to focus on.

10 CHIEF JUDGE SLEDGE: So it's
11 important for investors but not important for
12 business decisions.

13 THE WITNESS: That's correct.

14 CHIEF JUDGE SLEDGE: I see. Thank
15 you.

16 BY MR. SCHNEIDER:

17 Q And just so the record is clear,
18 and I'll move on, you don't know what
19 percentage Sirius is currently using for
20 weighted cost of capital in its model?

21 A I don't believe that Sirius has a
22 corporate view as to weighted average cost of

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1 it.

2 And they might use 10 times or 15
3 times or 30 times, whatever they choose, and
4 it creates a terminal value at that point in
5 time, which they then discount back to the
6 present.

7 And the individual year cashflows
8 for a business like Sirius tend to have very
9 little effect on that net present value. The
10 discounted present cashflow of the company,
11 it's really all in the terminal value.

12 So I'll use by way of example that
13 Bob Peck, who is one of the better analysts on
14 the street, put out a report a few days ago
15 that said that, you know, we -- he was
16 increasing our stock price target to \$4, that
17 he thought that delivered a 25 percent return
18 or would develop -- deliver a 25 percent
19 return for investors.

20 Now, in Bob's analysis -- I didn't
21 check it for this answer, but, for instance,
22 the terminal value might represent \$3.50 or

1 capital. It doesn't use the figure in its
2 model.

3 Again, there are many analysts
4 that do lots of analysis for us, and one
5 analyst may use one number and another analyst
6 may use another number.

7 Q Are you aware of any quantitative
8 data on how risky Sirius' business --

9 CHIEF JUDGE SLEDGE: Wait a
10 minute.

11 JUDGE ROBERTS: Given what you
12 just said there, Mr. Frear, I can't help but
13 think, then, what is the significance of Mr.
14 Musey's testimony?

15 THE WITNESS: Well, the structure
16 of this case is something -- I'm coming in as
17 the Chief Financial Officer of the company.
18 I have certain expertise. Mr. Musey has his
19 own expertise, as does, you know, Dr. Woodbury
20 and others.

21 JUDGE ROBERTS: I understand that
22 Dr. Woodbury -- he's actually presenting a

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1 model to set rates. But Mr. Musey's testimony
2 is about his evaluation of Sirius, and you're
3 saying, well, one analyst comes out one way,
4 and another one comes out another, and a lot
5 of that testimony is not really that --
6 doesn't impact our business decision.

7 THE WITNESS: Well, I think that
8 Mr. -- I haven't considered using Mr. Musey's
9 testimony in actually making business
10 decisions so far. I could do that. He is a
11 former analyst on Wall Street, and so he is
12 sort of cut from the same cloth as the roughly
13 25 or 30 analysts that cover us today. And
14 there is a range of results and assumptions.
15 They all have individual opinions.

16 They are all actually pretty smart
17 financial theory guys, and they're experts on
18 that in a way that I am not, so I read their
19 materials with interest and curiosity. But I
20 generally find that I don't use them in active
21 decision-making.

22 JUDGE ROBERTS: Well, maybe we'll

1 budgeted for at the time. But do you have a
2 view whether Howard Stern was a good
3 investment for Sirius Radio?

4 A I think it was a spectacular
5 investment for us.

6 Q Is it your understanding that
7 Sirius concluded that it would break even on
8 that Stern deal, even if Stern brought in a
9 million new customers?

10 A It's fair to say that we concluded
11 that was the break-even level.

12 Q And is it also fair to say that
13 you view exclusive programming as more
14 valuable than non-exclusive programming,
15 because it draws more subscribers to Sirius
16 than non-exclusive programming?

17 A Well, I think we might view it a
18 little bit differently, that we think what
19 brings subscribers to a company is unique and
20 compelling programming. And, you know, some
21 of that is exclusive, and some of it may not
22 be, all depending on what you mean by -- you

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1 wait for Mr. Musey, and he can describe what
2 -- the relevance of this testimony. Thank
3 you.

4 BY MR. SCHNEIDER:

5 Q Turning to page 5 of your
6 testimony, back to paragraph 7, which we've
7 looked at before, about, oh, 10 lines down,
8 you say that "We found we needed to invest
9 heavily in non-music programming." Do you see
10 that?

11 A I do.

12 Q Such as Howard Stern, among
13 others. And in paragraph 22 of your report,
14 on page 14, do you also in the second bullet
15 there refer to the non-music programming, is
16 that correct?

17 A I'm sorry. In the first bullet?

18 Q Second bullet.

19 A Oh, I'm sorry. Yes.

20 Q Now, we talked earlier about the
21 Howard Stern deal, in particular, and how it
22 may have resulted in costs that weren't

1 know, what "exclusive" is.

2 The NFL games are not exclusive to
3 us; they're on television. But they are
4 unique on radio in that there is no other way
5 -- I grew up in Detroit. I'm not going to --
6 probably don't want to really listen to the
7 Lions --

8 (Laughter.)

9 But I'm not going to get the Lions
10 games, you know, either in the 10 years I
11 lived down here in Maryland or in the eight
12 years that I've been living up in Connecticut.
13 They tend not to put them on. You know, I
14 tend to listen to them anyway.

15 Q I just have a few questions about
16 the rate proposal and your testimony about it,
17 and then I'll conclude. If I could turn your
18 attention to page 21.

19 A In my written direct?

20 Q Yes, in your written direct. In
21 the bullet point that starts on that page,
22 "Dr. Woodbury counts," do you see that? You

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1 make the point that many music and comedy
 2 channels contain a great deal of programming
 3 not subject to the license.
 4 A I must be on the wrong page.
 5 Page 21, is that what you said?
 6 Q Yes.
 7 A Okay. Sorry. Yes, "Dr. Woodbury
 8 counts."
 9 Q Yes. And there's a second
 10 sentence, "Many music channels contain a great
 11 deal of programming not subject to the
 12 license"?
 13 A Yes.
 14 Q Do you see that? You have not
 15 attempted to quantify that amount, have you?
 16 A I don't believe we have, no.
 17 Q No. No Sirius witness has,
 18 correct?
 19 A I don't know what the other Sirius
 20 witnesses have testified to here. I don't
 21 believe it's in anybody's written direct
 22 statements.

1 subject to the statutory license, isn't that
 2 correct?
 3 A They may. I'm less familiar with
 4 those -- those channels. That's better
 5 directed perhaps to someone else.
 6 Q Right. And you haven't quantified
 7 -- to the extent they do make use of sound
 8 recordings, you haven't quantified it.
 9 A Not to my knowledge.
 10 Q Looking at these pages here, 19
 11 through 22, I take it this is all
 12 characterization of Dr. Woodbury's testimony?
 13 A I believe that's the case, yes.
 14 Q And looking at the bullet that
 15 starts on 19, and goes to page 20, I have a
 16 question about that. It's not your view that
 17 Dr. Woodbury failed to account for the fact
 18 that Sirius provides non-music content, while
 19 Music Choice provides only music content. Is
 20 that your point?
 21 A Can I read it?
 22 Q Sure. Sure.

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1 Q And you don't rely on any data for
 2 this proposition, just your opinion.
 3 A We haven't quantified it. There
 4 is clearly data. We know we play pre-1972
 5 recordings. We know we play live
 6 performances. But we have not quantified it.
 7 Q And it's true, is it not, that
 8 Sirius' talk and sports channels make use of
 9 sound recordings subject to the statutory
 10 license, correct?
 11 A I don't believe they do in any
 12 material respect, but they may.
 13 Q Have you ever listened to the
 14 Howard Stern Show? Doesn't he play music all
 15 the time?
 16 A No, not in my opinion.
 17 Q You've made no offer to quantify
 18 what, if any, there is made of music on the
 19 talk and sports channels, have you?
 20 A We have not quantified it, no.
 21 Q And it's true that the children's
 22 channels make use of sound recordings that are

1 A Okay. I've read it.
 2 Q Well, what do you understand to be
 3 saying in this bullet point?
 4 A Well, you know, I think that what
 5 we're trying to communicate here is that we're
 6 starting from a percentage of revenue, and
 7 it's -- you know, the question is is are the
 8 revenues created equally. And in the case of,
 9 you know, Music Choice, which is fundamentally
 10 a wholesale, you know, computerized music
 11 service, that that's different than a company
 12 that is -- you know, for which the ultimate
 13 listeners are not paying anything for it,
 14 they're not charged anything.
 15 That that is fundamentally
 16 different, that revenue stream is
 17 fundamentally different from a revenue stream
 18 of a company that actually is trying to get
 19 somebody to reach into their pocket and pay
 20 for what they're listening to, and that in
 21 order to do that that we have made investments
 22 in both music programming as well as in the

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1 talk and entertainment programming to induce
2 them to do so, and that you have to take into
3 account, you know, the costs of in fact making
4 that service different from the revenue stream
5 that's in Music Choice.

6 And I don't believe in the case of
7 the non-music costs that Dr. Woodbury fully
8 reflected the effect of those costs in his
9 rate, and so I had an argument with him that
10 I thought his rate was too high. He won.

11 Q But he did account for non-music
12 costs, did he not?

13 A I don't think he did.

14 Q Okay. You've testified on page 24
15 -- I'm looking at your very concluding
16 sentence, says that "Excessive royalty rates
17 will exacerbate the financial challenges
18 facing Sirius." It's the penultimate
19 sentence, do you see that?

20 A Yes.

21 Q You don't provide any analysis of
22 what would constitute an excessive royalty fee

1 shorter.

2 BY MR. SCHNEIDER:

3 Q In the modeling series that was
4 done, for example, the 2007 budget, Sirius has
5 assumed a particular royalty rate for 2007,
6 correct?

7 A That's correct.

8 Q Let me show you what has been
9 marked for purposes of identification as Trial
10 Exhibit 46. Do you recognize this document?

11 (Whereupon, the above-
12 referred to document was
13 marked as SX Exhibit
14 No. 46 for
15 identification.)

16 A I actually don't. But I'm going
17 to make the leap that because of the amount
18 that is printed at the bottom that it actually
19 comes out of the model someplace.

20 Q Well, maybe another way to do this
21 -- let me show you 43, the 2007 budget, page
22 44816.

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1 in your testimony, do you?

2 A I do not.

3 CHIEF JUDGE SLEDGE: The amount of
4 that seems to be -- royalty fee more than he
5 wants to pay is excessive.

6 MR. SCHNEIDER: That's an unfair
7 question.

8 BY MR. SCHNEIDER:

9 Q I have one more document to show
10 you, and I'll try to -- the Court's
11 indulgence, if I could just have a few
12 minutes, I can conclude.

13 CHIEF JUDGE SLEDGE: I hope this
14 is a little shorter than the half hour you
15 were going to need after the first break, Mr.
16 Schneider.

17 JUDGE WISNIEWSKI: Well, he has
18 asked for a few minutes, and he's got two, so
19 that's --

20 MR. SCHNEIDER: I think I said a
21 half hour of confidential material, didn't I?
22 Perhaps I wasn't clear. I will try to be

1 MR. WYSS: Sorry. Your Honor, I
2 think this is restricted, but if he's not
3 going to read the numbers into the record,
4 I'll wait to -- I just wanted to let the Court
5 know that the exhibit itself is restricted.

6 THE WITNESS: What was the page?
7 I'm sorry.

8 BY MR. SCHNEIDER:

9 Q 44816.

10 A I don't have any 44s.

11 Q 48816. Excuse me. I'm afraid I
12 am going to actually need to do some numbers.
13 Let me ask the question. Do you see the total
14 revenue line in 2007? It's a little hard to
15 read.

16 A With great difficulty, I do.

17 Q What is that number on here?
18 Before you answer, give counsel a chance to --

19 MR. WYSS: Your Honor, we would
20 request confidential treatment of the numbers
21 in this.

22 CHIEF JUDGE SLEDGE: The motion is

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1 granted.
2 (Whereupon, the proceedings went
3 into Closed Session.)
4

1 Q And is that number on a monthly
2 basis that falls out, which is the same, is
3 that the number that Sirius has budgeted for
4 the sound recording royalty for 2007?

5 A That is what's reflected in the
6 2007 budget, yes.

7 Q And that -- let me ask you what
8 that number is.

9 PARTICIPANT: Is that really
10 necessary?

11 MR. SCHNEIDER: It's not in
12 evidence. Let me do it this way. Let me move
13 this document, SoundExchange Trial Exhibit 46,
14 into evidence. Any objection? I move it into
15 evidence.

16 CHIEF JUDGE SLEDGE: Any objection
17 to Exhibit 46?

18 MR. WYSS: I don't know if this
19 exhibit has been authenticated, Your Honor.
20 I think the witness was asked about it and
21 said he wasn't exactly sure what it was.

22 CHIEF JUDGE SLEDGE: Is there any

1 MR. WYSS: I don't think there
2 have been any questions asked about it yet,
3 Your Honor.

4 MR. SCHNEIDER: That's correct.

5 MR. WYSS: But we would move for
6 confidential treatment with respect to Exhibit
7 46 as well.

8 CHIEF JUDGE SLEDGE: I won't grant
9 that yet. I'll wait and see where we are.

10 BY MR. SCHNEIDER:

11 Q I'm pointing at the line 2000 and
12 beyond, fee percentage, do you see that?

13 A Yes.

14 JUDGE WISNIEWSKI: Just so the
15 record is clear, you're pointing at the line
16 2007 and beyond?

17 MR. SCHNEIDER: Yes, I am.

18 JUDGE WISNIEWSKI: And that's the
19 line you're saying is correct.

20 THE WITNESS: Yes.

21 JUDGE WISNIEWSKI: Thank you.

22 BY MR. SCHNEIDER:

1 objection to Exhibit 46?

2 MR. WYSS: Yes, Your Honor, lack
3 of authenticity and foundation, unless a
4 foundation is laid.

5 CHIEF JUDGE SLEDGE: Any response,
6 Mr. Schneider?

7 MR. SCHNEIDER: I believe he
8 testified this was data that came from the
9 model and the Sirius 2007 budget.

10 CHIEF JUDGE SLEDGE: The objection
11 is sustained.

12 BY MR. SCHNEIDER:

13 Q Do you have an understanding as to
14 the amount of money, on a percentage basis,
15 that Sirius has budgeted for the sound
16 recording royalty in 2007?

17 A I believe the budget was prepared
18 with an assumption that was in the range of
19 4 percent.

20 MR. SCHNEIDER: Thank you. I have
21 nothing further, Your honor.

22 CHIEF JUDGE SLEDGE: We'll recess

1 for the midday break for one hour.
 2 (Whereupon, at 12:36 p.m., the
 3 proceedings in the foregoing
 4 matter recessed for lunch.)
 5 CHIEF JUDGE SLEDGE: Thank you,
 6 we'll come to order. All right, any redirect?
 7 MR. WYSS: Yes, your Honor,
 8 briefly, with the Court's permission.
 9 CHIEF JUDGE SLEDGE: Thank you.
 10 REDIRECT EXAMINATION
 11 BY MR. WYSS:
 12 Q Mr. Frear, you were asked a number
 13 of questions about WACC or Weighted Average
 14 Constant Capital. For your own purposes, do
 15 you ever use a number when you were doing your
 16 analysis for WACC, you personally as Chief
 17 Financial Officer of Sirius?
 18 A I generally use 15 to 18 percent.
 19 Q And why do you use that number?
 20 A You know, for -- again, everybody
 21 has a different opinion on these things. For
 22 me, that's where I see the risk, so the -- you

1 some of the remarks that you made about
 2 guidance. Do you recall that?
 3 A I do.
 4 CHIEF JUDGE SLEDGE: Would you
 5 give us the exhibit number?
 6 MR. WYSS: I'm sorry, your Honor,
 7 it's SoundExchange Exhibit 28.
 8 CHIEF JUDGE SLEDGE: Thank you.
 9 BY MR. WYSS:
 10 Q What are the elements of the
 11 current guidance that Sirius gives to the
 12 investing public?
 13 A We provide guidance on the
 14 revenues. We provide guidance on subscriber
 15 acquisition costs per gross ad. We provide
 16 guidance on total churn and we provide
 17 guidance on subscribers.
 18 Q Anything else?
 19 A No.
 20 Q And for what period of time do you
 21 provide guidance to investors?
 22 A For our fiscal 2007.

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1 know, we raise that capital of about 10
 2 percent and I think on a normalized capital
 3 structure that might be about -- you know,
 4 about 40 percent of our capital structure and
 5 the other 60 percent being the equity returns.
 6 And so you know, the equity capital is going
 7 to be in the 15 to 18 percent range, would be
 8 assigned about a 20 percent -- 20 percent
 9 return parameter, generally riskier than the
 10 general market for equities reflecting the
 11 risk that the company faces.
 12 Q In connection -- you were asked a
 13 number of questions about SoundExchange
 14 Exhibit Number 28 which was the final
 15 transcript of the earnings conference call.
 16 Do you recall that?
 17 A Yes.
 18 Q And you might just --
 19 A I'm sorry, the first quarter
 20 earnings conference call?
 21 Q Yes, June 1 of 2007. And you were
 22 asked questions in particular about page 5 and

1 Q And do you provide any guidance to
 2 investors beyond 2007?
 3 A We do not.
 4 CHIEF JUDGE SLEDGE: List those
 5 for me.
 6 THE WITNESS: Revenues,
 7 subscribers, subscriber acquisition costs per
 8 gross add or SAC per gross ad, and total
 9 churn.
 10 CHIEF JUDGE SLEDGE: Thank you.
 11 THE WITNESS: I'm sorry, total
 12 churn expressed is a percentage of our
 13 subscribers that would leave us each month.
 14 BY MR. WYSS:
 15 Q Mr Frear, you were also asked some
 16 questions about the budget and that's SX Trial
 17 Exhibit Number 43. This is a confidential
 18 document and I don't want to elicit any
 19 numbers or anything out of it and I think we
 20 can stay public for the purposes of my
 21 questions.
 22 You were asked about Slide Number

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1 17 which had information about a proposed
 2 price increase, correct?
 3 A That is correct.
 4 Q Okay, am I correct that all of the
 5 other numbers in the statement regarding
 6 revenues, cash flow, some of the costs, that
 7 those were all based on an underlying
 8 assumption that there was going to be a price
 9 increase?
 10 A That's correct.
 11 Q Was there, in fact, a price
 12 increase in 2007?
 13 A There has not been to date and we
 14 do not plan to implement one.
 15 Q Okay. And then if you would turn
 16 to the Slide, page 35, in SX Trial Exhibit 43,
 17 and do you see the risks there and in
 18 particular the first two bullets?
 19 A Yes.
 20 Q Okay. The first bullet says,
 21 "Competitive pressure on subscription and
 22 product pricing", correct?

1 instance, might take advantage of lock-in on
 2 the old rates and that would produce the 130
 3 million of cash flow earlier now without a
 4 price increase. Of course, that's gone
 5 completely.
 6 Q You were asked about the
 7 SoundExchange Trial Exhibit Number 46 and the
 8 number of four -- well, actually, I think you
 9 were asked actually about a budget figure from
 10 a different exhibit and I think you were asked
 11 about a 4.2 percent figure that appears in a
 12 budget -- as a budgeted figure for relatives,
 13 do you recall that?
 14 A I do.
 15 Q Okay. Are you actually recording
 16 expenses in your accounting records at that
 17 4.2 percent rate?
 18 A No, we are not.
 19 Q What rate do you use for
 20 accounting purposes when you are recording
 21 expenses for the sound recording royalties?
 22 A Two and a half percent.

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1 A Yes.
 2 Q Okay, did that risk come to
 3 fruition this year?
 4 A It has in two respects, that the -
 5 - on the subscription front we, of course, did
 6 not implement the price increase and from a
 7 product pricing perspective, we have generally
 8 been more aggressive in the marketplace with
 9 respect to marking down hardware prices in
 10 terms of hard price declines as well as
 11 promotional offers we make through mail-in
 12 rebate programs, you know, more incentives, in
 13 essence, to get people to buy the radios than
 14 we had planned for.
 15 Q And the second risk refers to
 16 lower lock-in take rates. Has that risk come
 17 to fruition?
 18 A It has in the sense that in the
 19 absence of a price increase, there is no cash
 20 flow associated with a lock-in, so the risk
 21 that was here was that if we made assumptions
 22 at 20 percent of the subscribers, for

1 Q And why do you use a two and a
 2 half percent rate in your accounting?
 3 A Well, we wanted -- as in our
 4 budgeting where we like to be conservative in
 5 the rates that we employ, we want to do the
 6 same thing from an accounting perspective, so
 7 the two and a half percent represents a number
 8 that's above the high end of the range that
 9 we've suggested in the case but is for the
 10 sake of our outside accountants, is it a
 11 reasonable rate to accrue? It's consistent
 12 with the satellite radio industry average over
 13 the initial five-year term of our arrangement
 14 with SoundExchange.
 15 Q Why do you use a 4.2 percent
 16 number in the budget then if you're actually
 17 writing it down at 2.5 percent?
 18 A Well, you like to be conservative
 19 in your budgeting. That it's better to beat
 20 a budget. There are lots of uncertain things
 21 that happen in the course of a year, for
 22 instance, planning for a price increase that

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1 you ultimately find that you cannot implement
2 in the marketplace and so there are many
3 parameters in the budget where we try and
4 build in some room.

5 Q Now, do you recall being asked a
6 number of questions by SoundExchange counsel
7 regarding the so-called Howard Stern effect or
8 the Howard Stern deal and whether or not that
9 was a good deal? Do you recall that?

10 A I do.

11 Q And I think according to my notes
12 you said that that was a spectacular deal.

13 A I did.

14 Q Could you explain to the Court why
15 you believe that is a spectacular deal?

16 A Sure. The -- we delivered six
17 million subscribers at the end of 2006 and
18 that compares to an estimate that existed, by
19 the Wall Street analysts that day before we
20 announced Howard of about three and a half
21 million. So we pulled in, in the space of
22 roughly, well, at that period of time, two and

1 Q You just talked about the Howard
2 Stern effect as of the end of 2006. Is the
3 Howard Stern effect over with now?

4 A No, you know, I think like any,
5 you know, media company that your programming
6 continues to draw and so I expect Howard will
7 continue to draw subscribers to us.

8 Q Okay, and one just final last
9 question; you were asked questions by the
10 Court about fighting with terrestrial radio
11 for listeners to become subscribers of Sirius.
12 What is the impact on the record companies
13 every time one of those listeners goes from
14 terrestrial radio to Sirius?

15 A To the extent that was can pull
16 people away from listening solely to
17 terrestrial radio and bring them into you
18 know, listening to satellite radio, they're
19 paying us subscription fees. Those
20 subscription fees are, you know, generating
21 payments to SoundExchange that they do not
22 enjoy from people who do not subscribe to

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1 a half million more subscribers than they had
2 anticipated and from a revenue perspective,
3 again, the day before we announced the deal
4 with Howard, that the analysts were estimating
5 that we would generate \$400 million in
6 revenues for 2006 and in fact, we generated
7 637 million. So more than 200 million of out-
8 performance with respect to revenues on the
9 deal but has all in cash costs for us each
10 year of roughly \$80 million.

11 So you know, when you put that on
12 top of the complete turnaround in our brand
13 awareness where the month before we announced
14 Howard, we had about 15 percent of the people
15 you might interview on the street would be
16 able to come up with our name on an unaided
17 basis and that was 10 points below where XM
18 was. But by the time you got to the end of
19 2006, more than 50 percent of the people could
20 name us on an unaided basis and I believe that
21 was roughly a 15-point premium to where XM is
22 at the same time.

1 satellite radio because terrestrial radio pays
2 nothing.

3 MR. WYSS: No further questions.

4 CHIEF JUDGE SLEDGE: Any further
5 cross?

6 RE-CROSS EXAMINATION

7 BY MR. SCHNEIDER:

8 Q Do you recall before lunch that
9 you told me that the company had issued
10 guidance in 2010 of one billion dollar free
11 cash flow?

12 A Guidance in 2010?

13 Q For the year 2010.

14 A And I don't actually recall
15 telling you that. I can state as a fact that
16 we had previously given guidance to the street
17 of 2010 cash flow.

18 Q And you testified, I believe on
19 redirect that there is no longer such
20 guidance.

21 A That's correct.

22 Q And that's not a change in your

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1 testimony from before?
 2 A It's not.
 3 Q Let me direct your attention to
 4 Exhibit 28.
 5 A My exhibit says 45, but this is
 6 the first quarter transcript?
 7 Q Yes, exactly right.
 8 A Okay.
 9 Q Let me direct your attention to
 10 page 9. Do you see a question by Robert Peck
 11 in the middle of the page --
 12 CHIEF JUDGE SLEDGE: Where are the
 13 page numbers?
 14 MR. SCHNEIDER: They're on the
 15 right but I can also tell you it's 46002 is
 16 the Bates number.
 17 CHIEF JUDGE SLEDGE: Oh, I see, in
 18 that shading.
 19 MR. SCHNEIDER: Yeah, it's
 20 difficult.
 21 BY MR. SCHNEIDER:
 22 Q Do you see Mr. Peck's question?

1 where we discussed our year-end earnings and
 2 initially provided guidance for 2007. So --
 3 and in fact, there's an explicit statement
 4 that we have suspended cash flow guidance,
 5 that I believe came out in the fourth quarter
 6 call. So no, there is no reiteration of the
 7 \$3 billion in revenue and the billion dollars
 8 in free cash flow.
 9 Q Mr. Karmazin answered the
 10 question, "Would you reiterate your guidance
 11 of three billion and one billion", by saying,
 12 "My viewpoint is that nothing has changed in
 13 my outlook on how I see the company longer
 14 term". That's not guidance?
 15 A I don't believe he said what you
 16 just read back.
 17 Q I apologize. I'm looking at the
 18 last line of Mr. Karmazin's answer.
 19 A Well the -- so I believe it's true
 20 that nothing has changed, you know,
 21 fundamentally in his outlook for the company's
 22 long term prospects but that statement is not

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1 A Yes, I do.
 2 Q And he asks a question of you and
 3 then he asks a question of Mr. Karmazin; is
 4 that correct? And his question to Mr.
 5 Karmazin is, "Mel, if you wouldn't mind
 6 commenting a little bit, do you reiterate your
 7 guidance for 2010 of 3 billion of revenue, 1
 8 billion of free cash flow"? Do you see that?
 9 A Yes, I do.
 10 Q And do you see that very last
 11 sentence, Mr. Karmazin answers that? He says,
 12 "I think the only guidance we're going to give
 13 is the guidance we have given you but I can
 14 tell you that fundamentally my viewpoint is
 15 that nothing has changed my outlook on how I
 16 see the company longer term".
 17 A I do see that.
 18 Q And it's your testimony that's not
 19 reiterating the 2010 guidance?
 20 A That's correct. The 2010 guidance
 21 was not given in this call as guidance, nor
 22 was it given as guidance in the year-end call

1 a reiteration of guidance especially not in
 2 the face of specifically not reiterating that
 3 guidance either in this call or in the year-
 4 end call or in our press releases that went
 5 out associated with our earnings. I think if
 6 you were to check and see what do we do with
 7 guidance in our press releases, that we repeat
 8 them in the press release. So the guidance
 9 that we are providing to the street we
 10 actually incorporate into our quarterly press
 11 releases.
 12 There is no such guidance since
 13 some time in 2006 with respect to 2010.
 14 Q You were asked a question at the
 15 beginning of the redirect about weighted
 16 average cost of capital, do you recall?
 17 A Yes.
 18 Q And you said that you use a 15 to
 19 18 percent figure.
 20 A Yes.
 21 Q It's true, is it not, that you use
 22 an 18 percent figure when you do modeling of

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1 a break-even analysis, correct?
 2 A I think we have used that in the
 3 past, yes.
 4 Q Is that what you were referring to
 5 when you answered that question?
 6 A Well, I was referring to -- I
 7 wasn't referring to the break-even analysis,
 8 no, but I was referring to what I think of as
 9 the weighted average cost of capital for the
 10 company.
 11 Q For all purposes?
 12 A For my purposes in how I evaluate
 13 the company, yes.
 14 Q Is it your view that the company
 15 was an equally risky investment in 1990 as it
 16 is in 2007?
 17 A No.
 18 Q Is it your view that the weighted
 19 average of cost of capital has changed?
 20 A Yes.
 21 Q And is it your view that today the
 22 weighted average cost of capital is 15 to 18

1 A I'm doing nothing more than making
 2 reference to what Mr. Peck's publishes, a Wall
 3 Street analyst.
 4 Q You used that as an answer to a
 5 question of mine. It was nothing more than
 6 making an analysis. I asked you what the
 7 weighted cost of capital was and you said that
 8 Mr. Peck's target price was 25 or whatever
 9 percent you said higher than the current
 10 price. So your testimony is that what you
 11 understand to be the weighted average cost of
 12 capital -- for the stock component of the
 13 weighted average cost of capital.
 14 A My apologies but I find the
 15 question difficult to understand. My
 16 testimony is that I believe, my personal
 17 opinion is that the weighted average cost of
 18 capital that I use in evaluating the business
 19 and evaluating the fair valuation for the
 20 company's equity to be in the range of 15 to
 21 18 percent.
 22 Q And the question is, what -- how

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1 percent?
 2 A Again, in my opinion, I believe
 3 that that's the case. The best, you know,
 4 example I can give of this is how things move
 5 around is when Bob Peck published the other
 6 day that -- Bob Peck published a new price
 7 target for the company of \$4.00 and he says in
 8 his note that that will provide a 25 percent
 9 return for equity investors. And so you know,
 10 I don't know what he had specifically built
 11 into his weighted average cost of capital, but
 12 again, if you use my 60/40 analysis of capital
 13 structure allocation, that's 60 percent of 25
 14 percent, gets you to 15 percent and 40 percent
 15 of the tax effected debt rate at 6 percent
 16 would get you to 2.4 and you'd be back at 17.4
 17 percent cost of capital.
 18 Q So your view is that the stock
 19 component of the weighted average cost of
 20 capital is calculated by taking the target
 21 price and subtracting it from the current
 22 price?

1 is your view culled by the fact that Mr. Peck
 2 has a certain target price for the stock?
 3 A I think his -- it's not that he
 4 has a target price. He's specified in his
 5 research report that it delivers a 25 percent
 6 return for the equity investors which is one
 7 of the components of the weighted average cost
 8 of capital. I have nothing more than remarked
 9 that if you used that as well as the publicly
 10 traded cost of debt, it brings you back to 27
 11 percent roughly.
 12 MR. WYSS: Thank you, sir.
 13 Nothing further.
 14 CHIEF JUDGE SLEDGE: Mr. Frear,
 15 I'm puzzled by your testimony this afternoon.
 16 Before the noon or midday break, you said that
 17 weighted average cost of capital is something
 18 used by analysts for stock market. "I do not
 19 use the weighted average cost of capital in
 20 any of my business decisions and do not think
 21 that it is important". And then after the
 22 midday break you come back and the first

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1 testimony you give is that, "I use the
2 weighted average cost of capital in the range
3 of 15 to 18 percent to value our business".
4 What changed your mind?
5 THE WITNESS: It's not a change of
6 mind, your Honor. It's maybe different
7 applications that in operating decisions, the
8 operating decision making associated with the
9 company. I don't find weighted average cost
10 of capital to be a particularly helpful
11 measure to us. On the other hand, people
12 sometimes do ask me for what my point of view
13 is about valuation and I think one of the
14 things I testified to earlier was that with a
15 company like Sirius, where you have
16 significant negative cash flows at this point
17 in time, a big business to build over a long
18 period of time, and then ultimately there's
19 this enormous terminal value that is
20 calculated in doing it, that I do use a
21 weighted average cost of capital to actually
22 take all of that and digest it down to a stock

1 question.
2 THE WITNESS: I'm sorry. Perhaps
3 just ask your question again.
4 CHIEF JUDGE SLEDGE: How is the
5 weighted average cost of capital used for
6 evaluation of stock price used or effect
7 business decisions?
8 THE WITNESS: The valuation of the
9 -- ultimately our fiduciary obligation is to
10 deliver returns to our shareholders. And so
11 we do pay attention to the stock price. We
12 pay attention to things that we believe can
13 move the stock price and actually as we grow
14 and, you know, perform in the business that
15 actually should, over the long period of time,
16 you know, bring the weighted average cost of
17 capital down. That will help the stock price
18 just as operating performance will help it.
19 But we don't use the stock price, per se, in
20 making -- we wouldn't use the stock price in
21 deciding in a negotiation with a radio
22 manufacturer or a chip set manufacturer what

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1 price just like that analysts do.
2 So I use it in that -- generally
3 in that limited circumstances.
4 CHIEF JUDGE SLEDGE: Well, how
5 does the stock price valuation in which you
6 use it, effect any business decisions that are
7 made by Sirius?
8 THE WITNESS: Well, our business
9 decisions are made to maximize the free cash
10 flow of the company because we believe that's
11 the fundamental valuation metric that
12 ultimately the street is going to measure us
13 on. And it's ultimately what's going to drive
14 performance in the stock. So it's used again,
15 only to translate that lengthy period of free
16 cash flow as well as the discount of the
17 terminal value back to a present date so that
18 you can help relate the current price of the
19 stock to the theoretical price of the stock
20 for investors.
21 CHIEF JUDGE SLEDGE: I don't
22 understand your answer to respond to my

1 we should do with the business or, you know,
2 negotiating necessarily terms an automobile
3 manufacturer or even making a programming
4 decision. The stock price is a derivative of
5 many things that go on in the business and so
6 that's why I make the distinction between
7 valuation and operational decision making.
8 CHIEF JUDGE SLEDGE: Any other
9 questions? Any questions in response to my
10 comments?
11 MR. WYSS: None from Sirius, your
12 Honor.
13 CHIEF JUDGE SLEDGE: All right,
14 thank you, sir.
15 THE WITNESS: Thank you.
16 (The witness was excused.)
17 MR. RICH: Sorry for the
18 commotion. We're just setting up the
19 PowerPoint for a couple more minutes.
20 CHIEF JUDGE SLEDGE: I've been in
21 many situations where there's a lot of time
22 taken setting up PowerPoints and many

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Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 In the matter of: °
 Adjustment of Rates and Terms ° Docket No.
 for Preexisting Subscriptions ° 2006-1
 Services, ° CRB DSTR
 and °
 Satellite Digital Audio Radio °
 Services °
 Room LM-408
 Library of Congress
 First and Independence
 Avenue, S.E.
 Washington, D.C. 20540
 Monday,
 June 11, 2007

The above-entitled matter came on for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES: (cont'd)

On Behalf of Music Choice:
 PAUL M. FAKLER, ESQ.
 of: Moses & Singer LLP
 406 Lexington Avenue
 New York, New York 10174-1299
 (212) 554-7800
 pfakler@mosessinger.com

APPEARANCES:

On Behalf of SoundExchange:
 DAVID A. HANDZO, ESQ.
 MICHAEL B. DeSANCTIS, ESQ.
 JARED O. FREEDMAN, ESQ.
 THOMAS J. PERRELLI, ESQ.
 MARK D. SCHNEIDER, ESQ.
 of: Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 (202) 639-6060
 dhandzo@jenner.com
 On Behalf of XM Satellite Radio Inc.:
 BRUCE RICH, ESQ.
 JONATHAN BLOOM, ESQ.
 TODD LARSON, ESQ.
 BRUCE S. MEYER, ESQ.
 of: Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 (212) 310-8238
 On Behalf of Sirius Satellite Radio Inc.:
 BRUCE G. JOSEPH, ESQ
 KARYN K. ABLIN, ESQ.
 MATT J. ASTLE, ESQ.
 JENNIFER L. ELGIN, ESQ.
 THOMAS W. KIRBY, ESQ.
 MICHAEL L. STURM, ESQ.
 of: Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 (202) 719-7528
 bjoseph@wileyrein.com

		I-N-D-E-X	
WITNESS		DIRECT	CROSS REDIRECT RECROSS
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1 inquiries, starting service, canceling
 2 service?
 3 A No, we do not.
 4 MS. ABLIN: That's all I have,
 5 Your Honor.
 6 CHIEF JUDGE SLEDGE: Any questions
 7 from the Bench?
 8 (No response.)
 9 CHIEF JUDGE SLEDGE: Thank you,
 10 sir. That's the end of your testimony.
 11 THE WITNESS: Thank you very much.
 12 (Whereupon, the witness was
 13 excused.)
 14 CHIEF JUDGE SLEDGE: Mr. Joseph?
 15 MR. JOSEPH: Your Honor, Mr. Wyss
 16 will be calling our final fact witness.
 17 MR. WYSS: May I have just a
 18 moment, Your Honor, to get everything all on
 19 the table, please? Thank you.
 20 (Pause.)
 21 MR. WYSS: Your Honor, at this
 22 time we would call David Frear on behalf of

1 Q Could you briefly describe for the
 2 Court what areas of responsibility you hold as
 3 the Chief Financial Officer at Sirius?
 4 A Sure. I have the traditional
 5 responsibilities that a financial officer
 6 would have, so the accounting and treasurer
 7 responsibilities, investor relations in their
 8 public reporting.
 9 I also have the IT group that
 10 reports to me. So the technology base that
 11 the company rides upon, its subscriber
 12 management system and all of that, is --
 13 reports up through me.
 14 And I also have the next
 15 generation satellite constellation. So the
 16 satellite engineers that are working on the
 17 design, procurement, and building of our next
 18 generation constellation report up to me for
 19 that aspect of their activities.
 20 Q Mr. Frear, before joining Sirius,
 21 could you explain to the Court what you were
 22 doing, say, back to starting about 1990?

1 Sirius.
 2 CHIEF JUDGE SLEDGE: If you'll
 3 raise your right hand?
 4 Whereupon,
 5 DAVID FREAR
 6 was called as a witness by counsel for Sirius
 7 Satellite Radio and, having been first duly
 8 sworn, was examined and testified as follows:
 9 CHIEF JUDGE SLEDGE: Thank you.
 10 Please be seated.
 11 THE WITNESS: Thank you.
 12 DIRECT EXAMINATION
 13 BY MR. WYSS:
 14 Q Would you please state your name
 15 for the record?
 16 A David Frear.
 17 Q Mr. Frear, what is your current
 18 position with Sirius?
 19 A I am the Chief Financial Officer.
 20 Q How long have you held that
 21 position?
 22 A Since June 2003.

1 A The names of the companies
 2 probably wouldn't be familiar to you, but a
 3 good way to think of it is that for the last
 4 17 years, I've been the CFO of one
 5 developmental stage public telecommunications
 6 company or another one. So it's covered the
 7 cellular telephone business, satellite master
 8 antenna television, paging, data networking
 9 via satellite, as well as data networking via
 10 land lines, fiber around the globe. And the
 11 generally --
 12 Q If you could just step through the
 13 companies you were with starting in 1990?
 14 A Okay. So --
 15 JUDGE WISNIEWSKI: Isn't all this
 16 in his direct statement?
 17 MR. WYSS: I don't think it
 18 highlights the substance of the types of
 19 things he was doing, particularly at Orion.
 20 I'm not going to spend much time on it.
 21 BY MR. WYSS:
 22 Q I would ask you to do it very

1 briefly, please.

2 A Okay. So Millicom was a cellular
3 and paging company that did business in 23
4 companies around the world. And at a time
5 when cellular was really only in the G-7
6 nations, we were running cellular service in
7 Costa Rica and Pakistan and Sri Lanka and
8 places like that.

9 At Orion, it was in some ways
10 similar to Sirius. It was an early proponent
11 of using satellite technology for other
12 purposes that existed. And their idea was to
13 establish data networks across multiple
14 country boundaries.

15 So back coming out of the '80s, if
16 you were Citibank and you had branches
17 throughout Eastern Europe and Western Europe
18 and into the Mideast and if you wanted to get
19 the day's transaction dated back to London or
20 New York to process it, you had to go to each
21 of the individual countries' telephone
22 operators and get 17-18 different contracts to

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1 pull that data back.

2 You know, with -- via satellite,
3 you could do that with one company, one
4 salesman, one technical and engineering team
5 to put all of that together and bring it back.

6 Q And Orion was a satellite-based
7 service provider?

8 A It was.

9 Q And after Orion -- or how long
10 were you at Orion?

11 A I was at Orion just a little short
12 of five years.

13 Q And then what was the next
14 company, the third company?

15 A SAVVIS Communications. And SAVVIS
16 was, again, a similar company, data networking
17 but this time over land lines, fiber
18 connections and coaxial cables, and, again,
19 provided service in 44 countries around the
20 world.

21 One of the big customers was a
22 company called Bridge Information Systems,

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1 which at that time was the second largest
2 provider of stock quotes, bond quotes,
3 interest rate quotes to companies like Morgan
4 Stanley and Citibank.

5 And so the way the trading boards
6 operated with the screens that flash green and
7 red for prices going up and down, that
8 information got to those screens in Tokyo and
9 Shanghai and Hong Kong and London and New York
10 through the Bridge network, which we ran.

11 Q Approximately what years were you
12 at SAVVIS?

13 A SAVVIS was 1998 until just shortly
14 before I joined Sirius in 2003.

15 Q Mr. Frear, in connection with this
16 proceeding, did you submit a written direct
17 testimony in this case?

18 A I did.

19 MR. WYSS: Your Honor, with the
20 Court's permission, I would like to pass out
21 to the Court and to the witness the written
22 direct testimony of Mr. Frear. And with the

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1 Court's permission, I would also like to pick
2 up my water from the desk.

3 BY MR. WYSS:

4 Q Mr. Frear, do you have a copy of
5 your written direct testimony in front of you?

6 A I do.

7 Q What is the number on the front of
8 the book?

9 A Thirty-nine.

10 Q That's Sirius exhibit 39?

11 A Yes, sir.

12 (Whereupon, the
13 aforementioned document
14 was marked for
15 identification as Sirius
16 Trial Exhibit Number
17 SIR-39.)

18 BY MR. WYSS:

19 Q And is that a true and correct
20 copy of the written direct testimony that you
21 submitted in this case?

22 A I believe it is.

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1 Q And in your written direct
2 testimony -- and this is at paragraphs 12 to
3 26 -- you provide detailed financial
4 information regarding various costs of the
5 Sirius service, including both operating costs
6 and investment costs. Is that correct?

7 A That is correct.

8 Q And am I correct that your written
9 direct testimony was prepared back in October
10 of last year? Particularly when we were
11 talking about operating expenses, you really
12 only had the first six months available at
13 that time, correct?

14 A That is correct.

15 Q The Court has asked us to try to
16 update that information. Were you able to
17 update the operating expense information for
18 all of 2006?

19 A Yes, I was.

20 MR. WYSS: With the Court's
21 permission, I would like to hand to the
22 witness a document marked as SIR exhibit 40.

1 sales and marketing number on the SIR exhibit
2 40, is that where you would include the
3 research, including the customer satisfaction
4 research?

5 A Yes, it would be.

6 Q Okay. My understanding is there
7 has been some discussion about that. Could
8 you briefly describe the company's treatment
9 of customer satisfaction research over the
10 last several years?

11 A Well, when I got there, we didn't
12 really know anything about, you know, how
13 people were responding to the service. And so
14 the research people came up with the idea of
15 running quarterly what they called CSat
16 surveys to assess how people were responding
17 to the service.

18 Over time -- and we found that
19 people generally weren't using the information
20 making operating decisions. And so in the
21 course of the last year or so --

22 JUDGE WISNIEWSKI: We found that

1 (Whereupon, the
2 aforementioned document
3 was marked for
4 identification as Sirius
5 Trial Exhibit Number
6 SIR-40.)

7 BY MR. WYSS:

8 Q Mr. Frear, could you just briefly
9 describe what information appears on SIR
10 exhibit 40?

11 A It's the whole year operating
12 expenses for each of the line items noted
13 there. Those are all individual line items,
14 which are found in our public finances.

15 Q And were each of these items
16 discussed in your written direct testimony?

17 A They were.

18 Q Except in your written direct
19 testimony, am I correct, you only had six
20 months, correct?

21 A That is correct.

22 Q Just one quick question. The

1 out, too, during the course of this
2 proceeding.

3 THE WITNESS: Okay. For me, the
4 telling item was when I asked why they wanted
5 to continue it about a year ago. And they
6 said that, well, as long as you and Mel are
7 comfortable with not updating the investor
8 relations slides, I'm not sure that we really
9 need it.

10 And so investor relations
11 presentations tend not to be driving too many
12 operating decisions. So we have been cutting
13 back on the expenditures here.

14 BY MR. WYSS:

15 Q Now, in your written direct
16 testimony, as of last October, when that was
17 prepared, you had certain numbers for your
18 capital investments, correct?

19 A That is correct.

20 Q And have you been able to update
21 those as of reasonably the last quarter, I
22 guess?

1 A Yes, I have.

2 MR. WYSS: With the Court's

3 permission, I would like to hand the witness

4 and the Court exhibit SIR 41?

5 (Whereupon, the

6 aforementioned document

7 was marked for

8 identification as Sirius

9 Trial Exhibit Number

10 SIR-41.)

11 BY MR. WYSS:

12 Q And do you have in front of you

13 SIR exhibit 41?

14 A I do.

15 Q Could you briefly describe for the

16 record what information appears in that?

17 A It's an update of various things,

18 you know, where we have invested capital so,

19 you know, the satellites, the terrestrial

20 repeaters, chip sets, or subscriber management

21 system general facilities, expenses, as well

22 as the FCC license, which, of course, require

1 So it's not just a courtesy. It's

2 a rule. And I would object on that basis.

3 CHIEF JUDGE SLEDGE: Mr. Wyss?

4 MR. WYSS: Your Honor, the numbers

5 are what they are. I can have the witness

6 read them into the record if you want to take

7 it orally. We're just trying to have it in

8 one place for the convenience of the Court and

9 for the parties.

10 These updates were verified as of

11 -- I believe last night we had to find a

12 verification of the correct numbers.

13 CHIEF JUDGE SLEDGE: Are you going

14 to respond to the objection?

15 MR. WYSS: I think this is clearly

16 responsive to Your Honor's request, my

17 understanding of Your Honor's request, for

18 updated financial information. It is correct

19 we did not provide them exhibits yesterday

20 because we didn't have the final numbers until

21 this morning.

22 CHIEF JUDGE SLEDGE: Without any

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1 no update. We haven't paid any more for that.

2 Q So basically what you did, you

3 updated the ones that had changed from the

4 time of your written direct testimony?

5 A That is correct.

6 Q And this is an updated version of

7 that information. Is that correct?

8 A Yes, it is.

9 MR. WYSS: Your Honor, we would

10 move into evidence exhibits 40 and 41 at this

11 time.

12 CHIEF JUDGE SLEDGE: Any objection

13 to exhibit 40?

14 MR. SCHNEIDER: Yes. Rule

15 351.9(d) is titled "Notice of Witnesses and

16 Prior Exchange of Exhibits." "Each party must

17 provide all other parties notice of witnesses.

18 Parties must exchange exhibits at least one

19 day in advance of being offered into evidence

20 at hearing unless modified by applicable trial

21 order." And there is no such modification.

22 And this is the first time we're seeing these.

1 dispute in the evidence, the objection is

2 sustained.

3 MR. WYSS: All right.

4 BY MR. WYSS:

5 Q Mr. Frear, just so we can update

6 the operating expenses, do you know what the

7 --

8 CHIEF JUDGE SLEDGE: Mr. Wyss,

9 you're getting ahead of yourself.

10 MR. WYSS: I'm sorry.

11 CHIEF JUDGE SLEDGE: Any objection

12 to exhibit 41?

13 MR. SCHNEIDER: Yes. I have the

14 same objection.

15 CHIEF JUDGE SLEDGE: Any response?

16 MR. WYSS: Same response, Your

17 Honor.

18 CHIEF JUDGE SLEDGE: With no

19 dispute that the exhibit was not exchanged one

20 day in advance, the objection is sustained.

21 MR. WYSS: May I proceed?

22 BY MR. WYSS:

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1 Q Mr. Frear, were you able to update
2 for all of 2006 the total satellite operating
3 expenses for 2006?

4 A Yes, sir.

5 Q And could you tell the Court what
6 the updated figure was?

7 A \$41.8 million.

8 Q Were you also able to update --
9 you addressed in your written direct statement
10 the engineering figure for the first half of
11 2006. Were you able to update that figure?

12 A Yes, I was.

13 Q And could you please tell the
14 Court what the updated figure for all of 2006
15 was?

16 A \$70.1 million.

17 Q And were you able also to come up
18 with an updated all of 2006 figure for the
19 customer service center expenses? And if so,
20 could you tell the Court what that number was?

21 A Yes, I was. It was \$68.9 million.

22 Q Were you able to update for all of

1 Q Now, in your written direct
2 testimony, you discuss various capital
3 investments, correct?

4 A Yes, sir.

5 Q Am I correct that the FCC license
6 expenses, that has not changed, correct?

7 A That is correct.

8 Q Have there been additional
9 satellite capital investments since the time
10 of your original written direct testimony?

11 A Yes, there have been.

12 Q And what is the current updated
13 figure for Sirius' investment in satellites?

14 A They exceed \$950 million.

15 Q Okay.

16 JUDGE WISNIEWSKI: Mr. Frear, that
17 is not responsive to your counsel's question.
18 He asked you if there had been any change to
19 the number. You had 950 million in your
20 testimony. Now you're telling us it's
21 something in excess of 950 million. That's
22 not really responsive.

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1 2006 the programming expenses for Sirius?

2 A Yes.

3 Q And what was that number?

4 A \$552 million.

5 Q And were you able to update for
6 all of 2006 the sales and marketing expenses
7 for Sirius?

8 A Yes.

9 Q And what was that number?

10 A \$242 million.

11 Q Were you able to update for all of
12 2006 the subscriber acquisition expenditures
13 for Sirius?

14 A Yes.

15 Q And that number was, please?

16 A \$452 million.

17 Q And, finally, were you able to
18 update the general and administrative expense
19 for Sirius in 2006?

20 A Yes.

21 Q And what was that figure?

22 A \$137.5 million.

1 THE WITNESS: Let's see.

2 JUDGE WISNIEWSKI: Do you have a
3 number?

4 THE WITNESS: Do I have? I do not
5 have a specific number, no.

6 JUDGE WISNIEWSKI: Thank you.

7 MR. WYSS: Just so we are clear, I
8 think in your written direct testimony -- you
9 might look at it -- what was the number that
10 you had for satellite capital investments as
11 of last October?

12 THE WITNESS: You wouldn't happen
13 to know what page it's on, do you?

14 JUDGE WISNIEWSKI: Page 8,
15 paragraph 14.

16 THE WITNESS: Thank you. It says
17 Sirius has invested approximately \$950 million
18 in its first generation. And it says it's
19 invested approximately 800 million to design,
20 construct, and deploy its three in-orbit
21 satellites.

22 MR. WYSS: Okay.

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1 THE WITNESS: So the difference in
 2 the numbers -- I don't have an exact number --
 3 would be roughly \$50 million.
 4 JUDGE WISNIEWSKI: Difference in
 5 what?
 6 THE WITNESS: From the testimony
 7 to the greater than, but I don't have a
 8 precise number.
 9 JUDGE WISNIEWSKI: You think it is
 10 approximately 50 million more?
 11 THE WITNESS: Yes, sir.
 12 JUDGE WISNIEWSKI: Thank you.
 13 That's all.
 14 BY MR. WYSS:
 15 Q And your projection on the next
 16 generation satellites, has that changed from
 17 the time of your original testimony?
 18 A I don't believe it has.
 19 Q Has your investment in terrestrial
 20 repeaters increased since the time you
 21 prepared your written direct testimony?
 22 A It has.

1 the same as of the time of your written
 2 statement?
 3 A They have.
 4 Q Now, the Court has asked us to
 5 provide more specific information about the
 6 projected capital expenditures that Sirius is
 7 now projecting for the license term that's at
 8 issue in this proceeding. Do you have that
 9 information?
 10 A I do.
 11 Q And could you provide that
 12 information to the Court, please?
 13 A Over the course of the term --
 14 CHIEF JUDGE SLEDGE: Can you give
 15 us a reference point of what you're talking
 16 about?
 17 MR. WYSS: Yes, Your Honor. This
 18 is my understanding that --
 19 CHIEF JUDGE SLEDGE: Where in the
 20 testimony is the update?
 21 MR. WYSS: He is updating. He is
 22 giving the capital investments.

1 Q And what is the current investment
 2 as of up-to-the-date and terrestrial
 3 repeaters?
 4 A Approximately \$85 million.
 5 Q And has your chip set development
 6 increased?
 7 A I believe it has.
 8 Q And what is the current capital
 9 investment in chip sets?
 10 A It exceeds \$100 million.
 11 Q And have the investment in the
 12 subscriber --
 13 JUDGE WISNIEWSKI: Just a second,
 14 Mr. Wyss. That is the same number you had
 15 before. Do you have an estimate at least?
 16 THE WITNESS: I do not off the top
 17 of my hand.
 18 JUDGE WISNIEWSKI: Thank you.
 19 BY MR. WYSS:
 20 Q And the capital investments and
 21 subscriber management systems and the studio
 22 improvements, fixtures remained approximately

1 CHIEF JUDGE SLEDGE: Where in the
 2 testimony is the update?
 3 MR. WYSS: He is responding to the
 4 Court's request for specific information as to
 5 projected capital expenditures for the months
 6 --
 7 CHIEF JUDGE SLEDGE: Where in the
 8 testimony is he updating? That's the fourth
 9 time.
 10 MR. WYSS: He gave a projected
 11 number for the capital investments going
 12 forward.
 13 CHIEF JUDGE SLEDGE: Where?
 14 MR. WYSS: Could I have one moment
 15 to get my witness statement, Your Honor?
 16 CHIEF JUDGE SLEDGE: That's the
 17 fifth time. Please get it.
 18 MR. WYSS: I apologize, Your
 19 Honor.
 20 (Pause.)
 21 MR. WYSS: Your Honor, this would
 22 be encompassed in his projections for

1 including the projected capital expenditures
2 and future satellites and is responsive,
3 again, to what I understood was the Court's
4 request for very specific information for the
5 projections. It is not updating specific
6 information that was given in the testimony
7 itself.

8 CHIEF JUDGE SLEDGE: That's a lot
9 different answer than you gave me the first
10 four times I answered the question. So there
11 is no part of this statement that he is
12 updating.

13 MR. WYSS: That is correct, Your
14 Honor, other than to the extent it is
15 encompassed within his general projections of
16 the future capital expenditures.

17 But the question I posed, Your
18 Honor, was in response to when I was here on
19 the first day, when Mr. Parsons was on the
20 stand.

21 CHIEF JUDGE SLEDGE: And there the
22 question was asked. And you were able to show

1 CHIEF JUDGE SLEDGE: All right.

2 Go ahead. Yes, sir?

3 MR. SCHNEIDER: I'm sorry. Was
4 there a question pending?

5 BY MR. WYSS:

6 Q I think the question pending is in
7 response to our understanding that the Court
8 wanted year-by-year projected information, do
9 you have that information?

10 MR. SCHNEIDER: Objection. He's
11 apparently reading or intends to read off of
12 a piece of paper. I don't know what's on the
13 paper. We haven't been given a copy. We
14 ought to at least be given a copy of what he's
15 reading off of before he submits testimony on
16 this basis. It's not in the statement. It's
17 just reading from some paper.

18 CHIEF JUDGE SLEDGE: Mr. Wyss?

19 MR. WYSS: I have no problem with
20 them having a copy of that, Your Honor. It
21 simply is the information that we had
22 understood that would assist the Court in its

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1 that the additional information you were
2 asking was referenced in the direct written
3 statements. You showed me the page and the
4 line where that was referenced and a more
5 specific number was given to what was in the
6 written direct statement. And that was
7 allowed. You can't do that here.

8 MR. WYSS: I cannot do that here,
9 Your Honor, although I think what I was
10 referring to was the request from the Court to
11 Mr. Parsons if he could give specific
12 information.

13 CHIEF JUDGE SLEDGE: I'm
14 disappointed that you've presented all of this
15 as being updated information from his written
16 direct statement and now you're telling me
17 that it's not in his written direct statement
18 that he's updating.

19 MR. WYSS: This is not in. This
20 is specifically in response to giving
21 year-by-year projected capital investment for
22 Sirius.

1 deliberations.

2 CHIEF JUDGE SLEDGE: I think we
3 had better take a few minutes to talk about
4 what you're doing.

5 (Whereupon, the foregoing matter
6 went off the record at 4:44 p.m.
7 and went back on the record at
8 4:45 p.m.)

9 CHIEF JUDGE SLEDGE: We will come
10 back to order. The questions about
11 information that is not in the direct
12 statement are sustained. That is not
13 permitted on direct statement and direct
14 testimony.

15 Mr. Wyss?

16 MR. WYSS: All right.

17 BY MR. WYSS:

18 Q Mr. Frear, there was a number in
19 your written direct statement for revenues
20 through the first part of 2006. Have you been
21 able to update that number for all of 2006 for
22 Sirius?

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1 A Yes.

2 Q And what is the 2006 revenue
3 number?

4 CHIEF JUDGE SLEDGE: Where are
5 you?

6 MR. WYSS: Your Honor, this
7 appears on page 17 of the statement. There
8 was a total revenue figure for six months of
9 2006 in paragraph 26.

10 CHIEF JUDGE SLEDGE: Thank you.

11 MR. WYSS: Proceed?

12 CHIEF JUDGE SLEDGE: Please.

13 BY MR. WYSS:

14 Q Could you provide the Court with
15 the updated full-year figure for 2006?

16 A \$637 million.

17 Q Now, in your written statement,
18 paragraphs 5 through 11, you discuss the
19 significant risks that Sirius has faced in
20 bringing the service to where it is today.
21 Can you briefly summarize for the Court what
22 some of those most significant risks are in

1 billing systems, and other support systems,
2 they literally went from a few people and a
3 part-time secretary to actually developing a
4 full-scale business.

5 And along the way, every piece of
6 that involved convincing somebody who had
7 something better to do that they actually had
8 a pretty good idea.

9 Q Now, many of those risks were
10 covered with Mr. Karmazin when he was here,
11 and I don't want to repeat all of that. But
12 there are a couple that you mentioned that I
13 don't think he hit on. And that's the trying
14 to attract capital to make the business go.

15 Could you just describe for the
16 Court the element of risks involved in that?

17 A Sure. It's -- when I first met
18 David Margolies, who was one of those early
19 people, in 1993, you know, David was the
20 money. He brought money that he had made in
21 paging and cellular in Canada down as the seed
22 capital to take the idea that the FCC lawyer

1 this regard based on your years with Sirius?

2 A When Sirius started, it was a
3 lawyer, rocket scientist, and an enterprising
4 young Canadian entrepreneur who had the idea
5 of satellite radio, but then they had to
6 convince the FCC that that made sense. They
7 had to overcome opposition of the NAB. They
8 had to attract capital, you know, ultimately
9 win a round of bidding for a license, and then
10 actually begin to build a business, and find
11 management team members to round out their
12 team, begin to put industrial partners
13 together.

14 So whether that be the people that
15 manufacture satellites or launch vehicles, the
16 distribution partners on the automotive side
17 or on the retail side, people to make chips,
18 people to design radios, people to handle the
19 logistics of getting those radios from
20 overseas to the retail stores in the United
21 States, putting the programming together,
22 developing the subscriber management platform,

1 and the rocket scientist had about satellite
2 radio and try and birth it into a business
3 reality.

4 So, you know, it was David that
5 had to be convinced initially. And then he
6 went around and found other people that had a
7 similar risk profile, who if they found a
8 license with nothing more than a great idea
9 would be willing to risk capital to go and
10 pursue that.

11 Some of those were private
12 citizens. Some of them were financial
13 institutions. And he raised a significant
14 amount of capital over the years in multiple
15 different markets, you know, trying to find
16 different risk appetites to raise that capital
17 and spoke a -- talked a lot to David in 1993
18 to 1997. He spent a lot of time raising money
19 to keep the dream going before the licenses
20 were even awarded.

21 Q You also mentioned the risks
22 associated with getting distribution at

1 retail. What were those risks?

2 A You know, Best Buy and Circuit
3 City and Radio Shack and others of that ilk
4 have plenty of things to do with the floor
5 space in their stores. And every time they
6 try and make room for something else, they
7 have to consider what they might be twisting
8 out.

9 And so getting satellite radio
10 shelf space in retail stores wasn't a
11 guarantee. You had to go in and sell the
12 retailers that it was worth them spending, you
13 know, devoting any of their floor space,
14 either to your product or to the retail
15 displays that go there or the ads we get in
16 our Sunday circulars, you know, that say \$20
17 off this or \$30 off that, that for them,
18 that's all -- there's an opportunity cost to
19 all of it. There's something else that they
20 can put in there. And it took years to
21 convince the retailers that there was product
22 here worth carrying.

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1 Q You mentioned the term of "OEM
2 distributors" and getting that as one of the
3 risk bases. Could you describe for the Court
4 what you were facing there?

5 A So with the automotive
6 manufacturers, they're a little bit different
7 because a car has to work the same way, no
8 matter where it goes in the country. So
9 whether it's 60 miles outside of Fargo, North
10 Dakota or whether it's driving down K Street,
11 the car has to function the same way.

12 Our automotive partners were not
13 going to put any satellite radios into cars,
14 not in a factory basis and not into their
15 dealer partners inventory, without being
16 certain that the system worked with what they
17 described as 99.9 percent service availability
18 in the 48 states and southern Canada.

19 So the combination of the
20 satellite networks and the terrestrial
21 networks, in essence, had to deliver a good
22 signal 99.9 percent of the day. And that's

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1 down time with maybe 15 or 18 seconds a day
2 all throughout the 48 states and Canada.

3 It couldn't just work in the NFL
4 cities. It had to work everywhere in the
5 country. Otherwise they weren't going to put
6 it into the car.

7 Q How did your investment in
8 programming help with establishing those
9 distribution arrangements?

10 A Well, you know, it's a funny
11 thing. I was new to the consumer electronics
12 business when I joined Sirius four years ago.
13 And one of the things that I kept hearing was
14 that we were, in essence, selling to 25 to
15 54-year-old men. That's who went through the
16 door of a big box retailer to buy a new
17 technology product.

18 But we weren't just telling the 25
19 to 54-year-old men for the radios they walked
20 out of Best Buy with. Those are the same
21 people making the decisions at the automotive
22 companies, at the retailers. Pretty much

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1 everywhere we went we were trying to convince
2 a 25 to 54-year-old man to do something.

3 With the automotive companies, in
4 particular, Ford lost, I think it was, a
5 billion dollars in North American automotive
6 operations in 2003. They were laying off
7 40,000 engineers. And here we kept saying
8 that "We think you should put on your priority
9 list" -- and they probably had 50 pages of
10 priorities on ways to reduce the cost of the
11 car. And we wanted them to increase the cost
12 of the car to put a radio in it that nobody
13 really knew anything about at that point in
14 time.

15 So one of the things that sells to
16 25 to 54-year-old men is sports. And so the
17 -- a lot of the early sports decisions were
18 made not only for attracting subscribers but
19 also for the purpose of finishing the
20 industrialization of the company and actually
21 bringing the product to market.

22 Q Now, in your statement you

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1 mentioned the risks associated with satellites
2 launching and getting them up there. Can you
3 give the Court an example and perhaps quantify
4 the risks that you face, even after a
5 satellite is launched, for example?

6 MR. SCHNEIDER: So far I can't
7 find any connection between his oral testimony
8 and his written testimony. Sometimes the
9 questions relate in a vague kind of way with
10 his written testimony. So maybe I could ask
11 for a page reference at least to what you are
12 referring to?

13 MR. WYSS: I am referring on page
14 3, Your Honor, where you talk about the risks.
15 This is his risk section. He talks
16 specifically about the risks. The satellites
17 themselves had to be designed, constructed,
18 launched into orbit, and tested. And it is a
19 follow-up on that in terms of an example, a
20 quantification example, of the impact of the
21 company of subsequent developments after the
22 satellites are launched.

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1 CHIEF JUDGE SLEDGE: And what part
2 of page 3 is this example of?

3 MR. WYSS: This is the sentence at
4 the bottom of page 3 that reads "Then the
5 satellites themselves had to be designed,
6 constructed, launched into orbit, and tested."

7 JUDGE ROBERTS: What was your
8 question to the witness, Mr. Wyss?

9 MR. WYSS: My question was whether
10 he could give a quantification example as to
11 even after the satellite is launched, how --
12 what can be the financial impact on the
13 company of additional developments from
14 satellite risks.

15 CHIEF JUDGE SLEDGE: Additional
16 developments, then, is different from testing?

17 MR. WYSS: Yes. When you do the
18 testing, for example, the example I'm thinking
19 of is one that you find out that there you
20 have the shorten the life, which is something
21 that happened to Sirius.

22 CHIEF JUDGE SLEDGE: All right.

1 That is not in your statement. The objection
2 is sustained.

3 BY MR. WYSS:

4 Q Does Sirius continue to face many
5 of the same risks today going forward into the
6 future?

7 A It does.

8 Q For example, I think in your
9 statement, you talk about marketing risks, I
10 believe. What marketing risks do you continue
11 to face?

12 A Well, this is far from a fully
13 distributed product in the consciousness of
14 the public. And, you know, while we have had
15 good success so far, the satellite radio
16 represents about 3 percent of total radio
17 listening in the country, 97 percent of it is
18 still in the hands of the terrestrial radio
19 companies.

20 So we are working hard to build
21 not only brand awareness, but when listeners
22 are aware from terrestrial radio, as we came

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1 to the close of last year, it sort of brought
2 into stark relief how volatile, you know, the
3 business can be that we were estimating we
4 would finish the year with 6.3 million
5 subscribers.

6 We came out of the Thanksgiving
7 day weekend looking at the sales across that
8 weekend, which tends to be a precursor for
9 Christmas sales. And in the first week of
10 December with but 4 weeks to go in the year,
11 we cut our estimate of total adds for the year
12 by almost 10 percent, taking 300,000 out of
13 the number.

14 So, you know, while there's been
15 good success and, you know, I think we're
16 proud of how things went so far, there still
17 remains a lot of uncertain ground as we go
18 forward.

19 MR. WYSS: Your Honor, I note it's
20 just about 5:00 o'clock on my time. This
21 would probably be a convenient point to stop
22 to break.

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1 CHIEF JUDGE SLEDGE: We will
2 recess until 9:30.
3 (Whereupon, the foregoing matter
4 was recessed at 4:58 p.m., to be
5 reconvened on Tuesday, June 12,
6 2007, at 9:30 a.m.)
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PUBLIC VERSION

DESIGNATED DIRECT HEARING TESTIMONY OF DAVID FREAR
(2006-1)

June 12, 2007 Trial Transcript

Before the
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In the Matter of: °
 Adjustment of Rates and ° Docket No. 2006-1
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 Independence Ave., S.E.
 Washington, D.C. 20540
 Wednesday,
 August 15, 2007

The above-entitled matter came on
 for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES (Continued):

On Behalf of Sirius Satellite Radio
 Inc.:

BRUCE G. JOSEPH, Esquire;
 KARYN K. ABLIN, Esquire;
 MATT J. ASTLE, Esquire;
 JENNIFER L. ELGIN, Esquire;
 THOMAS W. KIRBY, Esquire;
 MICHAEL L. STURM, Esquire; and
 JOHN WYSS, Esquire

of: Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 (202) 719-7528
 b joseph@wileyrein.com

APPEARANCES:

On Behalf of SoundExchange:
 DAVID A. HANDZO, Esquire;
 MICHAEL B. DeSANCTIS, Esquire;
 JARED O. FREEDMAN, Esquire;
 THOMAS J. PERRELLI, Esquire; and
 MARK D. SCHNEIDER, Esquire

of: Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 (202) 639-6060
 dhandzo@jenner.com

On Behalf of XM Satellite Radio Inc.:
 BRUCE RICH, Esquire;
 JONATHAN BLOOM, Esquire;
 WILLIAM CRUSE, Esquire;
 TODD LARSON, Esquire;
 BENJAMIN MARKS, Esquire;
 BRUCE S. MEYER, Esquire
 RALPH MILLER, Esquire; and
 JOHN THOMPSON, Esquire

of: Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 (212) 310-8238

I-N-D-E-X

WITNESS	DIRECT	CROSS	REDIRECT	REXCROSS
MARK VENDETTI				
By Mr. Rich	12			
By Mr. Schneider		52		
DAVID FREAR				
By Mr. Sturm	66		207	
By Mr. Schneider		138		
EXHIBIT	DESCRIPTION			MARK RECD
10	Vendetti Testimony			12 13
47	Sirius Satellite Radio			81 81
57				81 81
58	P&L Statement			81 81
59	Sensitivity Analyses			81 81
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71	Settlement Agreement			69
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73	Analysts' Reports			173 178
74	2Q Call Transcript			183 184
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76	Frear Declaration			192 195
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1 not 112 million per year. I didn't -- if it
2 came off that way, I didn't mean it to sound
3 that way.

4 JUDGE WISNIEWSKI: Thank you.

5 CHIEF JUDGE SLEDGE: All right.

6 That completes your testimony.

7 (Whereupon, the witness was
8 excused.)

9 CHIEF JUDGE SLEDGE: We'll recess
10 for ten minutes.

11 (Whereupon, the foregoing matter
12 went off the record at 10:51 a.m.

13 and went back on the record at
14 11:07 a.m.)

15 CHIEF JUDGE SLEDGE: We will come
16 to order. Next witness?

17 MR. STURM: Your Honor, Sirius
18 calls David Frear.

19 CHIEF JUDGE SLEDGE: Mr. Frear,
20 please raise your right hand.

21 Whereupon,

22 DAVID FREAR

1 written rebuttal testimony?

2 A Yes.

3 Q And is the binder that's before
4 you that has been marked as exhibit 61 your
5 written rebuttal testimony?

6 (Whereupon, the
7 aforementioned document
8 was marked for
9 identification as Sirius
10 Exhibit Number SIR 61.)

11 THE WITNESS: Yes, it is.

12 BY MR. STURM:

13 Q And that includes exhibits 47 and
14 57 through 60 as well?

15 A Yes, it does.

16 MR. STURM: Your Honor, I would
17 move the admission of exhibit 61. I would
18 just note for the record that this is the
19 amended version of Mr. Frear's testimony. It
20 is an unopposed motion to amend. So this is
21 the amended version.

22 JUDGE WISNIEWSKI: Any objection?

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1 was called as a rebuttal witness by counsel
2 for Sirius Satellite Radio and, having been
3 first duly sworn, was examined and testified
4 as follows:

5 CHIEF JUDGE SLEDGE: Thank you.

6 Please be seated.

7 MR. STURM: Thank you, Your Honor.

8 DIRECT EXAMINATION

9 BY MR. STURM:

10 Q Mr. Frear, would you state your
11 name, please?

12 A David Frear.

13 Q Okay. You're the CFO and
14 Executive Vice President of Sirius?

15 A That is correct.

16 Q And you submitted written direct
17 testimony back in October 2006 in this case?

18 A Yes.

19 Q And you also testified during the
20 direct phase of this case?

21 A Yes.

22 Q Since then have you prepared

1 MR. SCHNEIDER: Yes, Your Honor.
2 Well, I have an objection to actually one
3 number in the testimony, if I may. And the
4 number appears on paragraph 24 on page 11, the
5 second line. And it purports to state the
6 current royalty in place between Sirius and
7 SoundExchange.

8 And my objection is that that rate
9 is subject to a settlement proceeding. And
10 I'm going to go ahead and hand out to the
11 Court --

12 CHIEF JUDGE SLEDGE: Page 11,
13 second line?

14 MR. SCHNEIDER: Yes, Page 11,
15 second line.

16 CHIEF JUDGE SLEDGE: Oh, I'm in
17 the --

18 MR. SCHNEIDER: Paragraph 24.

19 CHIEF JUDGE SLEDGE: I'm in the
20 wrong place. I'm sorry.

21 JUDGE ROBERTS: I was intrigued to
22 see it. It's the first time it showed up in

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1 this proceeding.

2 MR. SCHNEIDER: The documents I've
3 handed out, which I've labeled as trial
4 exhibit 71, is the settlement agreement
5 between the parties, bound Sirius.

6 (Whereupon, the
7 aforementioned document
8 was marked for
9 identification as Sirius
10 Exhibit Number SIR 71.)

11 MR. SCHNEIDER: On page 3 of that
12 agreement, forward to page 4, it says,
13 "Parties to this agreement intend that that
14 shall be non-precedential and shall not be
15 admissible as evidence or otherwise taken into
16 account in any administrative, judicial, or
17 other governmental proceeding with an
18 exception that it's not relevant. The parties
19 would not have entered into this agreement but
20 for this understanding."

21 And then second document, which
22 I've marked for identification as exhibit 72,

1 were entered into. What I'm asking the Court
2 to do is enforce the agreement between the
3 parties, which is exhibit 71.

4 JUDGE ROBERTS: We are not
5 enforcing anything that is in the --

6 MR. SCHNEIDER: Absolutely
7 correct, Your Honor. We're not asking you to
8 enforce your order. I'm asking you to enforce
9 the parties' agreement. The order simply just
10 shows that the Court was previously aware of
11 the private agreement.

12 CHIEF JUDGE SLEDGE: Response?

13 MR. STURM: Yes, Your Honor. Mr.
14 Schneider himself has previously elicited
15 testimony about these percentages. I'm
16 looking at the June 6th, 2007 hearing question
17 from Mr. Schneider "About how much on a
18 percentage basis do you know currently roughly
19 is the sound recording royalty?"

20 "Answer: It's about two percent."
21 That's on page 15 of the transcript. I
22 believe similar testimony was also elicited

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1 is the order of the CARP, which acknowledges
2 that "The agreement was private," -- I'm
3 quoting from the order -- "confidential, and
4 non-precedential."

5 (Whereupon, the
6 aforementioned document
7 was marked for
8 identification as Sirius
9 Exhibit Number SIR 72.)

10 MR. SCHNEIDER: Obviously Mr.
11 Frear here has revealed the number, although
12 I would point out it is not actually accurate,
13 thus the hazards of putting such things in.
14 And I would move that the Court strike the
15 number.

16 JUDGE ROBERTS: Well, now, this
17 order doesn't really do anything with respect
18 to this agreement other than to make a factual
19 statement that the parties have entered into
20 one.

21 MR. SCHNEIDER: That is correct,
22 Your Honor. There were simply knowledges that

1 from Mr. Frear during his testimony in the
2 rebuttal case.

3 So SoundExchange has specifically
4 -- putting aside the fact that in considering
5 disruption, it's important to know what is
6 going on currently, SoundExchange has directly
7 itself opened the door to this kind of
8 testimony. And, in fact, we can go into it in
9 greater detail with the witness.

10 Mr. Schneider suggested that the
11 number is incorrect while he can raise that
12 issue on cross if he likes, but, in fact, it
13 is properly reflecting a blended rate over the
14 time period. But the key point in terms of
15 admissibility is that SoundExchange has
16 previously elicited this kind of testimony
17 about precisely this rate.

18 MR. SCHNEIDER: May I be heard on
19 that, Your Honor?

20 CHIEF JUDGE SLEDGE: Yes, sir.

21 All right, Mr. Schneider.

22 MR. SCHNEIDER: It is a flagrant

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1 misrepresentation. That testimony was from
2 Mr. Vendetti, for one thing, concerning XM
3 rate. It's different from the Sirius rate.

4 When counsel informs you that the
5 similar question was elicited from Sirius,
6 that's a misrepresentation. And I will repeat
7 what I said, which is there is no testimony,
8 from Mr. Frear or anyone else, about the
9 Sirius rate in this case.

10 MR. STURM: Your Honor, may I
11 respond?

12 CHIEF JUDGE SLEDGE: Yes, sir.

13 MR. STURM: First of all, having
14 opened the door, -- I don't think Mr.
15 Schneider denies that he's opened the door for
16 it -- with respect to XM, I would think that
17 given that both Sirius and XM are parties to
18 the proceeding with aligned interest, that
19 once the door is opened, it's opened for both
20 parties.

21 Second, looking at Mr. Frear's
22 testimony, I didn't know that this issue was

1 I didn't ask Mr. Frear what the rate was.

2 This is some kind of blend of
3 rates for several different years. I take it
4 that's the only rate that could be accurate.
5 The rate is not even informed like the actual
6 royalty that the parties agreed upon.

7 This is making claims that are
8 false. For example, just one example, the
9 current rate is not stated as a percentage of
10 revenue. It's obviously a critical fact.

11 I never elicited any testimony
12 from anyone asking what the current was,
13 certainly not anyone from Sirius. And this is
14 a flagrant violation of the parties' private
15 agreement and will discourage settlement.

16 CHIEF JUDGE SLEDGE: So you are
17 suggesting that when you ask "How much does he
18 pay for royalties?" that's a different
19 question than saying, "What is the royalty
20 rate?"

21 MR. SCHNEIDER: I am saying when
22 he puts down in his books what he expects to

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1 going to be raised. So I don't have
2 everything at my fingertips. But I see at
3 page 192 of the transcript there is a question
4 to Mr. Frear, "Are you actually recording
5 expenses in your accounting records at that
6 4.2 percent rate?"

7 "Answer: No, we are not.

8 "Question: What rate do you use
9 for accounting purposes when you are recording
10 expenses for the sound recording royalties?"

11 "Answer: Two and a half percent."
12 That's page 192 of the transcript. And I
13 believe that there would be further cites that
14 we could provide if we needed to.

15 There is no dispute that the door
16 has been opened on this subject.

17 CHIEF JUDGE SLEDGE: Mr.
18 Schneider?

19 MR. SCHNEIDER: There is a
20 dispute. It's not a fair characterization of
21 the question I asked Mr. Vendetti. The rate
22 for Sirius is not the same as the rate for XM.

1 pay in royalties stated as a percentage of
2 revenue, it is not how the royalty comes out.
3 I'm asking for a particular piece of
4 information.

5 I was quite careful not to ask
6 what the royalty is. As the Court is
7 well-aware from testimony in the opening round
8 of the case, whether the royalty is stated as
9 a percentage of revenue in some other way is
10 a quite significant matter.

11 And this is not accurate. And I
12 think to have to get into why it is not
13 accurate and what averages the year are and
14 what differences, if any, there are between XM
15 and Sirius is exactly the kind of thing the
16 agreement was meant to stop us from having to
17 do.

18 JUDGE ROBERTS: Mr. Schneider,
19 when parties enter into a settlement agreement
20 like this and they put conditions upon
21 themselves that exceed what the rate or the
22 terms of payment are, who in your view is

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1 responsible for enforcing this?
 2 MR. SCHNEIDER: It would be the
 3 court, any court or judicial body or
 4 administrative body, in which someone comes
 5 and attempts to violate the private agreement.
 6 So if this were a federal district court and
 7 someone tried to introduce this or, as it
 8 happens now, this court, that's where it would
 9 be enforced.
 10 JUDGE ROBERTS: Under contract
 11 law?
 12 MR. SCHNEIDER: Yes. This
 13 violates their agreement with us. And that's
 14 a breach of contract. That's correct.
 15 JUDGE ROBERTS: What is the
 16 obligation of our body to be enforcing
 17 contract law?
 18 MR. SCHNEIDER: I think
 19 "obligation" is probably putting it -- let me
 20 answer your question directly. I don't
 21 believe it has an obligation. I think, for
 22 example, the Court could not enforce this

1 11:30 a.m.)
 2 CHIEF JUDGE SLEDGE: Thank you.
 3 We will come to order. Mr. Sturm, reread the
 4 transcript.
 5 MR. STURM: This is the question
 6 to Mr. Vendetti in the cross-examination.
 7 CHIEF JUDGE SLEDGE: What day?
 8 MR. STURM: It is June 6th, 2007.
 9 JUDGE WISNIEWSKI: Did you say Mr.
 10 Vendetti? I thought you were quoting from Mr.
 11 Frear.
 12 MR. STURM: I did one of each,
 13 Your Honor.
 14 CHIEF JUDGE SLEDGE: I am only
 15 interested in the one from Mr. Frear.
 16 MR. STURM: Sorry, Your Honor.
 17 It's on page 192 of the transcript. I don't
 18 see a date. It is the second date that Mr.
 19 Frear testified. Question, "Are you actually
 20 recording expenses in your accounting records
 21 at that 4.2 percent rate?"
 22 "Answer: No, we are not.

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1 private agreement because it wants the
 2 information and it's very sorry. And if it
 3 does that, then obviously the parties will not
 4 enter into private agreements. And that will
 5 affect settlement. I would argue to the Court
 6 that would be an unfortunate result.
 7 But the Court has no obligation to
 8 enforce it. We are asking the Court to
 9 enforce it. And I think it would be good
 10 public policy and help with settlement if the
 11 Court did enforce it.
 12 And if the Court were to say, "No.
 13 I choose not to enforce it. We choose not to
 14 enforce it" that, on the other hand, would be
 15 quite harmful to the process because it would
 16 discourage settlement. And the process
 17 encourages settlement.
 18 CHIEF JUDGE SLEDGE: All right.
 19 We will recess.
 20 (Whereupon, the foregoing matter
 21 went off the record at 11:22 a.m.
 22 and went back on the record at

1 "Question: What rate do you use
 2 for accounting purposes when you are recording
 3 expenses for the sound recording royalties?"
 4 "Answer: Two and a half percent."
 5 CHIEF JUDGE SLEDGE: And who asked
 6 the question?
 7 MR. STURM: I believe that was Mr.
 8 Wyss on redirect, Your Honor.
 9 CHIEF JUDGE SLEDGE: And there is
 10 no objection to that answer?
 11 MR. STURM: That is correct, Your
 12 Honor.
 13 CHIEF JUDGE SLEDGE: Based on that
 14 transcript and the evidence being in the
 15 further record, the motion is denied. And if
 16 there is no other objection, the exhibit is
 17 admitted.
 18 (Whereupon, the
 19 aforementioned document,
 20 having previously been
 21 marked for
 22 identification as Sirius

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1 Exhibit Number SIR 61,
 2 was received in
 3 evidence.)
 4 MR. STURM: Your Honor, I'm not
 5 sure if I correctly moved the admission of
 6 exhibits 47, 57, and 58 through 60, which are
 7 included within the binder that is exhibit 61.
 8 (Whereupon, the
 9 aforementioned documents
 10 were marked for
 11 identification as Sirius
 12 Exhibits Number SIR 47
 13 and 57 through 60,
 14 respectively.)
 15 MR. STURM: And I would also move
 16 their admission.
 17 CHIEF JUDGE SLEDGE: Any
 18 objection?
 19 MR. SCHNEIDER: No objection, Your
 20 Honor.
 21 CHIEF JUDGE SLEDGE: Without
 22 objection, they are admitted

1 Sirius does not disclose to analysts.
 2 Fifty-nine is some sensitivity
 3 analyses that run through the Sirius financial
 4 model, various different sound recording
 5 scenarios. Again, it's all based on
 6 non-public financial information from a model.
 7 Sixty is a non-music programming
 8 analysis. Again, it is based on the financial
 9 information in the model. Numbers are not
 10 broken out this way for public or for analysts
 11 or certainly competitors.
 12 CHIEF JUDGE SLEDGE: Any objection
 13 to the motion?
 14 MR. SCHNEIDER: No objection, Your
 15 Honor.
 16 CHIEF JUDGE SLEDGE: Without
 17 objection, the motion is granted.
 18 MR. STURM: Thank you, Your Honor.
 19 All right.
 20 BY MR. STURM:
 21 Q Moving now into some substance,
 22 you indicated in paragraph 4 of your written

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1 (Whereupon, the
 2 aforementioned
 3 documents, having
 4 previously been marked
 5 for identification as
 6 Sirius Exhibits Number
 7 57 and 57 through 60,
 8 respectively, were
 9 received in evidence.)
 10 MR. STURM: And, Your Honor, if
 11 now is the appropriate time, there are three
 12 of the exhibits, 58, 59, and 60, for which I
 13 would move for protection under the protective
 14 order.
 15 JUDGE WISNIEWSKI: Please identify
 16 those, Mr. Sturm.
 17 MR. STURM: Yes, Your Honor.
 18 Fifty-eight is a detailed profit and loss
 19 statement based on Sirius' internal modeling
 20 as well as consensus projections of
 21 subscribers. It is, as you can see, highly
 22 detailed, contains non-public information that

1 rebuttal testimony that a substantial portion
 2 of your testimony is in rebuttal to some
 3 projections provided by Mr. Butson in a model,
 4 his written direct testimony that he filed
 5 back in October, right?
 6 A That is correct.
 7 Q Now, you saw that Mr. Butson used
 8 those projections to reach various conclusions
 9 about whether or not Sirius would be fully
 10 funded and profitable at SoundExchange's
 11 proposed rates, right?
 12 A That is correct.
 13 Q Now, we'll get into some of the
 14 specifics, but at an overview level, based on
 15 your knowledge of the company, what were the
 16 most significant inaccuracies which the Butson
 17 model presented to the Court back in October?
 18 A The most significant issue I have
 19 with the October projections from Mr. Butson
 20 related to subscriber estimates. They, you
 21 know, were optimistic at the time relative to
 22 our own forecasts as well as the consensus of

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1 street analysts.

2 And then in the wake of weakening
3 demand for satellite radio that manifested in
4 the fall of last year, they are --
5 substantially overstate what I think is a
6 reasonably likely outcome for subscriptions.

7 He has also built within his model
8 a consistent increase in average revenue per
9 subscriber that I think also is inconsistent
10 with current market conditions, as I testified
11 in June and we stated on our second quarter
12 call. We have abandoned plans for a price
13 increase.

14 And so incorporating them into a
15 long-term model I find inconsistent with that.

16 Q And those are the two most
17 important differences?

18 A Yes, right.

19 Q This change in demand that you
20 talked about, is that something that is just
21 affecting Sirius?

22 A No. It affects XM as well that,

1 disappointing from a retail perspective.

2 Q Now, to reflect those changes in
3 demand, have you prepared a model on a
4 going-forward basis that is exhibit 58 in your
5 exhibit book?

6 A Yes, we have.

7 Q Let's walk through the process
8 that was used to prepare that book start at
9 the top with the subscriber projections or the
10 demand side.

11 A So there are a lot of
12 uncertainties in the satellite radio business.
13 It's a pretty new business. And we have
14 certainly seen in the course of the last year
15 that neither of the two operators have been
16 successful at estimating the demand side of
17 the model.

18 So to approach this issue knowing
19 that Sirius earlier this year suspended any
20 long-term guidance, as I testified earlier, we
21 looked at the consensus view of the analysts
22 who cover the stock.

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1 you know, the category has been showing
2 progressive retail weakness since it started
3 on the XM side in the middle of last year.
4 And then in the fall, really, about September,
5 it started to show up in the Sirius side.

6 And as -- I've testified earlier
7 that we came to the conclusion that this was,
8 in fact, a sustained change in the operating
9 environment for us in the first week of
10 September, where we caught our year-end
11 subscriber estimates by 300,000 subscribers
12 with 4 weeks to go in the year.

13 Q And has that change in the retail
14 environment persisted through the first half
15 of this year?

16 A It has. Retail continues to be
17 weaker than we had expected, that we are not
18 seeing the kind of recovery in retail numbers,
19 you know, that we had been hoping for.

20 It was weak in the first quarter.
21 And Father's Day, which is the second biggest
22 selling period for us in the year, was very

1 And we have a third party vendor
2 who we have hired to compile that for us.
3 It's an awful lot of detail. And we don't
4 have the staff to do it internally. And so I
5 believe the name is In Synch takes the models
6 that are published by the various Wall Street
7 analysts and puts them into a massive
8 spreadsheet for the sake of being able to
9 develop, you know, the consensus forecast.

10 So we took the demand-side
11 consensus of these analysts to use as, you
12 know, the demand-side input to our model.

13 Q The consensus for what metric?

14 A For gross additions. So, you
15 know, the --

16 Q Why did you choose that one?

17 A Well, because it's the fundamental
18 indicator of, in fact, demand, as opposed to
19 net additions, which, you know, reflect churn
20 assumptions and things like that. Gross
21 additions represent the -- what we think is
22 the purest indicator of the demand side of the

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1 equation.

2 Q And then what did you do after
3 taking the gross adds from the consensus of
4 analysts?

5 A Well, you know, the -- we have
6 developed a model that we think actually has
7 a lot of insight into how a subscriber
8 behaves, you know, once it comes into the
9 fold, so to speak.

10 And so it behaves not only as a
11 subscription but also behaves in terms of its
12 revenue and cost elements, that, you know,
13 once a subscriber coming into our automotive
14 channel, it could be a Ford subscriber, a
15 Chrysler subscriber, Mitsubishi, or Mercedes.
16 And each of those have different economic
17 effects in the business. And the same thing
18 is true in the retail channel that they can
19 come in from Wal-Mart or Best Buy.

20 They can come in under an annual
21 plan or a monthly plan. And those subscribers
22 have different behaviors in the model that we

1 visited our long-term, you know, demand
2 scenario in actually quite some time. I think
3 the last time that I sat down with Jim Myer,
4 our President of Sales and Operations, and Mel
5 Karmazin to discuss demand beyond 2007 was a
6 discussion that was held in the last round of
7 budgeting for subscribers about a year ago
8 now, certainly before we saw the manifestation
9 weakness for us at retail before we saw that
10 continue into the first part of this year.

11 So, you know, the subscriber
12 numbers represented in the models that we
13 produced in discovery several months ago
14 simply don't bear any resemblance to current
15 market expectations.

16 Q In your view, are the demand-side
17 numbers here on exhibit 58 reasonable?

18 A I think they're -- I don't think
19 anybody really knows. And so this is as good
20 a guess as any. You've got 20 people roughly
21 out there whose job it is to inform the
22 marketplace about what they think the

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1 think that our model adds a considerable
2 amount of value in terms of its insight into
3 those behaviors.

4 And so not knowing what the future
5 holds for the demand for satellite radio we
6 decided to use the consensus of the analysts
7 and then run it, that consensus demand, in
8 terms of gross additions through our model to
9 be able to properly represent the economic
10 impact of that demand.

11 Q There were a lot of materials and
12 spreadsheets produced back in discovery. Why
13 didn't you just use those in presenting this
14 model?

15 A Well, a couple of reasons. One
16 that we certainly discussed during the direct
17 phase is that those earlier models included a
18 price increase that, you know, in the second
19 quarter we abandoned as being feasible in the
20 marketplace. So certainly that had to be
21 stripped out.

22 Secondly, you know, we had not

1 performance of satellite radio companies could
2 be. And they take an awful lot of things into
3 consideration there.

4 So, you know, I think in terms of
5 the gross demand for satellite radio, that
6 their view is as good a view as any other
7 you're going to get in a business that is
8 inherently uncertain.

9 Q Do you have any difference in view
10 as to the 2007 numbers versus the 2012
11 numbers?

12 A Well, you know, so I feel like I
13 have got a smaller range of error around the
14 numbers that will be produced between now and
15 the end of the year than certainly I do for
16 2008 or 2009, so forth and so on. The further
17 you go out into the model, the more
18 speculative it becomes.

19 Q But you have, nonetheless,
20 presented this model through 2012, the end of
21 the license term --

22 A That is correct.

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1 Q So we talked about now the source
2 of the demand-side numbers. What is the basic
3 source of the rest of the numbers that appear
4 in exhibit 58?

5 A Well, fundamentally the many
6 assumptions that we have developed over the
7 course of the last few years in terms of, you
8 know, how subscribers behave within the
9 business, how they distribute across plans,
10 how they distribute within channels. They
11 reflect the contractual arrangements we have
12 with the various, you know, distribution
13 partners and other partners in the business.

14 And the model does a fairly
15 effective job of taking a given demand input
16 and representing the economic outputs of that.

17 Q Did you have to make some
18 adjustments into your standard model to come
19 up with a model that would cover through 2012?

20 A Well, we didn't -- our standard
21 model, when we actually run into 2011, the
22 underlying spreadsheets are very complex. And

1 can sell a spot for.

2 And so, you know, as the demand
3 side came down, we had to adjust the
4 advertising revenues as well. And so on that
5 score, we used our own estimates for the
6 balance of this year. And we used the analyst
7 consensus advertising revenues for 2008 to
8 2012.

9 Q What have you seen with respect to
10 actual advertising revenues so far this year?

11 A You know, the first quarter was
12 pretty disappointing. You know, it was
13 actually down from the first quarter of 2006,
14 really related to Howard Stern's launch on
15 Sirius that he didn't take any vacation, he
16 was live five days a week. So when Howard is
17 on live, the -- you know, you sell a spot for
18 more than when you have replays on.

19 The second quarter, you know, it
20 recovered a little bit, probably up roughly 20
21 percent over the last year but still below
22 what our original plan expectations have been,

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1 they actually -- either in terms of rows or
2 columns, actually either max out Excel as a
3 program. And so right now the model is only
4 physically capable of going on a monthly basis
5 to 2011.

6 So the analytics team at Sirius
7 then did what was a simple annual role for
8 2012. It had to be done in a simplified
9 version of the model because the base model
10 simply -- Excel isn't a big enough package to
11 handle it.

12 Q So you did roll it out to 2012?

13 A Yes, we did.

14 Q All right. Did you also make a
15 change, as you previously discussed, with
16 respect to ARPU?

17 A We did, as I mentioned earlier,
18 strip out the price increase, yes. And we
19 also -- as you bring the subscribers down, we
20 had to take another look at the advertising
21 revenue, you know, presumably the number of
22 listeners is going to affect the -- what you

1 which would be consistent, you know, honestly
2 with the subscriber numbers being reigned in
3 on the marketplace.

4 Q Let's look at some of the specific
5 differences between your model in exhibit 58
6 and the model presented by Mr. Butson in the
7 direct phase of the case. Could you look at
8 -- let's start with page 5 of your testimony.
9 There's a chart there at the top of page 5.
10 Do you see that?

11 A Yes, I do.

12 Q Can you explain what that chart
13 shows to the Court?

14 A Yeah. It compares the gross
15 additions, which is, again, the primary
16 indicator of the demand side of the equation
17 here, between Mr. Butson's October model and
18 the consensus that we obtained from In Synch
19 in the new model that was produced in exhibit
20 I guess 58. And you can see here the
21 substantial reduction in demand that has
22 occurred in the marketplace. And, therefore,

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1 Mr. Butson's numbers are significantly larger.

2 Q And, flipping over to the next
3 page, page 6, that shows the effects on
4 year-end subscribers, which is another way to
5 look at it?

6 A Yeah. So this difference in gross
7 additions of six million over the term turns
8 very rapidly into a roughly 2.7-2.8 million
9 subscribers fewer each year than Mr. Butson
10 had estimated. And that would appear to be a
11 permanent change in demand for satellite
12 radio.

13 Q And then that obviously has
14 effects on revenues, right?

15 A That is correct.

16 Q That's shown on the next page of
17 your testimony?

18 A Yeah. The -- I mean, over the
19 term -- license term, it would produce a
20 revenue shortfall from Mr. Butson's model of
21 in the aggregate 2.7 --

22 JUDGE WISNIEWSKI: Mr. Frear, just

1 testimony, isn't it?

2 THE WITNESS: You know, there's
3 just --

4 JUDGE WISNIEWSKI: It's half that.

5 THE WITNESS: I understand. The
6 numbers are half. They not only argue, but
7 the view of the 20 people roughly I think that
8 are incorporated into this after having
9 considered what the sales results from the
10 retail channel especially are is that they
11 have simply come to the conclusion that there
12 are likely to be significantly fewer
13 subscriptions generated out of the retail
14 channel. And they believe that to be a
15 permanent change in distribution.

16 So it's a change that's effective
17 not only this year but is expected to continue
18 on. And in previous forecasts, I think they
19 had felt that that would continue to rise.
20 And they simply don't see that anymore.

21 JUDGE WISNIEWSKI: I understand
22 that trend, but what I am asking you to help

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1 as a follow-up, could you go back to the
2 previous chart about the year-end subscribers?
3 Your testimony was that was an average of
4 nearly 2.4 million subscribers per year
5 difference? Why should we care about the
6 average? Didn't you indicate that as we go
7 out in time, these demand projections become
8 shakier?

9 THE WITNESS: Yes, they do.

10 JUDGE WISNIEWSKI: Why should we
11 care about the average? Shouldn't we be more
12 influenced by the early years here?

13 THE WITNESS: You can pick almost
14 any year. I think that, you know, you -- for
15 me, the differences are so substantial that,
16 you know, with six months left to go in the
17 year, that being off 1.2 million for this year
18 is -- likely will presage a significant gap
19 opening up in --

20 JUDGE WISNIEWSKI: That 1.2
21 million is certainly a lot less than with 2.4
22 million average you're talking in your

1 me with here is to understand the numbers that
2 you have given us. As I understood the
3 numbers as you were talking about them, the
4 numbers for 2007 ought to be more significant
5 to me than the numbers for 2012.

6 THE WITNESS: Well, for 2007 and
7 for the economic conditions that all exist in
8 that year, they are more significant. The
9 fact is that they're --

10 JUDGE WISNIEWSKI: Because they
11 essentially are some of the things that have
12 happened; whereas, 2012, we don't know what
13 might happen.

14 THE WITNESS: Well, that's true.

15 JUDGE WISNIEWSKI: I'm just asking
16 for help in interpreting. Thank you.

17 I'm sorry, Mr. Sturm.

18 MR. STURM: That's fine, Your
19 Honor.

20 BY MR. STURM:

21 Q The next page shows the effects on
22 projected revenue. Is that right?

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1 A It does.

2 Q What is the total effect of the
3 difference in the projected subscribers on
4 revenue over the course of the license term?

5 A Over the term, it generates a
6 difference of about 2.7 billion in revenue
7 and, you know, according to the -- in the
8 analyst consensus for 2012 vis-a-vis Mr.
9 Butson's model. It's an annualized gap that
10 is rapidly closing in on \$700 million a year.

11 Q Let's go back to exhibit 58. I
12 want to just talk about -- we don't need to go
13 into the specific numbers but just identify
14 some of the cost categories. There's an add
15 revenue share that is about a little less than
16 halfway down the page. What is add revenue
17 share?

18 A Well, we have arrangements with
19 certain of our programming partners wherein we
20 share the add revenues generated on their
21 channel. So we have an arrangement with
22 Howard Stern where we do that. There's an

1 becomes something that we call an enabled
2 vehicle. And at any time that there is an
3 active paying subscription in an enabled
4 vehicle, we pay a portion of that revenue to
5 the automotive partner.

6 Q So if I sell my car that has a
7 Sirius radio and the next person decides to
8 subscribe to Sirius, the auto maker would be
9 again getting a revenue share?

10 A That is correct.

11 Q Now, continuing on with cost, you
12 also have royalties that are listed, sort of
13 above where we have been looking previously?

14 A Yes.

15 Q And the RIAA or SoundExchange,
16 what percentage rate were you assuming for
17 purposes of this particular model?

18 A Well, it's really -- it's a
19 residual calculation that -- or leftover
20 calculation that our longstanding modeling
21 assumption has been that royalties would be
22 about seven percent of total revenues.

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1 arrangement with Maximum, CNN, and Martha
2 Stewart, and several of the other programming
3 partners.

4 Q A little bit further down is a
5 category called "Residuals." What is that?

6 A We pay residuals to certain of the
7 major retailers. So Best Buy, Circuit City,
8 Radio Shack, they're paid for radios sold and
9 under active subscriptions, you know, through
10 their stores.

11 And it varies by retailer as to
12 how much we pay, but it's -- in essence, some
13 people call it residual. Some people call it
14 loyalty payments.

15 Q And then there's also a revenue
16 share. How is that different from residuals?

17 A It's a similar concept, but it
18 relates specifically to our automotive
19 distribution partners.

20 Q How does that work?

21 A So for our automotive partners,
22 they install a radio in a car. And that car

1 And so since we don't know what
2 the SoundExchange royalty will be at this
3 point, you know, we have elected not to alter
4 that seven percent assumption that has been
5 running in our models for a few years.

6 And so we know what we paid to
7 ASCAP and BMI and SESAC, and we know what we
8 -- you know, what we expect to pay with
9 respect to Web streaming. And so it simply
10 represents the remainder. And I think
11 mathematically it works out to about 4.2
12 percent.

13 Q I would like to now direct your
14 attention to exhibit 57, which is the first
15 quarter 10-Q.

16 CHIEF JUDGE SLEDGE: Let me
17 interrupt.

18 MR. STURM: Yes, Your Honor.

19 CHIEF JUDGE SLEDGE: I understand
20 the 4.2 percent. I'm confused. What is the
21 seven percent?

22 THE WITNESS: Your Honor, in the

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1 modelling, for the sake of modeling, we have
 2 a simplifying assumption that total royalties
 3 of all kinds related to the music that we play
 4 and whether we play it on our satellite radio
 5 product or in the internet radio product will
 6 total seven percent of revenues. And we know
 7 what we will pay with respect to many of those
 8 royalties, and there are some that we don't
 9 know.

10 So, you know, for instance, we
 11 know what we will pay with respect to ASCAP,
 12 BMI, and SESAC. We know what we will pay
 13 under the Webcasting side of the business.
 14 And so those are calculated, you know, in
 15 accordance with those agreements.

16 And then you end up with a
 17 remainder. And the remainder we simply
 18 allocate to the SoundExchange or RIAA line in
 19 the model. So there's not actually -- there's
 20 an explicit assumption with respect to the
 21 seven percent of all royalties of all kinds.

22 And then there are the

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1 representations of the contractual terms that
 2 we know. And then what's left over is left
 3 for the unknown, which is SoundExchange.

4 CHIEF JUDGE SLEDGE: Thank you.

5 BY MR. STURM:

6 Q If I could direct your attention
 7 to exhibit 57, which is the first quarter
 8 10-Q, and page 14, please? Do you have it
 9 there?

10 A I do. Sorry.

11 Q There is a discussion in there
 12 about some 2 and a half percent convertible
 13 notes due 2009 and some 3 and a half percent
 14 convertible notes due in 2011.

15 A Yes.

16 Q First of all, what is a
 17 convertible note?

18 A It's a form of debt that gives the
 19 holder of the note, in essence, two choices,
 20 that at any point in time he can choose to,
 21 you know, treat it as debt or so. For
 22 instance, at maturity, he could simply get

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1 paid back or it has the right, he has the
 2 right, to convert it into a number of shares
 3 of stock.

4 So, you know, you see these low
 5 coupons, two and three percent, because the
 6 investors accord a value to that, the option.
 7 In essence, they have in the note to exchange
 8 it for stock. So you get a very favorable
 9 interest rate in return for giving them, in
 10 essence, an option on your equity.

11 And those options have value to
 12 the noteholder to the extent that the price in
 13 the market for the stock of the company
 14 exceeds the conversion price that you see in
 15 the second column of the table.

16 Q So, specifically, the convertible
 17 notes due 2009, how much is that?

18 MR. SCHNEIDER: Objection. Beyond
 19 the scope of the written report.

20 CHIEF JUDGE SLEDGE: Well, this is
 21 an exhibit. It's been entered.

22 MR. SCHNEIDER: Yes. And he's

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1 testifying about the terms of the exhibit.
 2 And in his report, he discusses the exhibits.
 3 But he discusses nothing about this part of
 4 this exhibit.

5 CHIEF JUDGE SLEDGE: Overruled.

6 BY MR. STURM:

7 Q How much is the value? How much
 8 is the 2009 convertible notes? How much money
 9 is involved in that?

10 A There is about 300 million
 11 outstanding.

12 Q What is the conversion price for
 13 those to be redeemed?

14 A \$4.41.

15 Q Now, what happens if the stock is
 16 below 4.41 when these notes come due?

17 A Well, a rational investor of the
 18 stock is below 4.41, instead of exchanging it
 19 as bond for stock that is worth less than the
 20 face value of the debt, will ask for the full
 21 repayment of the principal amount of the debt.

22 Q What is the stock price now?

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1 A It's roughly \$2.80, \$2.90.
 2 Q And has it been roughly in that
 3 range for some time now?
 4 A Unfortunately, it has, yes.
 5 Q Okay. What assumption have you
 6 made in your model about paying off this debt
 7 in 2009?
 8 A So -- and this is true for the
 9 2011 notes as well, that the model in -- is it
 10 exhibit 58?
 11 Q Fifty-eight.
 12 A -- makes the assumption that
 13 during the course of the projection period,
 14 the stock price will recover to a level that
 15 exceeds the conversion price, so just to
 16 belabor the point that before the 300 million
 17 of notes come due in 2009, the stock will rise
 18 from its current level of roughly 280 to 290
 19 to at least 441 or 442 where there is an
 20 advantage for the investor to convert it into
 21 equity and simply sell their stock in the
 22 marketplace.

1 A We would have to pay off the \$300
 2 million. So that would fully utilize the 200
 3 million of cash seen there and require us to
 4 seek \$100 million elsewhere.
 5 MR. STURM: Your Honor, I have a
 6 few questions that I need to go into specific
 7 numbers that are contained within this model.
 8 So I would ask that the protective order be
 9 applied and the courtroom be sealed for a few
 10 moments so I can ask these few questions.
 11 CHIEF JUDGE SLEDGE: What
 12 questions?
 13 MR. STURM: Your Honor, we are
 14 going to talk about when the model shows it
 15 becoming free cash flow positive, which is not
 16 something that is publicly disclosed.
 17 CHIEF JUDGE SLEDGE: This is on
 18 58?
 19 MR. STURM: Yes, Your Honor, 58,
 20 second page.
 21 CHIEF JUDGE SLEDGE: Where on the
 22 second page? I don't see that.

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1 And, similarly, by 2011, the model
 2 assumes that the stock price will continue to
 3 rise beyond that to clear the \$5.30 conversion
 4 price so that in that year, instead of those
 5 bond holders asking for the \$230 million back,
 6 that they would again exchange the bond for
 7 shares of stock, which they would sell in the
 8 marketplace for a greater value.
 9 Q And how much is involved in the
 10 2011 convertible notes?
 11 A It's \$230 million.
 12 Q And the conversion price on those
 13 is what?
 14 A \$5.30.
 15 Q Going back to exhibit 58, on the
 16 second page, third line from the bottom, there
 17 is "End of period, EOP, cash." Do you see
 18 that?
 19 A Yes.
 20 Q What would that look like in 2009
 21 if the stock is below 441 so the notes did not
 22 convert to equity?

1 MR. STURM: The free cash flow is
 2 the second line from the bottom, Your Honor.
 3 CHIEF JUDGE SLEDGE: All right.
 4 Any objections to protective order for
 5 questions on the free cash flow on exhibit 58?
 6 MR. SCHNEIDER: No, Your Honor.
 7 CHIEF JUDGE SLEDGE: Without
 8 objection, the motion is granted.
 9 MR. STURM: And, Your Honor, I
 10 will also intend to ask some questions about
 11 net income as well. Based on the same model,
 12 it's actually the net loss line that appears
 13 somewhat above.
 14 CHIEF JUDGE SLEDGE: All right.
 15 (Whereupon, the foregoing matter went
 16 off the record at 12:07 p.m., to
 17 reconvene in closed session, as
 18 follows.)
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1 BY MR. STURM:
 2 Q We have talked about some of the
 3 differences between exhibit 58 and Mr.
 4 Butson's old model. You are aware he has
 5 presented a new model in the rebuttal case,
 6 right?
 7 A Yes.
 8 Q What are the main differences
 9 between exhibit 58 and Mr. Butson's new model?
 10 MR. SCHNEIDER: Objection. Two
 11 objections. Beyond the scope of the relevant
 12 testimony. And, second, it's not appropriate
 13 rebuttal because I guess you would call it
 14 rebuttal of rebuttal, which is not within the
 15 scope of rebuttal.
 16 CHIEF JUDGE SLEDGE: Response?
 17 MR. STURM: Your Honor, Mr. Frear
 18 has put in a model. And it would help to --
 19 testimony explaining how his model is similar
 20 to or different from another model is really
 21 just part of explaining his model.
 22 I think the other thing is that if

1 and went back on the record at
 2 12:17 p.m.)
 3 CHIEF JUDGE SLEDGE: Let's come to
 4 order. The grounds of the objection are
 5 correct. However the judges exercise
 6 discretion on matters that they wish to hear
 7 and with that discretion, the objection's
 8 overruled.
 9 MR. STURM: All right, so Mr.
 10 Frear, the question was what are the biggest
 11 differences between Exhibit 58 and Mr.
 12 Butson's new -- new model?
 13 THE WITNESS: There are three --
 14 three principal areas I'd like to highlight.
 15 One is, is that much as we saw in the October
 16 model where Mr. Butson appears to be assuming
 17 a consistent increases in -- in, sorry Mr.
 18 Schneider, you standing up or --
 19 MR. SCHNEIDER: No, I apologize.
 20 THE WITNESS: Thank you. That he
 21 seems to be --
 22 CHIEF JUDGE SLEDGE: Please

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1 you have two conflicting models and no
 2 testimony explaining the differences, that is
 3 not going to be very helpful to the Judges in
 4 trying to resolve which model is more
 5 credible.
 6 And Mr. Schneider's point I assume
 7 is that when Mr. Butson testifies, that he
 8 shouldn't be able to say anything about Mr.
 9 Frear's model. I think that what would be
 10 more helpful is to allow the witnesses to
 11 engage and explain where the differences are
 12 so they will be clear.
 13 CHIEF JUDGE SLEDGE: Which,
 14 carried to its logical extension, means you
 15 would never end your trial.
 16 MR. STURM: Well, Your Honor, I
 17 think the trial is going to end on August
 18 30th, no matter what ruling there is on this.
 19 CHIEF JUDGE SLEDGE: We will
 20 recess on the objection.
 21 (Whereupon, the foregoing matter
 22 went off the record at 12:14 p.m.)

1 refrain from making a comment like that. If
 2 you --
 3 THE WITNESS: I'm -- I apologize,
 4 sir. I thought he was standing up.
 5 CHIEF JUDGE SLEDGE: So what if he
 6 is -- that's not part of your responsibility.
 7 THE WITNESS: I apologize. Mr.
 8 Butson appears to be retaining his increase in
 9 prices. So it -- they seem to be going up
 10 about three percent a year and as I stated
 11 earlier, the -- we don't see that as tenable
 12 in the marketplace.
 13 The -- he also appears to be
 14 having some difficulty, it's not clear to me
 15 what it is, with the revenue share calculation
 16 that the revenue share is one of the most
 17 important components of the cost side of our
 18 variable cost side of P&L.
 19 And Mr. Butson's assumptions
 20 substantially understate what that cost would
 21 be, so in essence in the aggregate, over the
 22 course of the model that there's a

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1 \$377,000,000.00 understatement of -- of the
2 revenue share payments to be made in the lines
3 that Mr. Sturm asked me about earlier.

4 And then, you know, he's got a --
5 JUDGE ROBERTS: That's over the
6 whole projected period?

7 THE WITNESS: Yes, it's largest in
8 the last year which I'll come back to in a
9 moment.

10 The way that his model works is he
11 gets to about the same total revenues but he
12 gets there a different way that actually
13 biases the royalty cost down.

14 So because he's got a price
15 increase up, you know, in there, that he
16 actually gets the same revenue numbers with
17 fewer subscribers and because the
18 SoundExchange proposal is subscriber dependent
19 in terms of when it steps up in rate, that he
20 actually has a lower royalty rate that's --
21 that's running throughout the -- the model so
22 if you were to -- what that produces is it

1 the capital markets to simply refinance
2 \$780,000,000.00 of debt that's coming due
3 within the license term, and yet when you look
4 at the SoundExchange proposal run through our
5 model, I'm hard pressed to figure out what
6 capital market would accept it, if there's no
7 point in the six year term of the license
8 where our EBITDA, which in the debt markets is
9 a commonly used measure that people like to
10 compare to your interest expense to see if you
11 generate enough pre-tax earnings to pay your
12 interest and, you know, our EBITDA will barely
13 get to covering half of the interest burden of
14 the company by the end of the license term.

15 And another important measure that
16 the -- the capital markets look at is -- is a
17 leverage ratio which is the total debt to the
18 EBITDA and, you know, that number at the -- in
19 the last year the license term will finally
20 break 20 times.

21 Well the -- a very highly
22 leveraged deal so, you know, the Clear Channel

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1 produces about, again, over the course of the
2 term, about \$118,000,000.00 of understated
3 royalties.

4 You know, at the end of it, when
5 we take the SoundExchange proposal and run it
6 through our model, it produces \$200,000,000.00
7 less net income.

8 Now, Mr. Butson's model, as
9 delivered in the rebuttal phase, never
10 achieves positive net income in license term.

11 And it doesn't get there, despite
12 the fact of what I think is a pretty material
13 understatement of the revenue share payments
14 that we would be making.

15 So when you finally adjust for it
16 all out, that -- not only does -- do we not
17 get there but we don't get there by a lot. So
18 then he's got one more assumption that
19 concerns me which goes back to the -- the debt
20 items we discussed earlier.

21 That, you know, he makes the
22 assumptions that we will have ready access to

1 for instance, which is out there in the
2 marketplace trying to -- trying to go private
3 is maybe in the seven to nine times range.

4 And so that I'm looking at credit
5 statistics that after 25 years of raising
6 money in a lot of different capital markets,
7 up markets, down markets, big deals, small
8 deals, public and private, I don't know where
9 you'd go to get the money with those kinds of
10 statistics and I guess the last thing is that
11 I run through it.

12 The SoundExchange proposal, you
13 know, again, run through the model properly
14 produces a, in essence a billion dollar cash
15 deficit.

16 You don't have a single year of
17 income, not a single year of positive free
18 cash flow. That's, for me, as a chief
19 financial officer, is an untenable proposal.

20 BY MR. STURM:

21 Q Mr. Frear, let's talk, unless the
22 judges have some questions, let's talk about

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1 the issue of disruption which is addressed in
2 paragraphs 22 to 24 of your written rebuttal
3 testimony.

4 In his testimony -- in his
5 testimony in the initial case, Mr. Butson
6 suggested that the royalties proposed by
7 SoundExchange would not be disruptive to
8 Sirius because Sirius would have
9 \$792,000,000.00 in cash to cover
10 \$783,000,000.00 in anticipated free cash flow
11 for a loss that basically means that you had
12 a \$9,000,000.00 cushion and that was enough.

13 Does that conclusion make sense to
14 you as a CFO?

15 A Well, it's mathematically correct
16 on the face of it that \$792,000,000.00 is
17 greater than \$783,000,000.00.

18 Unfortunately, you know, you can't
19 run companies on tolerances that tight. And
20 so, you know, I don't know of anyone who
21 would, you know, conclude when looking at a
22 model, especially with all the assumptions,

1 have the money which are the circumstances
2 under which you are least likely to get it.

3 Q Have you recently yourself gone to
4 the capital markets?

5 A We did. We went in June, very
6 quickly, to raise \$250,000,000.00 that we
7 thought the market conditions were very
8 favorable and in retrospect that turns to have
9 been a prophetic view although I can't really
10 claim responsibility for it.

11 But, you know, we were able to get
12 a deal done on favorable terms that simply
13 would not be available to us in multiple
14 respects today.

15 We, but we obtain that money by
16 giving -- by doing something we haven't done
17 before. That we gave away security to get it
18 and so, you know, generally as we've raised
19 money in the past, we've raised it in
20 convertible notes where people are more -- in
21 equity light risk posture and so we raised a
22 lot of money there.

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1 all the uncertainties we've talked about and
2 everything else and come to the conclusion
3 that we have plenty of cash available to run
4 the business when a six year model with all
5 those uncertainties produces a \$9,000,000.00
6 excess.

7 You know, we've been running the
8 company with treating \$100,000,000.00 as the
9 affunctional equivalent of zero. But --

10 Q Why is that?

11 A Well it's -- assumptions can
12 change very rapidly, you know, that you can be
13 wrong on demand side, that vendors can come in
14 with different -- different costs, the timing
15 of working capital flows can change on you and
16 a capital markets may not be open to you on
17 the day that you want to go.

18 So you've got to retain a highly
19 liquid position with the business that's in
20 these conditions, otherwise you end up in a
21 place where you never want to be, in a
22 speculative business who absolutely has to

1 We raised some money in the high
2 yield market, you know, a couple years ago on
3 an unsecured basis and this time around we
4 fundamentally gave up all the assets of the
5 company as security so, in essence, the -- the
6 guys who hold \$250,000,000.00 worth of paper,
7 hold the keys to the kingdom.

8 If the assumptions don't come
9 through, if the, you know, the cash -- free
10 cash for losses exceed what we expect and
11 capital becomes scarce, they are in the
12 controlling position in the event that things,
13 well, go wrong.

14 And, you know, that's what I
15 believe actually got the deal done and that is
16 opposed to, you know, a great view for the
17 outlook of the business or anything else he
18 had the combination of a hot market at the
19 time, which has certainly cooled off and then
20 a -- a transaction that was significantly
21 over-collateralized.

22 They essence owned the business

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1 for \$250,000,000.00 and I think that's the
2 fundamental reason why the deal got done.

3 Q Do you think you could repeat the
4 deal on the same terms now?

5 A I do not.

6 MR. SCHNEIDER: Objection, beyond
7 scope of the written examination.

8 CHIEF JUDGE SLEDGE: Mr. Sturm?

9 MR. STURM: I'll withdraw the
10 question.

11 CHIEF JUDGE SLEDGE: All right.

12 The answer is stricken.

13 BY MR. STURM:

14 Q Does Exhibit 58 include the
15 effects of and all your other exhibits -- do
16 they include the effects of this
17 \$250,000,000.00 that you just grazed?

18 A Yes they do.

19 Q So in the end of period cash going
20 down across there, three lines from the bottom
21 of Exhibit 58, that includes the benefit of
22 that \$250,000,000.00?

1 three sections.

2 The top section is the baseline
3 model and then this is what's reflected in the
4 testimony itself, where I identified, you
5 know, the model with the consensus gross ads
6 assumptions and as you let it run, produces
7 \$104,000,000.00 in terms of the cash low point
8 in 2009.

9 And as I stated in the testimony,
10 that is for us, the functional equivalent of
11 zero. We've been operating with that as a
12 philosophy for as long as I've been with the -
13 - the company.

14 The second section of the graph
15 simply illustrates the impact of tax affecting
16 the net income.

17 Knowing that your operating losses
18 are eventually going to turn around and so
19 while you could get very excited about the
20 fact that you have a net margin in 2012 of
21 nearly ten percent, when you take the taxes
22 out, it's actually below six percent. So

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1 A It does.

2 Q And at least one of those lines
3 would -- you didn't have that 250, at least
4 one of those lines would dip below zero?

5 A That's correct.

6 Q Now if you prepared -- did you
7 prepare the analysis that is Exhibit 59?
8 Which is the next page there?

9 A Yes.

10 Q And can you explain this analysis
11 to the judges please?

12 A Yes, it was an attempt to -- there
13 was an awful lot of numbers that had been
14 presented so it's an attempt to illustrate the
15 changes on the cash position of the company
16 with respect to changes in royalty rates as we
17 go down from the assumptions contained within
18 the standard model.

19 And then it also illustrates the
20 effect of giving a tax effect to the -- to the
21 income. So the top portion of the graph, you
22 know, it's in three -- or the chart, it's in

1 still a long cry away from where mature
2 companies would want to be.

3 And in the final section of the
4 graph shows that what would happen in the
5 event that the low end of our proposed --
6 originally proposed range for royalties would
7 apply and you know, I think the, to me, there
8 are few things that change and you know,
9 including net income happening, if all
10 assumptions come true, theoretically one year
11 earlier happening in 2010 instead of 2011, but
12 it from -- for the way that I plan the
13 business, it's really -- it's more the cushion
14 that's built into the cash that, you know, you
15 -- you buy this lower rate, it creates what I
16 think is a \$90,000,000.00 cushion above the
17 functional equivalent of zero.

18 You know, to me, you know, why did
19 we put all of this together if I had a rate
20 that was going to come out at above 4.2
21 percent, it would clearly push me below the
22 functional equivalent of zero and with the

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1 philosophy that we've had of not wanting to be
2 below \$100,000,000.00 in cash, I would be
3 recommending to Mel that we go back to the
4 markets as the company needs to raise more
5 money.

6 Q Let's move on now to the last
7 chart which is Exhibit 60 and in the non-music
8 programming benchmark which is discussed at
9 paragraphs 15 to 21 of your written rebuttal
10 testimony, now you understand this is
11 presented in response to testimony originally
12 presented by Dr. Pelcovits, right?

13 A Yes.

14 Q Now, you're a CFO rather than an
15 economist, right?

16 A That's correct.

17 Q So you're not going to be here
18 opining as to the validity of the underlying
19 theory, is that right?

20 A That's correct.

21 Q Okay. So with that caveat noted,
22 let's -- I'd like to look briefly at the

1 going to be pulled out from the analysis, what
2 mistake, if any, did Dr. Pelcovits make with
3 respect to his analysis of the 2006 numbers?

4 A Well he got -- he missed one of
5 the pieces of compensation due to Howard and
6 you know, certain reasonably substantial
7 impact on the -- on his calculations so, there
8 was a piece of stock that was delivered to
9 Howard and his agent in January of 2007 but
10 the accounting expense for that was taken in
11 2006.

12 And so when Dr. Pelcovits was
13 adding up the Stern expenses and taking them
14 out of our expenditures, he left
15 \$83,000,000.00 behind resulting in -- when
16 he's trying to create a non-Stern programming
17 expense, by leaving a Stern related expense in
18 there, he fundamentally overstated it by
19 \$83,000,000.00.

20 Q And is that \$83,000,000.00
21 disclosed in your public filings?

22 A It is.

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1 issues that you see with the analysis as a CFO
2 of Sirius. First of all, Dr. Pelcovits
3 excluded Howard Stern from his analysis. Do
4 you agree or disagree with that exclusion, in
5 theory?

6 A You know, to me it makes sense. I
7 think that, you know, Howard, as we've talked
8 about before was a truly unique event for you
9 know, this company, the unprecedented
10 publicity that went along, you know, with it.

11 The response that we found from
12 our distribution partners in terms of we
13 believe a better establishing our brand and
14 cementing the extension of our OEM contracts
15 completely reversing the position in the
16 marketplace that existed with respect to, you
17 know, XM and again, they did absolutely
18 extraordinary promotional rally that went
19 along with that deal that if, you know, Dr.
20 Pelcovits' comfortable excluding it, I'm
21 certainly comfortable excluding it as well.

22 Q Assuming that Howard Stern is

1 Q Now, was it correct to just look
2 at 2006 and then project that on forward and
3 assume nothing had changed?

4 A No. If I remember right, I was
5 particularly confused with this.

6 Dr. Pelcovits used a 2012 surplus
7 analysis so it's very confusing to me as to
8 why he'd do this analysis as of 2006.

9 But, you know, knowing that we're
10 making investments in programming for the sake
11 of driving future subscription demand, it
12 seems to me that, well, everyone who looked at
13 the model has an understanding that those
14 programming costs will be better absorbed by
15 the growing subscriber base growing revenues
16 of the company going forward.

17 So I think using the last year of
18 the old license period doesn't really make a
19 whole lot of sense to me.

20 Q So is the programming expenses are
21 not going to scale with the growing revenue?

22 A Absolutely not.

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1 Q Finally, did Dr. Pelcovits
2 properly account for all of the benefits of
3 the non-music programming?

4 A No, when we make, unlike the music
5 programming, we -- we actually expect to sell
6 commercials on our non-music programming so we
7 consider the benefit we get from the
8 advertising revenue for those channels and so,
9 you know, again, on what Dr. Pelcovits wanted
10 to do was build a non-Stern, non-music
11 programming calculation and so what we should
12 include in that is in fact the ad revenues
13 related to those non-Stern, non-music channels
14 and so, we've gone along in this exhibit and
15 adjusted for that based on the Exhibit 58, is
16 it?

17 Q Does Exhibit 60 attempt to take
18 into account all of the additional benefits of
19 non-music programming?

20 A No. So we've testified in, you
21 know, I think a number -- through a number of
22 different witness that there are -- there are

1 recess for one hour.

2 (Whereupon at 12:38 p.m. a
3 luncheon recess was taken until 1:39 p.m.)

4 CHIEF JUDGE SLEDGE: Thank you.
5 We'll come to order.

6 Any cross examination?

7 MR. SCHNEIDER: Yes, Your Honor.

8 CROSS EXAMINATION

9 BY MR. SCHNEIDER:

10 Q Good afternoon, Mr. Frear,

11 A Good afternoon.

12 Q Now Sirius undertook internal
13 financial modeling for purposes unrelated to
14 this litigation and it offered projections out
15 to the Year 2011. Is that right?

16 A The statement is that we undertook
17 financial modeling unrelated to this
18 proceeding, so our analysts regularly, as part
19 of their jobs, produce financial models.

20 Q And they offer projections out to
21 the Year 2011, correct?

22 A We went through in the direct

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1 non-music programming investments we make for
2 the -- not only for the programming content
3 but for the brand affiliation and promotional
4 benefits that go along with that.

5 So whether it's Howard Stern or
6 NASCAR or the NFL or Martha Stewart, we've
7 discussed all of these things before, that
8 they have substantial non-programming related
9 values to us that there's testimony that has
10 been delivered by our assorted experts that
11 have sought to value that.

12 If you were to further adjust this
13 weighted rate of 1.57 percent that's
14 calculated pursuant to this schedule for the
15 components that the experts see as being
16 related to the endorsement value, the
17 promotional value, the exclusivity value of
18 these other deals, you would end up with a
19 number that is dramatically smaller than this.

20 MR. STURM: I have no further
21 questions of this witness.

22 CHIEF JUDGE SLEDGE: We will

1 phase of the trial, the models do run out to
2 2011, yes.

3 Q And you provided those models to
4 us in discovery last year, did you not?

5 A As I understand it, we produced
6 quite a number of models during the course of
7 discovery, yes.

8 Q Now leaving aside Exhibit 58 for a
9 moment, you've turned over nothing in
10 discovery in this rebuttal phase generated in
11 the normal course of business that updates
12 those financial models, have you?

13 A I have to be honest, Mr.
14 Schneider, I do not know all of what's been
15 produced in discovery in either the direct
16 phase of the rebuttal phase, so I don't think
17 I'm in a position to answer.

18 Q Well, I can't tell from your
19 report, have you stopped updating those
20 models?

21 A No, our analysts continue to do
22 today what they've always done, which is that

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1 they are regularly revising the model and
2 running it and re-running it. There's nothing
3 that has changed in the corporate behavior as
4 a result of this case.

5 Q So if in fact Sirius hasn't
6 provided updated models from last October to
7 us, it's simply because they have provided
8 them in discovery. They exist?

9 A Yes, there are additional models
10 that exist. That's correct.

11 Q And you did testify that you
12 haven't updated the subscriber numbers. I
13 thought I heard you say that?

14 A The company has suspended its
15 long-term guidance, and so we get into that
16 whole discussion about what's a plan versus a
17 model. The management hasn't sat down and
18 adopted a view with respect to long-term
19 subscriber numbers. No, they have not.

20 Q I guess I wasn't asking a clear
21 enough question. There are these models which
22 you do in a normal course and they had

1 organization, that we have not sat down as a
2 group and taken a perspective on long-term
3 subscriber numbers since our last budget
4 update, which would have been a year ago when
5 we would have been preparing for the 2007
6 budget. So we haven't gotten together as a
7 group and considered it.

8 There are quite a number of
9 analysts that work in my department who, as
10 part of the regular responsibilities, take it
11 upon themselves to make what they believe are
12 appropriate adjustments in the model. They
13 may have changed some of the subscriber
14 numbers in future years. That's not something
15 that I would have been looking at in the
16 normal course of what I use the models for.

17 Q So as far as you are aware, there
18 could be Sirius internal models used for
19 internal purposes, created by your analysis
20 with updated subscriber numbers?

21 A With the analysts' view of what
22 they think subscriber numbers might be, that's

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1 subscriber numbers in them up through 2011.
2 We saw that in October?

3 A That's correct.

4 Q My question is, and you have
5 updated these models, Sirius has?

6 A That's correct.

7 Q Do I understand you to say that
8 the subscriber numbers in the models are not
9 updated?

10 A Well, I wouldn't -- I wouldn't
11 have reviewed the models for that purpose, and
12 so whether or not the analysts have made -- in
13 the ordinary course of their work, they may
14 have made modifications to the subscriber
15 numbers that I wouldn't be aware of.

16 Q So you don't know whether Sirius
17 has internal subscriber estimates going out to
18 2011? You simply do not know?

19 A No. I think and I've stated this
20 before that if by Sirius, you mean the
21 management of Sirius, Mel, myself, Jim Myer,
22 who runs the sales and operations

1 correct.

2 Q And you have not chosen to rely on
3 them here?

4 A No, we have not.

5 Q Look at what you have relied on.
6 Exhibit 58? I take it this is the paper you
7 created for advocacy purposes for this
8 litigation, is that right?

9 A We created that paper to create a
10 perspective on the change in demand in the
11 effect that's having on the business.

12 Q This is not your internal model
13 update?

14 A It is -- as I've testified
15 earlier, that the input for that model is the
16 gross additions, which we obtained from the
17 consensus of the Wall Street analysts over the
18 course of the license term. Then we inputted
19 those gross additions into our model and it
20 produced that result.

21 Q So as I understand it, some of the
22 data in this what's called a litigation model,

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1 comes from analysts' projections, and some of
2 this data comes from your internal model?

3 A Specifically, the gross additions
4 come from the consensus of the analysts and
5 the rest of the numbers are generated by and
6 I'm sorry, also the advertising revenues for
7 2008 to 2012. The rest of the data comes from
8 our model.

9 Q So this -- apart from those two
10 lines, everything in this is the most recently
11 updated version of the model?

12 A Yes, it's the model that we have
13 today.

14 Q And it may be that that model has
15 these two lines, this updated data. But you
16 just chose not to use it? Is that fair?

17 A Certainly, that our model has
18 gross subscriber additions in them. They also
19 have advertising revenue numbers in them. As
20 I've testified earlier that we thought that
21 the analysts had as good a guess as anybody
22 about the demand for satellite radio in the

1 already done that work. I have not done that
2 work, and so we thought it was a reasonable
3 approach to simply adopt their view of demand
4 in satellite radio.

5 Q So this is kind of a mix-and-
6 match? This has got two lines from the
7 analysts and everything else from your
8 internal model, although we haven't really
9 seen your internal model?

10 A Yes.

11 JUDGE ROBERTS: Mr. Frear, why do
12 the analysts know more about what the
13 potential is for future satellite subscribers,
14 gross ads, than the company, the folks at the
15 company whose business that is? Why are they
16 more qualified to make those predictions?

17 THE WITNESS: It's a great
18 question, honestly. You know, we managed to
19 miss by a substantial margin in a very short
20 period of time what we thought the subscriber
21 numbers were going to be last year. That had
22 a very substantial effect on what those

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1 future and since management hadn't met and
2 hadn't developed such a view, that we would
3 use the consensus of the analysts.

4 Q Now the consensus of the analysts'
5 data, which is as I take it two lines, is it
6 in all respects lower than the data you had
7 provided us at least in discovery from the
8 model last October. Is that correct?

9 A That's correct.

10 Q And if I understand your
11 testimony, you actually don't know whether
12 this analysts' data is lower than what's in
13 the model today?

14 A What I know is the last time that
15 I reviewed the long-term subscriber numbers
16 and took a point of view as to whether or not
17 I thought they were reasonable, that there has
18 been a significant change in the market. If
19 I were to look at the long-term subscriber
20 numbers today, they would in fact be lower
21 than was in the previous version of the model
22 that I would have approved. The analysts have

1 subscribers would be for 2008 as well. So the
2 last time that Mel, Jim and I sat down and in
3 our expert opinion as operators of a satellite
4 radio company, which would have been in
5 roughly August, September of last year and
6 came to a view as to what we thought the
7 subscribers would be, we not only missed the
8 four-month forecast by a lot, but we also
9 missed what was possible for 2007.

10 You know, the business is young.
11 I don't think anyone really knows what the
12 ultimate demand for satellite radio is going
13 to be. We've got 20 people out there whose
14 business it is to not only look at our
15 industry but to look at many other, you know,
16 businesses and so whether they're looking at
17 how MP3 players might be used over time or
18 whether they're looking at the future of
19 terrestrial radio or how the internet might
20 develop as the delivery of media. You know,
21 they're going to take all of that learning
22 that they do in studying all those different

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1 industries.
2 We spend all of our time running a
3 satellite radio company, and in some respects
4 we have a narrower view of the world than the
5 analysts do.

6 BY MR. SCHNEIDER:

7 Q To follow up on that, you could
8 have done an analyst's model if that's your
9 view of the world. You didn't do that. This
10 is not, in fact, this Exhibit 58 an analyst's
11 model?

12 A Well, one of the things I think
13 that we do know more about than anybody else
14 is how the subscribers will behave. We simply
15 don't give the analysts an awful lot of
16 information. So the analysts don't know when
17 a retail subscriber comes in how many of them
18 choose an annual plan. Then what is the churn
19 behavior of that subscriber? Do they behave
20 differently than somebody who buys a monthly
21 plan or a two-year plan or a quarterly plan?
22 Does the retail subscriber behave differently

1 THE WITNESS: We do. I actually
2 look at the churn numbers everyday and we
3 track them by quite a number of different
4 reason codes and look at the trends over time.
5 We look at the differences between what
6 channel they come from. We look at Best Buy
7 subscribers and how they churn differently
8 than Circuit City or Ford subscribers. We
9 have a team of people that goes far beyond me
10 that analyzes that data and produces a pack
11 every month that's probably three quarters of
12 an inch thick that is devoted to in fact
13 looking exactly at those things. We have
14 different populations. They behave
15 differently.

16 So over the last four years, we've
17 learned a good bit about it. We found, you
18 know, a lot of statistical consistency in how
19 those subscribers behave. So we incorporate
20 that into the detailed model assumptions. Why
21 would we run out of an Excel file? If you go
22 to the bottom of the Excel file it has tens of

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1 than the OEM subscriber?

2 They really don't have access to
3 any of that information because we choose not
4 to provide it to them. They also don't have
5 access to then all of the cost elements --
6 well, a lot of it, that our contract with
7 Chrysler is very different than our contract
8 with Ford is very different from our contract
9 with Best Buy or Wal-Mart or BMW. And so in
10 order for the model to produce an accurate
11 result, we believe that we have much greater
12 insight into what happens after that
13 subscriber comes into the door than the
14 analysts can possibly have given the limited
15 access to data that they have.

16 Q Directing your attention to page
17 five --

18 JUDGE ROBERTS: Wait a minute.
19 Mr. Frear, you obviously know what your annual
20 churn rate is for your subscribers. Do you
21 know how long your subscribers typically stick
22 with you?

1 thousands of rows and all these columns. It's
2 because they incorporate all these different
3 assumptions into the development of the model.

4 JUDGE ROBERTS: Do you know the
5 approximate percentage of subscribers that
6 were with you in 2004 that are still with you
7 now?

8 MR. STURM: Your Honor, that may
9 get into confidential information and I don't
10 -- if so, I would ask that we close the court
11 room before he gives an answer to that.

12 THE WITNESS: It is something that
13 wouldn't be public today.

14 CHIEF JUDGE SLEDGE: The number of
15 subscribers in 2004 that are still subscribers
16 is not public information?

17 JUDGE ROBERTS: Actually, 2003 was
18 four years ago.

19 THE WITNESS: Well, rather than as
20 a rate, generally we know exactly how many
21 subscribers we had from 2003 that are still
22 with us today. I can approximate the

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1 percentage for you, which I would prefer to do
2 in the absence of the public. Off the top of
3 my head, I wouldn't know the precise number.
4 But it is a knowable number. It is something
5 that our people look at.

6 JUDGE ROBERTS: I was just looking
7 for an approximation, not the precise size.

8 THE WITNESS: Well, so here's what
9 we have said publicly. We have said publicly
10 that our self-paid churn rate has been very
11 consistently in the range of 1.5 to 1.7
12 percent per month. So you lose about 18
13 percent of your subscribers each year. So if
14 we put somebody on in 2003, we get to the end
15 of 2007, and we've had -- you know, we've gone
16 from 100 percent to 82 percent to something
17 that's then -- it's hard to do the math.
18 Probably something in the range of 66 percent
19 to then something that is going to be
20 approaching 50 percent.

21 We say that the average life of a
22 subscriber, we disclose this in our 10K, is

1 2006 projections with analysts' October 2006
2 projections, are you?

3 A We're not.

4 Q And you certainly are not
5 comparing Mr. Butson's July 2007 projections
6 with the analysts' 2007 projections, are you?

7 A Not in this table, no.

8 Q Not in any of these tables?

9 A That's what my testimony was about
10 earlier. Correct.

11 Q You are comparing what Mr. Butson
12 found in October 2006 to what the analysts
13 found in what you said sometime this summer?

14 A That's correct.

15 Q So the legitimate points that
16 you're making here -- strike that. If you
17 look at the 2006 consensus and the 2006 Mr.
18 Butson, these two sets of numbers will be much
19 closer. Would they not?

20 A Off the top of my head, I don't
21 know what the difference would be.

22 Q Is it a legitimate point that

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1 approximately 3.5 years. Over the course, as
2 you can see by that number, it gets pretty
3 close to 50 percent over 3.5 years. For as
4 smart as we are today, that's on average how
5 long we think somebody sticks around. They're
6 with us for about 42 months.

7 JUDGE ROBERTS: I thought I had
8 read that in the testimony. Thank you.

9 BY MR. SCHNEIDER:

10 Q So looking at page five of your
11 testimony, the top of the page you have a
12 chart projected Sirius gross ads. I take it
13 this is part of the case that you're making
14 here that you find Mr. Butson's projections
15 vastly over-optimistic and unrealistic. Is
16 that fair?

17 A Relative to the consensus, that is
18 correct.

19 Q I just want to be clear about
20 this. You were comparing Mr. Butson's
21 projections with the consensus projections.
22 You are not comparing Mr. Butson's October

1 you're making here is that the consensus view
2 on October 2006 is very different than the
3 consensus view in July 2007?

4 A The point that we're making and I
5 think I've testified to this is is that we
6 believe that the demand for satellite radio
7 has changed dramatically in the course of the
8 last year and that we think it is appropriate
9 to reflect that in any models that are used
10 for the consideration of an appropriate rate
11 in this case.

12 Q And that point has nothing to do
13 with Mr. Butson?

14 A Well, it does to the extent that,
15 you know, Mr. Butson should be reflecting an
16 accurate view of today's world as well. So
17 we're all affected by that.

18 Q Well, you know, you've testified
19 about what Mr. Butson has done today versus
20 the consensus. Isn't it the case, looking at
21 this chart here on the top of page five, that
22 Mr. Butson's current projections are in every

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1 single year lower than the consensus
 2 projections?
 3 A My understanding is that I don't
 4 know about every single year. I do believe
 5 that Mr. Butson's current projections, which
 6 we didn't have, of course, at the time that we
 7 prepared this written rebuttal, are in fact
 8 lower than the consensus indicated here.
 9 Q Turning to page two, paragraph
 10 five of your testimony, after stating that Mr.
 11 Butson's projections were vastly over-
 12 optimistic and unrealistic on paragraph four,
 13 you go ahead and give an example of that and
 14 that's the subscriber numbers in paragraph
 15 five. Correct?
 16 A That's correct.
 17 Q I believe you testified this
 18 morning orally that Mr. Butson's subscriber
 19 numbers were even more optimistic than the
 20 consensus you had at that time. Is that what
 21 you testified to this morning?
 22 A Sorry, which time?

1 Q And it didn't lower that guidance
 2 until December of 2006?
 3 A That's correct.
 4 Q So if I could put this together,
 5 Sirius had internal projections that were
 6 substantially lower than the public guidance
 7 it was giving in 2006. That's your view?
 8 A I don't know where you are making
 9 that statement from.
 10 Q I believe you testified this
 11 morning that Sirius had internal projections
 12 that were lower than Mr. Butson's 6.3 million?
 13 A So I guess we'll have to pull the
 14 record, back up and read it, Mr. Schneider.
 15 I actually don't believe that I made that
 16 statement, but perhaps I made an error.
 17 Q Well, when Sirius had guidance of
 18 6.3 million, I take it it was being as vastly
 19 over-optimistic and unrealistic as Mr. Butson.
 20 Is that fair?
 21 A Apparently so.
 22 Q So I take it your legitimate point

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1 Q October 2006?
 2 A My recollection is is that Mr.
 3 Butson's subscriber projections were on the
 4 aggressive end of analysts' estimates. That's
 5 what I recall.
 6 Q I believe this morning you
 7 testified that they were higher than your
 8 internal projections?
 9 A If that's what I said, I'll take
 10 your word for it.
 11 Q And that raised a question in my
 12 mind, because in this paragraph five itself,
 13 you see, Mr. Butson projected that Sirius
 14 would in 2006 with 6.3 million subscribers.
 15 Do you see that?
 16 A I do.
 17 Q And the very last sentence, or the
 18 next to last sentence of that very paragraph
 19 you say that Sirius had guidance and the
 20 guidance was 6.3 million subscribers. Do you
 21 see that?
 22 A Yes, I do.

1 here had nothing to do with Mr. Butson?
 2 A I must admit, sir, I don't
 3 understand the question that you've asked me.
 4 Q I'll withdraw the question. On
 5 page seven --
 6 CHIEF JUDGE SLEDGE: What are the
 7 different dates that we're talking about on
 8 these projections on page six. Butson's
 9 projections of October 2006. And the
 10 analysts' projections are when?
 11 THE WITNESS: From this summer.
 12 So probably June.
 13 CHIEF JUDGE SLEDGE: June of 2007?
 14 THE WITNESS: That's correct, sir.
 15 It may be July, sir, but it would be June-July
 16 time frame.
 17 CHIEF JUDGE SLEDGE: And we don't
 18 know what the Sirius projections after October
 19 2006 are?
 20 THE WITNESS: Sirius had no long-
 21 term projections after October 2006.
 22 CHIEF JUDGE SLEDGE: Well, that's

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1 -- the model is updated constantly. The model
2 includes subscriber projections. How is that
3 last answer correct?

4 THE WITNESS: I think -- I've made
5 a distinction throughout these proceedings
6 between the work product of an analyst and
7 models that would be approved by the
8 management that -- this afternoon.

9 CHIEF JUDGE SLEDGE: That's a
10 different answer than what you said a minute
11 ago. So Sirius has not adopted a formal
12 policy on projections?

13 THE WITNESS: That's correct.

14 CHIEF JUDGE SLEDGE: But we don't
15 have the Sirius projections since October '06
16 on subscribers?

17 THE WITNESS: Well, I don't know
18 that. As far as I know, we've met all of our
19 responsibilities with respect to discovery.
20 We've produced a great number of models and
21 provided them to SoundExchange's counsel and
22 I can't be certain of what was produced, sir.

1 models and delivered them to us subsequent to
2 October 2006. That's your testimony? That
3 you know?

4 A Yes. We delivered them to you
5 after October 2006. That's correct.

6 MR. STURM: Your Honor, there are
7 50 gigabytes of models that were produced in
8 June of 2007, so I'm not sure what the basis
9 is for Mr. Schneider's continued questioning
10 on this point because there have been tons and
11 tons and tons of models produced in discovery
12 in this case.

13 CHIEF JUDGE SLEDGE: Mr. Sturm,
14 you're not a witness. You're testifying.

15 BY MR. SCHNEIDER:

16 Q Let me direct your attention to
17 page seven, to paragraph 14 which is a
18 paragraph that starts actually on page six.

19 Now in the middle of this page
20 seven, by footnote five, you say that "the
21 magnitude of these discrepancies renders Mr.
22 Butson's model and our conclusion is based on

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1 CHIEF JUDGE SLEDGE: All right,
2 thank you.

3 BY MR. SCHNEIDER:

4 Q And what's the basis of your
5 understanding that you've provided a great
6 number of models to SoundExchange's counsel
7 after October 2006?

8 A It's based on what's been reported
9 to me by our counsel, as well as members of my
10 staff who coordinate with them on the
11 production of the materials.

12 Q Does your staff provide your
13 counsel with updated models after October
14 2006?

15 A We'd have to go back and check the
16 record. I don't -- as I've said twice
17 already, I don't know the specifics of what's
18 been produced in discovery and what has not,
19 other than the fact that we've produced a
20 great number of models and delivered them to
21 you.

22 Q You've produced a great number of

1 a fundamentally, unreliable and misleading" --
2 do you see that?

3 A I do.

4 Q Now looking at the top of this
5 page, in October 2006, and this is the same
6 thing here. We're talking about these are Mr.
7 Butson's models in October 2006, right?

8 A That's correct.

9 Q And the consensus models in --
10 this summer, 2007. Correct?

11 A That's correct.

12 Q Top of this page, do you see that
13 Mr. Butson projected right at the top left
14 corner there \$1.76 billion in revenue?

15 A That's correct.

16 Q Now Sirius' guidance that was in
17 place at this time was also for \$1 billion,
18 was it not?

19 A At which time?

20 Q October 2006.

21 A In October 2006, our guidance was
22 that we would have approximately \$1 billion in

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1 revenue. That's correct.

2 Q And it's not true that that
3 guidance was fundamentally misleading, was it?

4 A No.

5 Q Looking at October 2006, at that
6 time period, Mr. Butson has projected for the
7 Year 2010 \$2.428 billion in gross revenue. Do
8 you see that?

9 A I do.

10 Q That's the projection you
11 described as fundamentally unreliable and
12 misleading, correct?

13 A No, I don't believe that is
14 correct. I think you're confusing the time
15 frames, Mr. Schneider, that there is nothing
16 inherently wrong with Mr. Butson's projections
17 as of October 2006. They were on the
18 aggressive end of things. We provided
19 testimony to that earlier.

20 The fact is is that market
21 conditions have changed dramatically. There's
22 nothing about the statement "fundamentally

1 new model?

2 A As I testified earlier, Mr.
3 Butson's new model produces a revenue result
4 that is in the same ballpark as what the
5 consensus gross ads run through out model
6 produces. It just gets there in a slightly
7 different way. He has price increases that
8 would appear to be built into his model and so
9 he gets there with higher prices and fewer
10 subscribers.

11 Q We'll get to that next. In your
12 modeling, your Exhibit 58, you assume no price
13 increase, correct?

14 A That's correct.

15 Q In fact, that was one of the two
16 lines that you took from analysts instead of
17 your own model when you made that assumption,
18 correct?

19 A Which lien?

20 Q Subscribers, gross additions.

21 A We took gross additions, that's
22 correct.

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1 unreliable and misleading that is intended to
2 impugn Mr. Butson's work in any way, shape or
3 form. It is simply outdated.

4 Q Ah. Because Sirius had guidance
5 in place for 2010 of \$3 billion in revenue,
6 did it not?

7 A Things have changed. That's
8 correct. Changed dramatically, as we've seen.

9 Q Back in May of 2007 when Mr.
10 Karmazin was shown the guidance of \$3 billion
11 for 2010, and asked specifically about it,
12 what he said in May of 2007 was that
13 "fundamentally, my viewpoint is nothing has
14 changed in my outlook on how I see the company
15 longer term." Isn't that his answer?

16 A Mr. Karmazin explicitly suspended
17 long-term guidance four months before that and
18 we covered that in the direct case.

19 Q I'd like to ask you the same
20 question I asked before. You now have looked
21 at Mr. Butson's new model. How do these new
22 numbers relate to the numbers in Mr. Butson's

1 Q Isn't it the case that every
2 single analyst you relied on in creating this
3 model has pretty good price increase?

4 A I haven't reviewed the analysts'
5 models for price increases. We have no
6 intention of implementing one. If they assume
7 a price increase, that's something internal to
8 their model that doesn't represent the way we
9 intend to operate the company.

10 Q Let me show you what I'll mark as
11 Exhibit 73.

12 (Whereupon, the above-
13 referred to document was
14 marked as SX Exhibit 73
15 for identification.)

16 (Pause.)

17 Are you familiar with this
18 document?

19 A I am not.

20 Q You're not?

21 A No.

22 Q Didn't you testify earlier about

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1 an analyst's analysis that In Synch performed?
 2 A Yes.
 3 Q Do I understand from your
 4 testimony that -- have you reviewed that
 5 analysis?
 6 A This document is not familiar to
 7 me. Members of my staff coordinated with In
 8 Synch to obtain the analyst's consensus. I
 9 reviewed Exhibit 58.
 10 Q Why don't you look through this
 11 document and see if it appears to represent to
 12 you a compilation of analysts' reports and
 13 conclusions.
 14 A Would you like me to review all of
 15 the pages?
 16 Q Look at the first two pages, which
 17 is the summary -- purports to be a summary of
 18 all the pages.
 19 (Pause.)
 20 A Mr. Schneider, I've never seen
 21 this document before to my knowledge. If you
 22 tell me it's from In Synch and that the

1 A I do.
 2 Q Remind the Court what ARPU is
 3 because I always forget. Excuse me, go ahead.
 4 A Average Revenue Per U -- I assume
 5 the U means Unit.
 6 Q Is there where you would see the
 7 effects of a rate increase?
 8 A Yes. You could see the effects of
 9 a rate increase here.
 10 Q Let me ask you to compare the line
 11 there with the line on Exhibit 58.
 12 A Which line?
 13 Q The ARPU line on the second page,
 14 Exhibit 58. One, two, three, four, five lines
 15 up from the bottom?
 16 A Yes.
 17 Q And they start about the same it
 18 looks like 10, 46 and 10? I'm sorry, I had
 19 that wrong. 2007 is 1078 versus 1087, do you
 20 see that?
 21 A I do.
 22 Q They end quite differently. The

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1 columns that say "average" represent the
 2 average of the analysts' consensus for all the
 3 pages that follow, I'm sure that's exactly
 4 what it is.
 5 Q Do you see at the bottom left it
 6 says "In Synch analytic's confidential"?
 7 A I do see it, but I don't know what
 8 the page represents.
 9 Q So Sirius, I take it, doesn't have
 10 a witness that actually can testify to the --
 11 what In Synch did?
 12 A I can testify to what we requested
 13 of In Synch. I can testify to what we used In
 14 Synch for. And I can testify to how we
 15 created Exhibit 58. The rest of the work
 16 product of In Synch I would not be able to
 17 testify to.
 18 Q Let me ask you to turn to the
 19 second page of this exhibit.
 20 Three lines up from the bottom
 21 there's a row called "Monthly ARPU." Do you
 22 see that?

1 discover material ends at 1317, do you see
 2 that?
 3 A I do.
 4 Q And your own model ends at 1201.
 5 Do you see that?
 6 A Yes, I do.
 7 Q And that reflects the fact that
 8 your model assumes considerable less revenue
 9 from subscribers than this, what's called the
 10 In Synch analytics. Is that fair?
 11 A So again, not having reviewed the
 12 In Synch analytics nor reviewed the revenue or
 13 ARPU assumptions used by the analysts, I
 14 really don't know what creates the difference.
 15 Again, what we did with Exhibit 58
 16 was use their gross additions and run it
 17 through our model which has various plan price
 18 assumptions in it and it produces a calculated
 19 result. This line reported ARPU including
 20 advertising is not an input to the model. It
 21 is a computation that results from the model.
 22 Q How do you know that you used

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1 those ads from In Synch. I thought you said
2 you only looked at Exhibit 58?

3 A I directed my staff to do that.
4 We talked about how we should prepare the
5 exhibit. They tend to be pretty good. I
6 don't check all of their work at that level of
7 detail, but when they represent to me that's
8 what they've done, I believe that's what
9 they've done.

10 MR. SCHNEIDER: I would like to
11 move Exhibit 73, is that the right number,
12 into evidence. I believe he testified it's
13 prepared by his staff and he relied on it at
14 least for some of the data that he's used in
15 Exhibit 58.

16 CHIEF JUDGE SLEDGE: Any objection
17 to Exhibit 58?

18 MR. STURM: No objection, Your
19 Honor.

20 CHIEF JUDGE SLEDGE: Without
21 objection, it's admitted.

22 (The document, having

1 with what would even be expected to rate
2 inflation. Is that correct?

3 A We don't expect -- that the market
4 will sustain an increase in prices for
5 satellite radio subscriptions. So we
6 definitely don't have price increases that
7 would keep up with the pace of inflation.

8 Q So just to be clear, in real
9 terms, your modeling here is a decrease in
10 subscription prices?

11 A We are.

12 Q And 73, going back to Exhibit 73,
13 to the second page of that exhibit. The very
14 first line of numbers of free cash flow. Do
15 you see that?

16 A I do.

17 Q And turning to your Exhibit 58,
18 the very next to last line of that exhibit,
19 also have a row of free cash flow. Do you see
20 that?

21 A I do.

22 Q And once again here, it appears

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1 been marked previously
2 for identification as SX
3 Exhibit No. 73, was
4 received in evidence.)

5 BY MR. SCHNEIDER:

6 Q Now when you say that you didn't
7 build a rate increase into your model --

8 CHIEF JUDGE SLEDGE: Perhaps that
9 the wrong number in my earlier exhibits. 73
10 is offered and admitted.

11 BY MR. SCHNEIDER:

12 Q Mr. Butson's model had the
13 subscription places to keep up with inflation.
14 Is that right?

15 A I don't know what Mr. Butson
16 assumed with respect to subscription prices.
17 Rather than seeing the result what his
18 rationale was for the increases in ARPU, I
19 don't have any insight into -- I just note
20 that they increase and they increase at a
21 greater rate than they do in our model.

22 Q Your ARPU numbers do not keep up

1 that this consensus view of free cash flow is
2 more optimistic in every year than the free
3 cash flow you provide in this litigation
4 model. Is that fair?

5 A The numbers -- I haven't reviewed
6 them, but we can compare each number line by
7 line or column by column.

8 Q Have you done the comparison? So
9 2007, we have a negative \$171 million and the
10 analysts' consensus has a negative \$254
11 million in --

12 MR. STURM: Your Honor, if he is
13 going to go into this level of detail, I'd ask
14 that we go into restricted session.

15 CHIEF JUDGE SLEDGE: Is that
16 necessary in your questioning?

17 MR. SCHNEIDER: It is not
18 necessary. And I think what I'll do is
19 withdraw the question.

20 BY MR. SCHNEIDER:

21 Q If I ask you to assume that the
22 analysts project over \$600 million more free

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1 cash flow over the course of the rate term
2 than you have put down, I ask you to make that
3 assumption, okay? The numbers are what they
4 are. What do you think explains that?

5 A Well, it would be consistent with
6 the direction that I've seen in Mr. Butson's
7 rebuttal model which would imply an
8 overstatement of revenue and an understatement
9 of costs.

10 Q Now you've provided us in
11 discovery no quantitative analysis supporting
12 your claim that Sirius is unable to maintain
13 retail prices that keep pace with inflation,
14 have you?

15 A Other than the expert opinion of
16 the Chief Executive Officer in the second
17 quarter earnings call I don't believe we've
18 provided you any evidence.

19 (Pause.)

20 Q 74?

21 (Pause.)

22 I show you an exhibit I've marked

1 A Yes.

2 MR. SCHNEIDER: I'd like to move
3 this into evidence.

4 CHIEF JUDGE SLEDGE: Any objection
5 to Exhibit 74?

6 MR. STURM: No, Your Honor.

7 CHIEF JUDGE SLEDGE: Without
8 objection, it's admitted.

9 (The document, having
10 been marked previously
11 for identification as SX
12 Exhibit No. 74, was
13 received in evidence.)

14 BY MR. SCHNEIDER:

15 Q Now Mr. Karmazin on the very first
16 page of this document provides some data about
17 your second quarter. Do you see that, 561,000
18 net additions, 7.41 million subscribers, 1.1
19 million net new subscribers. Do you see that?

20 A I do.

21 Q In each of those metrics, you're
22 ahead of schedule. Is that fair?

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1 for purposes of identification as
2 SoundExchange Exhibit 74.

3 (Whereupon, the above-
4 referred to document was
5 marked as SX Exhibit No.
6 74 for identification.)

7 Are you familiar with this
8 document?

9 A I believe so.

10 Q And what is this document?

11 A It looks to be a transcript of our
12 second quarter call.

13 Q Second quarter call?

14 A Did I say second quarter or first
15 quarter?

16 Q Second quarter call.

17 A Second quarter call.

18 Q I just didn't hear you, sorry.

19 What is a second quarter call?

20 A Second quarter earnings call.

21 Q This is how the company explains
22 to the public its second quarter earnings?

1 A No. I think -- I believe what it
2 says is that we are on schedule to meeting our
3 guidance for more an eight million
4 subscribers.

5 Q On page five of the report --

6 A Of the transcript?

7 Q Of the transcript, thank you. Do
8 you see Mr. Peck has asked Mr. Karmazin a
9 question about the merger? Do you see that?

10 A I do not.

11 Q It's page six. I apologize. Is
12 it Mr. Karmazin's view -- strike that. Is it
13 your view that the merger was likely to be
14 completed?

15 MR. STURM: Your Honor, I object.
16 There has been absolutely no testimony about
17 the merger whatsoever from this witness about
18 either in the written direct or in his oral
19 testimonies. His objective is beyond the
20 scope of the direct.

21 CHIEF JUDGE SLEDGE: Overruled.

22 THE WITNESS: I am sorry. What is

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1 the question?

2 BY MR. SCHNEIDER:

3 Q Is it the company's view that the
4 merger is more likely than not --

5 CHIEF JUDGE SLEDGE: That was not
6 the question. Is it your view, is the
7 question.

8 By MR. SCHNEIDER:

9 Q Is it your view, thank you, that
10 the merger is more likely than not going to be
11 consummated?

12 A It's my view that the merger
13 should be approved. I don't know if the
14 merger will be approved.

15 Q Has Mr. Karmazin expressed the
16 view that the merger is more likely than not
17 going to be consummated?

18 A The company has taken a view that
19 after consulting with regulatory counsel in
20 both the FCC side as well as anti-trust
21 counsel that we have a, this is a decision
22 that we reached last fall and discussed with

1 free cash flow and subscribers, EBITDA, and
2 the like, related to the merged company?

3 A I don't believe that that is
4 precisely correct, no, at this point.

5 (Whereupon, the above-
6 referred to document was
7 marked as SX Exhibit No.
8 75 for identification.)

9 BY MR. SCHNEIDER:

10 Q 75? I have before you what's been
11 marked for purposes of identification as
12 Exhibit 75 and if I may explain for the
13 record, just so there is no confusion what
14 this document is, because there are some
15 public and then some non-public pieces to it.
16 First, let me ask you to strike that.

17 Do you recognize this document?

18 A I think I do.

19 Q And what is this document?

20 A I believe it is our Reply Comments
21 related to the merger that we have filed with
22 the FCC in July.

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1 our board that there was a better than 50
2 percent chance of approval

3 Q And just to be clear, the
4 projections you provide here in your testimony
5 are projections based on the assumption that
6 the merger is not consummated. Is that fair?

7 A There are projections for Sirius
8 and Sirius only. The projections don't
9 reflect anything related to the XM business.

10 Q Now there are projections as to
11 how the merged company will do on many of
12 these metrics. Is that not the case?

13 A So where are we on protective
14 order? I'm sorry. Just when we get into the
15 merger area, Your Honor, this is an uncertain
16 milieu to me. I don't know who is in the room
17 and who should be in the room? I'm sorry.

18 CHIEF JUDGE SLEDGE: The public is
19 in the room.

20 BY MR. SCHNEIDER:

21 Q And all I ask, and I'll be more
22 precise, there are data on metrics such as

1 MR. SCHNEIDER: And what I would
2 like to make clear for the record is that the
3 first part goes to page 103 is redacted and is
4 public. What follows in Exhibit A was
5 produced to us in discovery and was at least
6 when produced subject to the protective order.
7 And so, it is a mixture of those two things.
8 I would like to move it into evidence.

9 CHIEF JUDGE SLEDGE: Any
10 objections to Exhibit 75?

11 MR. STURM: Yes, Your Honor.
12 Again, there has been no testimony solicited
13 from the witness on direct, either in the
14 written direct or orally concerning the
15 merger. So it's both beyond the scope and
16 it's irrelevant. In addition, I believe that
17 the witness would not have seen significant
18 portions of this document. The unredacted
19 portion, part of the document in the middle
20 because it will contain both confidential
21 Sirius and XM information that would not have
22 been, the XM portion of it would not have ever

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1 been seen by the witness.

2 CHIEF JUDGE SLEDGE: Mr.
3 Schneider?

4 MR. SCHNEIDER: I'm going to
5 withdraw the motion for now and we'll proceed
6 with my questions.

7 BY MR. SCHNEIDER:

8 Q I'll direct your attention to
9 Exhibit D of this document. Are you familiar
10 with this document?

11 A I am.

12 Q And what is this?

13 A It's a declaration that I provided
14 as part of the reply.

15 Q And what is the subject of this
16 declaration?

17 A I honestly haven't looked at it in
18 a long time, so I've managed to forget what's
19 in it. But I think it goes through our
20 perspective of the categories where synergies
21 can be expected to be high in the merger.

22 Q And what do you mean by synergies?

1 then in fact, merger could and should produce
2 a more financially viable entity.

3 Q What's the next number? 76. I
4 would like to move Exhibit D into evidence as
5 Exhibit 76 and I will correct the copies to
6 assure they have a proper indication on it.

7 (Whereupon, the above-
8 referred to document was
9 marked as SX Exhibit No.
10 76 for identification.)

11 (Pause.)

12 CHIEF JUDGE SLEDGE: Any objection
13 to Exhibit 76?

14 MR. STURM: Yes, Your Honor.
15 Again, there was no direct testimony from this
16 witness regarding the merger or synergies from
17 the merger or anything else related to the
18 merger. So it's beyond the scope of direct
19 and not relevant.

20 With respect to this prior
21 testimony, it doesn't purport to impeach
22 anything that he said and so therefore it's

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1 A Economic efficiencies that are a
2 direct result of the merger.

3 Q And is it fair to say looking at,
4 for example, pages two through seven of this
5 document that you described it as cost savings
6 that you expect would accrue in the merged
7 company?

8 A Yes.

9 Q In looking at pages eight and nine
10 and ten, is it fair to say you describe
11 increased revenues you would expect to accrue
12 in the merged company?

13 A Yes.

14 Q And is it fair to say that if
15 those cost savings and increased revenues, in
16 fact, occur, that would present a very
17 different financial picture of the financial
18 picture you present in your written testimony?

19 A If the merger is approved, and if
20 synergies are realized, and if there's no
21 other deterioration in the business either in
22 terms of subscriber demand or cost behavior,

1 not properly admitted on any other basis.

2 CHIEF JUDGE SLEDGE: Any response?

3 MR. SCHNEIDER: Yes. In his
4 written testimony, Mr. Frear has made
5 statements that although the future is
6 uncertain the most likely outcome in his mind
7 for data such as gross ads, revenue and all of
8 the other categories including Exhibit 58 are
9 such as he presented them in Exhibit 58 and in
10 his report. I believe I've elicited testimony
11 that he believes, in fact, the more likely
12 outcome is that there will be a merger and
13 that there will be very different results in
14 all of these metrics and I think I'm entitled
15 to introduce evidence on the record to try to
16 establish what those metrics would be.

17 CHIEF JUDGE SLEDGE: Mr. Sturm?

18 MR. STURM: He didn't say that he
19 believed that the merger was more -- his
20 company has taken the position it should be
21 approved, but that hasn't -- it isn't that
22 it's more likely than not and --

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1 CHIEF JUDGE SLEDGE: Mr. Sturm,
 2 you're inaccurately reflecting what was said.
 3 MR. STURM: I think he said that
 4 the company at one time had taken the position
 5 that it was more likely to be approved than
 6 not.
 7 CHIEF JUDGE SLEDGE: Which is the
 8 opposite of what you just said.
 9 MR. STURM: I'm drawing a
 10 distinction between what he testified to and
 11 between his personal view which I don't think
 12 has been elicited and what the company has
 13 said on one occasion. But in any event,
 14 there's absolutely no testimony in terms of
 15 what the effects on Exhibit 58 would be if, in
 16 fact, the merger goes through. Obviously,
 17 there would be significant changes, but there
 18 isn't any testimony with respect to the merger
 19 at all that he has presented.
 20 CHIEF JUDGE SLEDGE: You didn't
 21 address his response, so that's all you've
 22 got?

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1 MR. STURM: I'm sorry, what
 2 portion didn't I address, Your Honor.
 3 CHIEF JUDGE SLEDGE: You didn't
 4 address any of it.
 5 MR. STURM: Well, to the extent --
 6 as I understand -- the company has taken the
 7 position that the merger is certainly a
 8 possibility to be approved, but that is not --
 9 the company has not taken the position -- has
 10 not put forward any evidence as to what plans
 11 in this case as to what the impact of any of
 12 these things would be. It is at this point
 13 entirely speculative what synergies would be
 14 and so there isn't any basis, particularly
 15 based on what he said in his direct or his
 16 written direct or on the oral direct about
 17 what the possible effects of the merger would
 18 be.
 19 CHIEF JUDGE SLEDGE: Objection is
 20 overruled. The exhibit is admitted.
 21 (The document, having
 22 been marked previously

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1 for identification as SX
 2 Exhibit No. 76, was
 3 received in evidence.)
 4 BY MR. SCHNEIDER:
 5 Q Turning to the first page of text
 6 of Exhibit 76, paragraph 3. You say that
 7 "prior to the announcement of the merger and
 8 immediately thereafter, analysts estimated
 9 there will be efficiencies." Do you see that?
 10 A I do.
 11 Q And it says that you reviewed
 12 those reports and you've independently
 13 considered that issue?
 14 A Yes.
 15 Q Let me show you what's been marked
 16 as SoundExchange Trial Exhibit 77.
 17 (Whereupon, the above-
 18 referred to document was
 19 marked as SX Exhibit No.
 20 77 for identification.)
 21 (Pause.)
 22 Are you familiar with this

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1 document?
 2 A I am.
 3 Q And what is it?
 4 A It's the Deck that the Morgan
 5 Stanley team used to brief the Board on their
 6 opinion with respect to the merger and its
 7 fairness to our shareholders.
 8 Q Its fairness to our shareholders.
 9 And turning to page 31 of the Deck.
 10 CHIEF JUDGE SLEDGE: Deck, D-E-C-
 11 K?
 12 BY MR. SCHNEIDER:
 13 Q First of all, let me ask, were you
 14 present at this meeting?
 15 A I was.
 16 Q And what is the material on page
 17 31 meant to represent?
 18 A This is a representation of what
 19 the Wall Street analysts thought the combined
 20 company would look like on certain metrics.
 21 Q And turning to page 32 of the
 22 presentation, what is this data meant to

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1 represent?

2 A This is a representation of taking

3 the two what we call the merger plans, so

4 these were -- the two companies exchanged

5 their five-year forecast, forecast for 2010,

6 I believe it was. Maybe it's 2011, that

7 existed at the time that the merger

8 discussions began around Christmas of last

9 year. And you know, I believe -- I don't know

10 for sure. This is Morgan Stanley's work

11 product. It is not mine. And I did not

12 review their work product. But I believe

13 they added the two together.

14 MR. SCHNEIDER: I would like to

15 move Exhibit 77 into evidence.

16 CHIEF JUDGE SLEDGE: Any objection

17 to Exhibit 77?

18 MR. STURM: Yes, Your Honor, for

19 the reasons stated previously.

20 CHIEF JUDGE SLEDGE: Objection is

21 overruled. It's admitted.

22 (The document, having

1 (Pause.)

2 Are you familiar with this

3 document?

4 A I am.

5 Q And what is this document?

6 A This is an unsolicited pitch for

7 the Merrill Lynch Investment Banking team who

8 once Mel made comments about his interest in

9 merging with SX at the deal.com conference

10 earlier that summer. It provoked a flurry of

11 phone calls to my office as well as other

12 offices in the company with every investment

13 banker on the street wanting to represent us.

14 So it's just an unsolicited pitch for Merrill

15 Lynch.

16 Q And turning to page -- it's marked

17 here. Look at the Bates stamp numbers, the

18 little numbers on the bottom right, Sirius

19 46518.

20 (Pause.)

21 Do you see that page number?

22 A I do.

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1 been marked previously

2 for identification as SX

3 Exhibit No. 77, was

4 received in evidence.)

5 MR. STURM: Your Honor, I would

6 add this document is strictly -- and I move

7 that it be -- I do not believe it has been

8 publicly disclosed. I would move that it be

9 subject to the protective order.

10 CHIEF JUDGE SLEDGE: Any

11 objection?

12 MR. SCHNEIDER: No objection.

13 CHIEF JUDGE SLEDGE: Motion is

14 granted.

15 BY MR. SCHNEIDER:

16 Q I'd like to show you what is

17 marked for purposes of identification as

18 SoundExchange Trial Exhibit 78.

19 (Whereupon, the above-

20 referred to document was

21 marked as SX Exhibit No.

22 78 for identification.)

1 Q Strike that question.

2 (Pause.)

3 Are you familiar with this

4 document?

5 A I am.

6 Q And what is this document?

7 A Lehman Brothers was one of two

8 banks that we actually asked to pitch us

9 specifically was the advice and so this is one

10 of their pitch books with respect to their

11 attempt to win the business.

12 Q And did you actually engage a bank

13 for this business?

14 A We did.

15 Q And which bank was that?

16 A Morgan Stanley.

17 Q And turning to page seven of this

18 presentation. What do you understand this

19 page to represent?

20 A I honestly don't know.

21 Q Were you present at the time when

22 this was discussed?

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1 A I was. I don't really have much
2 of a recollection of meeting -- many times the
3 substance of the pitch books is not something
4 that we actually consider. They are, after
5 all, pitches to win business and so careful of
6 the salesman's hot air. So there isn't
7 anything in this book that would have shaped
8 my opinion with respect to which firm to
9 retain.

10 Q Was there any discussion at Sirius
11 of whether the data provided by Lehman
12 Brothers was accurate or inaccurate?

13 A No, not that I was involved in.

14 Q Now back to your written rebuttal
15 statement and in this statement and in your
16 oral testimony this morning, I believe you
17 testified that you had liquidity concerns,
18 were a rate higher than 4.2 percent adopted.
19 Is that fair?

20 A Yes.

21 Q And those concerns involved the
22 year 2008 and 2009. Is that also fair?

1 that we were will have to maintain and operate
2 the two issuers quite separate and distinct
3 because both companies have a substantial
4 amount of debt outstanding and, you know,
5 refunding all that debt in connection with the
6 merger would be very, very expensive.

7 BY MR. SCHNEIDER:

8 Q And you haven't done any analysis
9 about the extent to which any particular
10 musical royalty would affect any of that?

11 A We've done no post-merger
12 analysis.

13 Q Now earlier today in oral
14 testimony when discussing I believe Mr.
15 Butson's most recent P&L statements, you said
16 you had three concerns. My notes are rough so
17 I'm going to ask you to repeat them about
18 refinancing debt, I believe, in the event that
19 the world looks something like the world that
20 Mr. Butson is describing in his analysis. Do
21 you recall that testimony?

22 A I do recall the testimony.

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1 A It would, according to our model,
2 if all the assumptions would come true, the
3 risk would ripen in 2009, so we would seek to
4 address it well in advance of that.

5 Q And those are yours -- if the
6 merger goes through, the company would be the
7 merged company, correct?

8 A I've done no analysis of what the
9 companies would look like merged, so I don't
10 have a point of view on that.

11 CHIEF JUDGE SLEDGE: That wasn't
12 the question. In 2009, which would be the
13 merged company if the merger occurred is the
14 question.

15 THE WITNESS: I am sorry. I did
16 not hear the question properly. If the merger
17 were approved prior to 2009 then we would be
18 obviously in 2009 looking at financial results
19 for a merged entity. Exactly how that merged
20 entity operates would be very dependent on
21 decisions made with respect to the outstanding
22 debt of the two companies. It is conceivable

1 Q And I believe you said that you
2 would be unable, or you feared you would be
3 unable to refinance debt?

4 A I think my testimony specifically
5 with respect to that point went to that if you
6 adjusted his model for the errors with respect
7 to revenue share and price increase, that it
8 produces a far different result. Now, I
9 didn't have Mr. Butson's model so I didn't try
10 and run his model. So what we did was use our
11 model and with the consensus gross ads that
12 we've discussed earlier and then applied the
13 Sound Exchange proposal to that result and
14 then took a look at it.

15 It should be relatively close
16 absent manifest error in the revenue share or
17 differences in assumptions on price increases.
18 But they should be relatively close. I see a
19 set of credit statistics that are produced by
20 that model that I think would be very
21 speculative to whether or not you find any
22 market to raise money for that company.

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1 Q And just to go over the -- well,
2 why don't you tell me what the three were
3 because my notes aren't good. I'll get it
4 wrong. So what was the first that had
5 mentioned?

6 A So the first issue I believe I
7 mentioned was the price increases. I believe
8 his model assumes price increases that we
9 don't believe will sustain themselves in the
10 market place. I believe that the second area
11 was with respect to his revenue share
12 calculation, which I believe to be materially
13 understated that in looking at the details of
14 his model, his revenue share only is in the
15 OEM revenue share area. There is no value in
16 the ad revenue shares and I believe there is
17 no value in the residuals. I don't know
18 whether he's made a simplifying assumption,
19 because I know he's aware of those things,
20 having analyzed the company before, so I don't
21 know if he's made a simplifying assumption,
22 just collapsed it all into a single line item

1 three reasons. The one I have done is you
2 said that at no point the license period would
3 Sirius be EBITDA positive. Does that ring a
4 bell?

5 A We may be better off simply going
6 back to the record to review it. I said I
7 don't recall. So I do know the concerns I
8 have is that at no point in time when I run
9 the SoundExchange proposal through the
10 consensus gross ads do we produce net income.
11 I don't believe we have any year that we have
12 positive free cash flow. The EBITDA to
13 interest expense coverage really never gets
14 above .5 to 1 and the debt -- the total debt
15 to EBITDA leverage ratio just barely cracks 20
16 in the last year of the model and it's way
17 outside the bounds of what's acceptable in the
18 marketplace.

19 Q Let me -- because I was probably
20 part of that conversation and I was trying to
21 recall. In the last rate period, Sirius was
22 never positive free cash flow. Is that

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1 he calls OEM revenue share or whether or not
2 he forgot to include them in his model.

3 So I think I ended up mentioning
4 four things. The third thing I mentioned is
5 just the peculiarities of the way the rate is
6 structured and the fact that with his higher
7 ARPU he achieves the same dollars of revenue
8 with lower subscribers which because you have
9 lower subscribers with the SoundExchange
10 proposal, the rate doesn't get quite as high,
11 so you end up with lower royalties in dollars
12 of royalties even from the same dollars of
13 revenue in his model. And then lastly when
14 you adjust for all of those things, I find
15 that his refinancing assumption to the -- I
16 think I described it as highly speculative.

17 Q And it's actually on my very last
18 point and it's the question I meant to ask and
19 I guess I didn't ask it clearly. I thought
20 you had said that it would be challenging for
21 Sirius to borrow money in the event that Sound
22 Exchange's rate proposals were adopted for

1 correct?

2 A That's correct.

3 Q Sirius borrowed money during that
4 last rate period, correct?

5 A It did.

6 Q In the last rate period, Sirius
7 never had a positive net income, correct?

8 A That's correct.

9 Q And Sirius borrowed money during
10 the last rate period?

11 A It did.

12 Q And here's where your technical
13 knowledge has defeated mine. The .5 to 1 to
14 EBITDA ratio, that ratio I also assume was
15 unfavorable in the last rate period as well,
16 is that correct?

17 A That's correct.

18 Q And you wanted to borrow money?

19 A That's correct.

20 Q So it's not your testimony that
21 these things either alone or together make it
22 impossible for a company like Sirius to borrow

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1 money because Sirius, in fact borrowed money,
 2 in these three things for present, correct?
 3 A Sirius' capitalization following
 4 the 2003 recapitalization which resulted in an
 5 exchange of debt for 92 percent of the equity
 6 in the company when the first round of
 7 financing didn't play out was an all equity
 8 capital structure and so then as Sirius went
 9 to the markets to raise money, it raised it in
 10 the form of instruments that are commonly
 11 viewed as being equity equivalent. It's still
 12 the same people taking equity like risks and
 13 the substantial amount of capital was raised
 14 in the form of additional equity issuances as
 15 well as the convertible debt which can go to
 16 equity investors. It was not until the nine
 17 and five-eighths bond issue, if all of that
 18 equity-like capital under it and in the wake
 19 of the -- of what had been a significant pick
 20 up in the market for us when the Howard Stern
 21 announcement that we, for the first time, were
 22 returned to a debt market that had lost a

1 functional equivalent of zero.
 2 A I believe that's correct, yes.
 3 Q You're not suggesting that for a
 4 company the size of Sirius it's not able to go
 5 into the bond market and borrow \$100 million,
 6 are you?
 7 A It all depends on market
 8 conditions and what the market's outlook is
 9 for the business at that time. I don't know
 10 how -- what our performance will be, the
 11 market conditions, nor the market's view of us
 12 next year or the year after or the year after
 13 that. I just don't know.
 14 Q I have nothing further. Thank you
 15 very much.
 16 CHIEF JUDGE SLEDGE: Any redirect?
 17 MR. STURM: Yes, Your Honor.
 18 CHIEF JUDGE SLEDGE: Let's recess
 19 10 minutes.
 20 (Off the record.)
 21 CHIEF JUDGE SLEDGE: We'll come to
 22 order.

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1 significant amount of money on this company in
 2 the pre-2003 period. We were, in fact,
 3 successful in raising that issue.
 4 I've been working the capital
 5 markets for 25 years. And you know, you don't
 6 get that many swings at the plate and bond
 7 investors have very long memories, even though
 8 the portfolio managers turn over because it's
 9 a young business. They have long memories.
 10 Having fleshed their paper in
 11 2003, in turning it around and setting up a
 12 business plan that looks at getting ready to
 13 flesh it again in a couple of years is a
 14 strategy that as a CFO, I wouldn't advise Mel
 15 and the Board that we pursue.
 16 Q Now one of your criticisms of Mr.
 17 Butson is that you would run a \$100 million
 18 liquidity cushion and you consider that the
 19 functional equivalent of zero.
 20 A I do.
 21 Q And that's because \$100 million
 22 for a company the size of Sirius is the

1 MR. STURM: Thank you, Your Honor.
 2 REDIRECT EXAMINATION
 3 BY MR. STURM:
 4 Q Mr. Frear, on cross you had a
 5 number of questions about how you prepared
 6 your Exhibit 58 which is your model.
 7 As I understand it, there are
 8 analysts on your staff who are constantly
 9 running models about all sorts of things,
 10 right?
 11 A That's right.
 12 Q And some of those would have
 13 subscriber numbers in them or all of them
 14 would have subscriber numbers?
 15 A All of the models have subscriber
 16 numbers.
 17 Q So in preparing Exhibit 57, why
 18 did you decide to use analysts' gross adds to
 19 represent the demand side of the model?
 20 A WE felt that they had as good a
 21 view as anybody as to what the next six years
 22 might look like in terms of the primary demand

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1 for the service.

2 Q And have you as management of
3 Sirius as opposed to analysts come up with any
4 particular subscriber or demand side numbers
5 that go out beyond 2007?

6 A We have not.

7 Q Are there any numbers that you
8 have internally that you believe are more
9 reasonable than the subscriber numbers in
10 Exhibit 58?

11 A I do not.

12 Q Now, the lower part of the model,
13 you used principally the internal spreadsheet
14 that you have, correct?

15 A That's correct.

16 Q And why did you decide to use that
17 internal model rather than simply following
18 the analysts' consensus for other metrics?

19 A We have an ability to look at more
20 granular information than the analysts do,
21 that there's a lot of information that I have
22 access to that - and our analytical staff has

1 cross was that those projections originally
2 were made back in October and the consensus in
3 the industry had changed significantly since
4 then. Do you recall that line of questioning?

5 A I do.

6 Q Now, assuming that to be the case,
7 because if these numbers that are represented
8 in your chart as Mr. Butson's numbers have
9 been presented to the Court in June as
10 conservative, would that have been an accurate
11 characterization of these numbers, given the
12 changes that had taken place in the market in
13 the intervening time period?

14 A As of June 2007, the numbers that
15 Mr. Butson created in his October 2006 direct
16 would certainly not be conservative under the
17 -- what we now know about the market.

18 MR. STURM: Thank you. I have no
19 further questions, Your Honor.

20 CHIEF JUDGE SLEDGE: Any further
21 cross?

22 MR. SCHNEIDER: No, Your Honor.

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1 access to that we simply don't disclose to the
2 public. The model is very detailed in terms
3 of its assumptions and we believe that it has
4 a higher likelihood of producing an accurate
5 result for any given demand scenario than what
6 the analysts' models would produce.

7 Q You talked about differences in
8 subscriber behavior between say subscriber who
9 comes in having brought a Chrysler versus
10 somebody who comes in from Best Buy. Would
11 analysts have the ability to take that - -
12 those differences fully into account?

13 A They would not.

14 Q And does your model do so?

15 A It does.

16 Q And there were also some questions
17 about the comparison of the consensus on the
18 demand side versus the projections that Mr.
19 Butson had made in his written direct
20 testimony. Do you recall those questions?

21 A Yes.

22 Q Now the point that was made on

1 CHIEF JUDGE SLEDGE: Any questions
2 from the bench? Judge Roberts?

3 JUDGE ROBERTS: No.

4 CHIEF JUDGE SLEDGE: Judge
5 Wisniewski?

6 JUDGE WISNIEWSKI: Just a couple
7 quickly.

8 Mr. Frear, looking at your Exhibit
9 58, the second page of that, Looking at the
10 churn rate assumption. It says churn
11 including Hertz. Could you enlighten us on
12 what that means?

13 THE WITNESS: Sure. The Hertz is
14 simply a reference to the fact that we have a
15 small number of subscribers, paying
16 subscribers, that are actually owned by the
17 Hertz rental fleet. So it is an
18 acknowledgement that they are included in the
19 denominator for the calculation of the
20 percentage.

21 JUDGE WISNIEWSKI: Do you know
22 then how that compares with the churn rate

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1 assumption in the In Synch analytics study
 2 that's Exhibit 73?
 3 THE WITNESS: Well, I can't speak
 4 to it specifically because I haven't reviewed
 5 their churn assumptions. We've spent a good
 6 deal of time with the analysts over the last
 7 couple of years explaining from a
 8 methodological perspective how we calculate
 9 our numbers so that they are able to replicate
 10 those calculations. So, you know, I believe
 11 that they would understand that we're using
 12 the average of our total subscribers and
 13 dividing that into the number of subscribers
 14 that churned out through the quarter in order
 15 to present a churn rate, and then we stated in
 16 per month terms as opposed to
 17 --

18 JUDGE WISNIEWSKI: And the total
 19 subscribers would be the Hertz? So they
 20 should at least be aware that if you don't
 21 know, of course, since you didn't do the
 22 study, whether they include that.

1 them is tax affected and it is only the middle
 2 one that normalizes for what a normal taxpayer
 3 would pay.

4 JUDGE WISNIEWSKI: I think we're
 5 talking about the same thing, yes. Okay.
 6 Thank you.

7 CHIEF JUDGE SLEDGE: I believe you
 8 gave it earlier. I'm not comfortable with my
 9 understanding. Why is your churn rate that
 10 you gave of 18 percent so different than the
 11 churn rate on Exhibit 58 and 73?

12 THE WITNESS: So it's two
 13 respects. First of all, the 18 percent is
 14 stated in annual terms and generally, the
 15 churn rates in 58, for instance, is stated in
 16 monthly terms. That would be the first
 17 difference. The second --

18 JUDGE WISNIEWSKI: So let me stop
 19 you here. So you're going to have to explain
 20 that one a little bit further.

21 THE WITNESS: So in Exhibit 58,
 22 there is a number that is 2.3 percent. That

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1 With respect to your Exhibit 59,
 2 is it fair to say that this is a what-if
 3 scenario in the sense that you could change
 4 almost line out of it in your income statement
 5 and basically you might have reached the same
 6 result?

7 THE WITNESS: Right, so this is
 8 meant to do nothing more than to display, at
 9 least between the top third and the bottom
 10 third of the page, the effect of a change in
 11 the Sound Exchange royalty rate.

12 JUDGE WISNIEWSKI: All other
 13 things being equal?

14 THE WITNESS: All other things
 15 being equal. That's correct.

16 JUDGE WISNIEWSKI: Okay, and one
 17 question on this while we have it here. Just
 18 for point of clarity. The base line and the
 19 third one, which is run on the Sirius XM
 20 proposed rates, both of those do include the
 21 tax effect whereas the second one does not?

22 THE WITNESS: Actually, neither of

1 number means that 2.3 percent of the
 2 subscribers that were there at the beginning
 3 of the month are no longer there at the end of
 4 the month. So it is a monthly churn rate.
 5 The 18 percent was an annual churn rate, so
 6 that saying that 18 percent of the subscribers
 7 who were there in January of 2004 are no
 8 longer there at December 31st, 2004.

9 Obviously, the math isn't exactly
 10 the same; 2.3 times 12 is going to get you
 11 much closer to 30, so where is this 18 percent
 12 coming from? The 2.3 percent calculation is
 13 a composite of two types of churn, churn that
 14 we have on what we call our self-pay
 15 subscribers. So those are subscribers that
 16 have actually made the decision to subscribe
 17 to Sirius, and they might have gone to Best
 18 Buy and bought a radio and then called us up
 19 on the phone and turned it on and paid their
 20 \$142.45 for an annual subscription.

21 They might have a year earlier
 22 bought a Chrysler car with a radio in it,

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1 which you know comes with a bundled one-year
2 subscription as part of the car. And then at
3 the end of that year, they might have decided
4 you know what, I want to keep this. So when
5 they make that decision at the end, we call it
6 a conversion and they convert from our bundled
7 subscribers into the self-pay universe.

8 The self-pay universe has
9 significantly different churn behavior than
10 the bundled subscribers. In the case of XM's
11 business, they call them a promotional.

12 And XM has publicly disclosed what
13 their conversion rate and it's generally a
14 little bit over 50 percent, 52 to 53 percent
15 of the people who buy a car that have an XM
16 radio in it and have that trial period
17 subscription would at the end of that trial
18 period convert into a self-paying subscriber.

19 The 18 percent comes from our
20 experience with the self-paid base. That it's
21 bounced around a little bit, but on average,
22 about 1.5 to 1.7 percent of the self-paid base

1 It sounds a little bit like a pyramid scheme,
2 don't run out of people. And you have that
3 same conundrum in the cellular business and
4 the cable television business and the
5 satellite television business that there's a
6 certain amount of natural churning and the
7 churn we're measuring is churn on radios that
8 as opposed to necessarily subscribers. And so
9 the real number that we're reporting is
10 subscriptions. And so I might call up and
11 cancel a subscription for one of the radios
12 because it's not working properly and I just
13 don't get to the store and I go back in a
14 month's time and pick up a new radio and then
15 reactivate it. It's the same person with a
16 different radio. That would reflect churn.
17 It would be reflected as churn in that model.

18 JUDGE ROBERTS: Do you know how
19 many people, approximate percentage are coming
20 back to you?

21 THE WITNESS: We don't at this
22 point, we don't. It's data that we're working

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1 leave each month or about 18 percent per year.

2 CHIEF JUDGE SLEDGE: And the
3 higher rates on the other exhibits reflect
4 that close, that over 50 percent -- that
5 almost 50 percent that don't convert.

6 THE WITNESS: That's correct.

7 JUDGE ROBERTS: Mr. Frear, you had
8 told me earlier that your average subscriber
9 hangs in there for about three and a half
10 years?

11 THE WITNESS: Yes.

12 JUDGE ROBERTS: That's correct?

13 THE WITNESS: Yes.

14 JUDGE ROBERTS: Three and a half
15 years, so you're really -- to keep your
16 business going and in terms of expanding it
17 you're really counting on their being a deep
18 well of new people out there who have never
19 gotten satellite radio before that are going
20 to be signing up for it in the future. Yes?

21 THE WITNESS: Well, that's
22 correct. And you have that same conundrum.

1 on, but it's going to take some time and
2 effort to get it properly assembled.

3 JUDGE ROBERTS: I assume that
4 would be important in your automotive
5 operation because people sell their cars and
6 when they sell that car, that subscription
7 goes away, but they may be probably buying
8 another car and then are coming back to you
9 again.

10 THE WITNESS: That's exactly
11 right.

12 JUDGE ROBERTS: You're not aware
13 of approximately how many people are doing
14 that? Not yet.

15 THE WITNESS: We aren't confident
16 of the quality of the data at this point, you
17 know, subtle changes, in that the account
18 moves from my name to my wife's name and it
19 doesn't -- that would look like a churned
20 subscriber to us, so that our discipline is
21 around understanding addresses and names and
22 whether the name is David Frear or David J.

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1 Frear and it's those kind of data issues that
2 we honestly have to be able to devote the
3 resources to get a better sense of time.

4 CHIEF JUDGE SLEDGE: One other
5 question on this churn rate. You said earlier
6 today that your mid-year adjustments included
7 a lower than projected retail market
8 subscribers which would cause the company to
9 adjust its business plan with a greater
10 emphasis on OEM subscribers, therefore the
11 churn rate that's more applicable business-
12 wide would be the churn rate given in 58 and
13 73 rather than the churn rate that you
14 testified about?

15 THE WITNESS: That would -- yes,
16 for the total business, that would be true.
17 I believe the question that I was asked when
18 I used the 18 percent rate was related to 2003
19 subscribers, do we know how many subscribers
20 we still have from 2003. In 2003, we had
21 virtually no factory installations by
22 automotive companies so that base would have

1 witnesses.

2 Thank you.

3 CHIEF JUDGE SLEDGE: That request
4 is denied. You should have people available
5 to use your available time and if you don't,
6 that's your responsibility.

7 With no witnesses available to
8 testify, we recess until 9:30 in the morning.

9 (Whereupon, at 3:28 p.m., the
10 hearing was adjourned, to reconvene tomorrow,
11 Thursday, August 16, 2007, at 9:30 a.m.)
12
13
14

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1 been an entirely retail base.

2 CHIEF JUDGE SLEDGE: Any other
3 questions?

4 Any questions generated by those
5 from the Court?

6 MR. STURM: No, Your Honor.

7 MR. SCHNEIDER: No, Your Honor.

8 CHIEF JUDGE SLEDGE: Thank you,
9 sir. Your testimony is concluded.

10 THE WITNESS: Thank you, sir.

11 (The witness was excused.)

12 CHIEF JUDGE SLEDGE: Mr. Rich?

13 MR. RICH: Your Honor, that
14 concludes our witness presentation for the day
15 and we had unfortunately anticipated that
16 Professor Fisher would be testifying and
17 budgeted the day accordingly. We're prepared
18 to proceed first thing in the morning with
19 Professor Roger Knoll and proceed from there.
20 In the circumstances, we would ask the Court
21 to not taxing the unused time against us since
22 again we attempt to fill a day with three

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PUBLIC VERSION

DESIGNATED REBUTTAL HEARING TESTIMONY OF DAVID FREAR
(2006-1)

August 15, 2007 Trial Transcript

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of)	
)	
DETERMINATION OF RATES AND TERMS	)	Docket No. 2011-1
FOR PREEXISTING SUBSCRIPTION AND	)	CRB PSS/Satellite II
SATELLITE DIGITAL AUDIO RADIO)	
SERVICES)	
)	

WRITTEN DIRECT TESTIMONY OF RONALD H. GERTZ
CHAIRMAN, MUSIC REPORTS, INC.

(On behalf of Sirius XM Radio Inc.)

Background

1. My name is Ron Gertz. I am the chairman of Music Reports, Inc. (“MRI”), the leading provider of high-volume music license administration and “direct” music licensing services to music users in the United States. I was appointed Chairman of MRI in July 2008 after having served as its Chief Executive Officer from its inception in 1989. As explained in the testimony that follows, MRI has played an integral role in the direct licensing initiative of Sirius XM Radio Inc. (“Sirius XM” or the “Company”) since that initiative began.

2. I have spent more than thirty-five years in the music business specializing in the negotiation and administration of copyright licenses between media companies and composers, music publishers, record labels, and their agents (including collecting societies). I got my start in the industry as a touring musician and songwriter. After graduating from Whittier Law School in the mid 1970s, I worked as a lawyer representing songwriters and recording artists in the negotiation of publishing and recording

agreements, and I worked at a company that handled music licensing transactions for television and film producers. Based on that experience, I subsequently founded a company called Clearinghouse Ltd., which negotiated with music publishers and record labels on behalf of television and film producers and motion picture studios to secure licenses for the music used in their programs, and later, as described below, I founded MRI.

3. I have negotiated tens of thousands of copyright licenses and gained extensive familiarity with the various markets in which music rights are transacted. I have served as an expert witness in copyright royalty proceedings in the United States and Canada, and I am a past Chairman of the Board of Directors of the Intellectual Property and Entertainment Law Section of the Los Angeles County Bar Association. I testified before the CARP in *Webcasting I* and the Copyright Royalty Judges in *Webcasting II* on behalf of Royalty Logic, Inc., a subsidiary of MRI. I also recently testified on behalf of DMX in its rate-court trials against ASCAP and BMI on topics similar to those discussed in this testimony.

Music Reports, Inc.

4. MRI was created in 1989 in the aftermath of the historic Buffalo Broadcasting interim-fee decision rendered by the Federal District Court for the Southern District of New York in an ASCAP ‘rate court’ proceeding. That decision, later ratified in a post-trial ruling, afforded local television broadcasters the first meaningful licensing alternative to ASCAP’s traditional “all-or-nothing” blanket license covering public performances of all of the musical works in ASCAP’s repertory. That alternative, the per-program license, allows broadcasters and other music services to access the competitive market to secure the musical works public performance rights they require for at least some of their programming, through direct licensing transactions with individual copyright

owners, rather than depending exclusively on securing such rights (and paying for them) under the ASCAP blanket license. This legal precedent has led to more than 450 local television stations operating under per-program licenses in lieu of traditional blanket licenses, benefiting from the forces of competition in the licensing of these music rights, and, in the process, making millions of dollars of license payments directly to copyright owners rather than through their licensing collective.

5. MRI's initial purpose – and a precursor to its current work with Sirius XM to report and pay record companies pursuant to their direct licenses – was to assist local television broadcasters in implementing the new ASCAP (and later, BMI) per-program licenses. To facilitate that objective, we developed an industry-standard system for tracking the broadcasting of television programs, analyzing their musical content to determine copyright ownership, and preparing music usage reports to content owners. Crucial to that task – and our ongoing ability to fulfill our reporting responsibilities to content owners, be it individual labels and publishers or ASCAP, BMI, or more recently SoundExchange – was the development of a comprehensive database of copyright ownership information including, among other data elements, the title, alternative titles, composer, performing artist, record label, publisher, PRO affiliation, contact information, and ownership shares associated with the millions of songs used by our clients. That database – known as SONGDEX – currently contains tens of millions of individual song title records, allowing us precisely to identify the necessary ownership and label affiliation of songs used in our clients' programming.

6. Our databases contain a tremendous repository of recording industry identifiers such as ISRC (International Standard Recording Code) and UPC (Uniform

Product Code) numbers, which we utilize to match titles of recordings to copyright ownership information. We have also written tens of thousands of lines of sophisticated algorithmic software code to improve the rate at which we are able to match titles from music service playlists and usage logs (which often vary widely in terms of spelling, punctuation, and the like) to actual recordings. This is a major issue in the rights administration arena; it can, if not done properly, prevent artists from getting paid for all performances of their material, and we work hard to make sure that tracks are properly identified so that songwriters and artists get paid the royalties they deserve. A team of more than 20 MRI researchers updates SONGDEX on a regular and ongoing basis to reflect new songs and recordings as well as changes for works already in the database. This team of researchers also works on matching those titles in our client playlists which do not match through our automated processes.

7. MRI has expanded its scope of services over the years to provide copyright research, licensing, royalty accounting and music-use reporting services for music users and distributors across all media, including not only radio and television broadcasters, but record labels (including projects for some of the major labels), consumer products companies, digital music services, wireless carriers, and background/foreground music services. One directly relevant result of that work is that MRI has developed vast experience in negotiating direct licenses from composers, music publishers, and record labels for the rights to publicly perform, distribute, reproduce, and synchronize the songs and recordings they own (or administer). We have a licensing staff of approximately ten employees devoted to this task, several of whom have been working on the Sirius XM direct licensing initiative.

8. Another group within MRI administers the royalty payments for many of the licenses we negotiate on behalf of our clients, utilizing our proprietary royalty accounting platform and the SONGDEX database to distribute millions of dollars in royalties annually. Today, almost every aspect of the reporting and payment process for MRI clients is handled electronically. For example, for DMX, a business establishment service (BES), we developed an electronic reporting protocol that we use to provide both ASCAP and BMI with music-use and payment reports under another competition-enhancing licensing option – the so-called “blanket carve-out license” – which allows DMX a credit against the otherwise prevailing blanket license fee for music performances that it has licensed directly from music publishers. (We also pay and report to those directly licensing publishers on DMX’s behalf.) In addition, we administer royalty payments under the statutory license found at Section 115 of the Copyright Act on behalf of many well-known interactive digital music streaming services; this task entails providing monthly reporting and payment to some 20,000 music publishing administrators who collectively represent approximately 100,000 publishers. To help facilitate this reporting process, we have recently developed popular online portals where these publishers can access a personalized, password-protected website and receive their royalty statements and enter changes to their catalog information to help ensure that SONGDEX has the most up-to-date records regarding the tracks they own or control and that they are paid appropriately. Publishers may also download music usage statements; track licensing and payment history; and update their payment information, through these online portals. We contemplate that we will be able to provide similar “per-play” electronic reporting on a regular quarterly basis to record labels that directly license Sirius XM.

The Sirius XM Direct License Initiative

9. MRI met with Sirius XM in early 2010 to assist the Company with its plan to develop a licensing program that would enable Sirius XM to obtain directly from record companies the rights that Sirius XM needed to perform and reproduce sound recordings on its various services. At the time, Sirius XM was considering various enhancements to its service (including the new Sirius XM 2.0 functionality) that in some cases might go beyond the limitations of the Section 114 statutory license. The Company had also been told by SoundExchange that they would need to go directly to the labels to obtain such rights – something the Company had done in the past with respect to certain user devices that allowed subscribers to record and store tracks from Sirius XM programming. Because the Company needed to go to the market for these expanded rights, it only made sense to seek performance rights as well. This approach had the benefit not only of convenience and efficiency, but of allowing Sirius XM to lock in its music royalty fees for at least a portion of the songs performed on its services; we believed that going directly to the competitive marketplace would allow Sirius XM to do so at or below the current statutory rate. It also made sense to take the opportunity to streamline the Company's licensing approach by obtaining rights for all its platforms – satellite, internet webcasting, BES, and residential (television) music services – at the same time, and in one convenient license form.

10. I worked with David Frear, the CFO of Sirius XM, to define what type of license Sirius XM would offer to the labels, which labels we would approach, and in what order, to achieve these goals. We believed labels would be receptive to an offer that provided for faster royalty payments and transparent royalty and music usage reporting with an accurate identification and count of performances, while also avoiding SoundExchange

administrative fees and deductions for other expenses. We also felt labels would be interested in providing an incentive to Sirius XM to increase plays of the their works, resulting in greater exposure and a greater share of the royalty pool (and, to the contrary, fewer plays and royalties for those who declined the offer).

11. Our first major project for the initiative was an informal analysis of one year (June 2009 to May 2010) of Sirius XM play data (using SONGDEX) to rank the publishers and record companies whose works were played most frequently by Sirius XM. This analysis – which revealed that roughly 35-45% of plays on Sirius XM represent tracks released by independent labels¹ – helped identify record companies whom it made sense to approach for direct licenses. We also targeted companies performing well on various Billboard charts, companies which had granted Section 114 waivers to Sirius XM in the past, and companies with whom MRI had existing relationships – the idea being that we could use those relationships not only to obtain the rights we needed for Sirius XM, but to get market feedback from experienced label representatives on the feasibility of the direct-license program we were developing.

12. We decided early on to focus the direct-license effort on independent record companies rather than the major labels. This was a result of the fact that Sirius XM was already in the midst of discussions with the major record companies related to rights for its user recording devices and Sirius XM 2.0 functionality (based on relationships dating back several years); it was clear from those discussions that the major labels – whose executives sit on the SoundExchange board and licensing committee – were unlikely to

¹ This figure is listed as a range because it depends on assumptions made about ownership of unidentified plays.

break ranks to sign a direct license with Sirius XM for rights covered by the Section 114 statutory license.

13. In addition to the play-share analysis, MRI worked closely with Sirius XM to develop the key terms of the direct-license offer and the license form in which those terms would be embodied. Our objectives in developing the license were to create an offer that labels would find not only reasonable and acceptable, but recognizable – *i.e.*, one that used industry-standard terms (reps and warranties, audit rights, and the like) that would not require lengthy negotiations or material variation from agreement to agreement. This latter point was particularly important because it would allow us to standardize royalty administration across all directly licensing record companies. Moreover, the offer was designed so that each label would be paid its *pro rata* share of a percentage-of-revenue royalty pool, and such a structure would not work if the rate-calculation methodology or revenue definition were to vary from licensor to licensor. Because MRI negotiates with copyright owners regularly on behalf of a wide range of clients, and has developed a level of trust and credibility in the market, it was also extremely important to me that the offer be fair, straightforward, and transparent so as not to damage our credibility or jeopardize our relationships in any way.

Key Terms of the Direct Licenses

14. The key terms of the Sirius XM direct license offer (with cross-references to SXM Dir. Ex. 7, a sample direct license with Indica Records) include the following:

a. Grant of Rights (clause 1(a)): This clause grants all the rights Sirius XM needs from the record company to operate all of its various services, including through-to-the-listener public performance rights and reproduction and distribution rights (to

cover server copies and, to the extent Sirius XM decides to offer it, the features described on Exhibit A of the agreement, such as single-track recording). SoundExchange was unable to offer reproduction rights, and was also unable to negotiate a single license, even covering performance rights alone, for all of the Sirius XM services. As clause 1(b) confirms, the rights grant in this voluntary agreement covers Sirius XM's current statutorily-compliant services (*i.e.*, it grants the same rights that are covered in this proceeding), but is not strictly limited by the restrictions of the Section 112/114 statutory licenses, and would allow Sirius XM to offer the additional functionality described in Exhibit A to the agreement. From the label's perspective, eliminating the statutory restrictions – in particular the sound recording performance complement which would otherwise limit the number of times a given artist or album could be played in a three-hour window – allows for increased plays of their songs on Sirius XM channels, increased promotion of those recordings, and increased payments.

b. Royalty Rate (clause 2(a)(i)): Working with Sirius XM, we derived the rate we would take to the market: the publisher's *pro rata* share of 5% to 7% of gross revenues, with a revenue definition that mirrors that found at 37 C.F.R. 383.2(g).² We chose the top rate of 7% in part by reference to the current statutory rate (7.5% for 2011), but also taking into account some additional considerations. To start, we knew that labels do not actually receive the full 7.5% after SoundExchange's overhead and expenses are removed, and because (in the labels' estimation) all performances of their tracks are not always

² Paragraph 2(a) makes a couple of small modifications to the current definitions, including to clarify that performances of under 30 seconds (generally "skips" on Sirius XM webcasts where the person doesn't like the song) do not qualify as performances, and to clarify that revenue from stations that make only occasional, incidental performances of sound recordings would not come into the revenue base.

accurately identified and paid for by SoundExchange. We also believed that labels competing for plays on Sirius XM would likely agree to a rate at or below the current statutory rate if they felt it would provide an incentive to increase their spins (as Mr. Blatter's testimony describes in detail, plays on Sirius XM are valued immensely in the record industry, and companies routinely waive statutory limits like the sound recording performance complement in order to allow Sirius XM to feature their artists more prominently). At the same time, because we were seeking some rights that are not included under the statutory license, and rights for services like the BES that traditionally had been priced at a higher percentage of revenue, we felt that too large a discount from the statutory rate might prove unacceptable to the marketplace.

Finally, because we couldn't know for sure whether the "right" rate was 7% or something lower (that would be revealed only by marketplace reaction), we decided to "tier" our approach and see whether some labels would be willing to accept 5% or 6%. Accordingly, we offered 5% to some labels whose works are played relatively lightly on the service, and 6% to some others whose works are played relatively more often. It is important to understand that this approach was simply a practical way of dividing up the list, and did not reflect the view that the songs on some of the labels were more or less valuable than those of other labels – only that we wanted to test different price points and see whether acceptance varied across the different tiers. As it turned out, there was not a significantly different level of acceptance across the tiers – those offered 7% were not more likely to sign than those offered 5%. Not surprisingly, a number of labels, having seen SoundExchange's prognostication in the press that the Judges would be setting the rate at 13% or higher, did

ask for a “most favored nations” clause pegged to the outcome of this proceeding – an offer we declined.

Pursuant to clause 2(c), the 7% rate includes both the label and artist share of the royalties (it is “all in”); as is routine under licenses that record companies enter with music services, the record company is responsible for paying the artist pursuant to the terms of their recording agreement. (I address this more below, as it has resulted in some unfounded accusations that we are attempting by engaging in this standard practice to avoid paying artists royalties they would otherwise receive.)

c. Royalty Formula (clause 2(a)): As noted above, Sirius XM pays each directly licensing record company its *pro rata* share of 5-7% of revenue. That *pro rata* share is calculated by dividing the number of transmissions of the record company’s works in the given period by the total number of transmissions on the Sirius XM satellite radio service during the period (whether or not directly licensed). Record companies in my experience are well accustomed to taking their *pro rata* share of a defined royalty pool. The royalty pool is “gross” without deduction of any administrative fees and expenses like those deducted by SoundExchange – each licensor receives its share of the entire royalty pool.

d. Satellite Radio Performance Proxy (clause 2(a)(iii)): Although the royalty pool is calculated at the rate of 5-7% of *all* Sirius XM revenue from all covered services (satellite, Internet, BES, residential television music channels), the label’s share of that pool is calculated based on its share of Sirius XM satellite radio transmissions. In other words, the satellite radio performances serve as a proxy for distributing royalties associated with all Sirius XM services. The reasoning behind this approach is simple. First, almost all Sirius XM revenue is accounted for by the satellite radio service, so it makes sense to

distribute funds according to plays on that service. In addition, the offerings of the other services are typically simulcasts of the satellite channels – *i.e.*, the content is identical in any event, so a label’s share would not change by including transmissions on the other services. Although there are some minor variations (the residential and business services may offer only a subset of the satellite channels, and there are handful of webcasting channels that are not on the satellite), it does not appear that it will have a material effect on the total royalties paid to any direct licensor.

e. Audit Rights (clause 3(b)): Sirius XM’s satellite radio play data tracks every transmission on each channel and the frequency with which songs are played, making it an accurate count of performances that is easy for a label to audit, the rights for which are covered in clause 3(b). This transparency stands in contrast to royalty statements from SoundExchange, where it can be nearly impossible to discern how much a label is receiving on account of Sirius XM plays or whether those plays are accurately captured. (Even after a revamping of the statements in the third quarter of 2011, this problem remains.)

Industry Acceptance of the Direct License Offer

15. Industry response to the Sirius XM direct licensing initiative has been extremely positive. At the time of writing, more than 60 different record companies have entered into direct licenses with Sirius XM; we are in active negotiations with many more, and I anticipate that the number could increase sharply by the time this proceeding concludes. SXM Dir. Ex. 14, a list maintained by MRI, identifies the direct licenses signed to date. These licenses include the performance rights to works by artists and labels regularly featured on the Sirius XM service, including:

- PS Classics: A leading producer of Broadway cast albums, including seven by Steven Sondheim and four Grammy-nominated cast albums. Sirius XM, which has an entire channel, “On Broadway,” devoted to the genre, has more than fifteen tracks in active rotation at this time, including tracks from *Sondheim on Sondheim*, *A Little Night Music*, *Finian’s Rainbow*, and the cast albums from *Assassins*, *Grey Gardens*, and *Nine*.
- Downhere and Aaron Shust (Centricity Music): Shust’s song “My Hope is In You” is currently at #1 on the Billboard Christian charts. Downhere won a 2007 Juno (Canadian Academy of Recording Arts & Sciences) award for Contemporary Christian/Gospel Album of the Year. Each artist is featured on Sirius XM’s Christian music channel “The Message.”
- Relient K, Ayiesha Woods, and Jamie Grace (Gotee Records): these artists are also featured on “the Message.” Relient K has released three Gold records, sold over two million records in total, and is Grammy-nominated. Woods’s debut album on Gotee, *Introducing Ayiesha Woods*, was nominated for Best Pop/Contemporary Gospel album in 2007.
- Animal Collective and Sigur Ros (FatCat Records): Sigur Ros’s 2004 album “()” earned them a double Grammy nomination (including one for Best Alternative Album) and was identified by *Rolling Stone* magazine as a top-thirty album of the 2000s; Animal Collective’s 2009 album “Merriweather Post Pavilion” topped the year-end “best of” lists of dozens of critics around the country. Sirius XM features both bands on its “Sirius XMU” channel.
- Local Natives (Frenchkiss Records): The Company’s “Sirius XMU” and “Alt Nation” channels have been featuring two songs by the band, “Wide Eyes “ and “Airplanes,” for over a year.
- The String Cheese Incident and Umphrey’s McGee (SCI Fidelity Records): Sirius XM’s “Jam On” channel has more than twenty active titles for each band in current rotation, along with tracks by Keller Williams and Greyboy Allstars, also SCI Fidelity artists.
- The Proclaimers (Milan Records): Their international hit “I’m Gonna Be (500 Miles)” is featured on Sirius XM’s “90s On 9” channel.
- Spyro Gyra (Amherst Records) and Soul Ballet (NuGroove Records): both jazz artists are featured on Sirius XM’s “Watercolors” channel; Spyro Gyra has won multiple Grammy awards.
- K-Tel Records: Hit tracks from K-Tel’s many compilations, including multi-disc greatest hits packages from the 70s, 80s and 90s, country hits, and others (including the multi-million selling *Hooked on Classics*) are featured across a wide array of Sirius XM channels.

- LA Guns (Cleopatra): this popular 80's heavy metal band has over ten tracks featured on Sirius XM's "Hair Nation" channel.
- Sloan (Murderecords): This band is regularly featured on Sirius XM's "Iceberg" and "CBC Radio" channels; Sloan's album *One Chord To Another* won a 1997 Juno Award for Best Alternative Album.

16. It is true that the list of direct licensors to date comprises small independent labels, and that Sirius XM has not signed a direct license with a major recording company. It would be a mistake, however, to conclude that agreements with small labels are somehow less valuable benchmarks for competitive rates, that smaller labels fail (or are unable) to extract full value for their rights, or that they are less sophisticated in their bargaining approach. As suggested by the list of names above, small labels are often home to critically acclaimed artists who, while not generating top-40 hits, create music that is considered the best in its particular genre (and that fits perfectly on Sirius XM's more specialized stations devoted to those genres). In fact, many artists consciously choose to *remain* independent and seek out independent labels they know will provide a level of attention and artistic freedom that they perceive may be lacking at major labels. Consistent with this reality, small labels tend to be entrepreneurial, innovative businesses devoted to promoting both the financial and artistic best interests of their artists and their catalogs. The executives of these labels (often the founders of the label, or veterans of major labels) routinely consider license requests from all types of users (and uses) and, in my experience, consider such license offers – especially significant offers for catalog-wide license with a major music provider – with a good deal of care and attention.

17. The fact that Sirius XM has been successful in signing over 60 agreements thus far is especially notable given the coordinated effort by the record industry, led by SoundExchange, A2IM, the National Academy of Recording Arts and Sciences, the

Future of Music Coalition, and the various musicians' unions, to publicly discredit the offer and encourage labels not to accept it. The testimony of Mel Karmazin and Mr. Frear details that effort, and I will not repeat it here. What I can say, however, is that evidence from the "front line" suggests that the interference from SoundExchange is, unfortunately, working: my staff has heard over and over again from the labels we have approached on Sirius XM's behalf that labels interested in doing the deal were under tremendous pressure from the industry groups not to sign -- that their signing a deal at a lesser, competitive rate, would have the impact of setting bad precedent in this proceeding, meaning, risk undercutting SoundExchange's anticipated request for substantially higher royalties. SXM Dir. Ex. 8, an email from Jim Olsen at Signature Sounds Records, illustrates the chilling effect that concerted industry opposition has had on Sirius XM's direct-license efforts. Mr. Olsen tells Jake Terrell (a member of the MRI licensing staff), "After reading about the positions of AAIM and NARAS on this issue, we've decided to stay with Sound Exchange for now. Feel free to send along new information as it becomes available." I have no doubt we would have signed many more direct licenses by this point in time were it not for this overt interference by the industry groups.

18. The interference with Sirius XM's efforts has been exacerbated by the fact that the heads of the major and larger independent record companies sit on the SoundExchange and A2IM boards and licensing committees; it has been nearly impossible to get those companies to break ranks with their fellow board-members and sign a direct license when SoundExchange and A2IM are taking the official position that direct licensing is a dangerous step that would effectively lower the royalties paid the industry via this statutory license proceeding. SoundExchange has suggested in this regard that it will be

successful before the Judges in achieving a rate significantly higher than what Sirius XM is offering (perhaps 13% or more), such that the labels could expect to earn more by sticking with the statutory license. Apart from the speculative nature of this assertion, this argument wrongly assumes that Sirius XM's use of each label's catalog will remain the same irrespective of their participation or non-participation in direct licensing, and fails to acknowledge that labels that refuse the Sirius XM direct-license offer may see diminished royalties for Sirius XM performances paid through SoundExchange as Sirius XM relies more heavily on directly licensed music. Notwithstanding these considerations, as noted, SoundExchange's and the other industry groups' vehement opposition to the direct license effort has had its intended effect of dissuading a number of record companies otherwise disposed to enter into such agreements from doing so.

19. The public attacks on the direct licenses include the improper suggestion that Sirius XM is somehow attempting to deprive artists of their share of royalties. This criticism apparently is rooted in the fact that Section 114 directs that artists' shares of *statutory* license payments be made directly to the artists, rather than being filtered through their record companies, whereas under the Sirius XM direct licenses the Company will pay the record labels the entire royalty, with responsibility on the record company to make payment to the artists pursuant to their private contractual arrangements. The facts are as follows. First, the manner of royalty distribution adopted in the direct licenses is consistent with the practice under virtually every voluntary licensing agreement a label signs. Second, the statute itself specifically sanctions this practice by stating that voluntary licenses "shall be given effect in lieu of" statutory rates (114(f)(3)) and that in such a situation, an artist is to be paid "in accordance with the terms of the artist's contract" with

the record label (114(g)).³ Third, many artists actually have a better chance of being paid by their directly licensing label than by SoundExchange. The labels are often in a better position to locate and pay their artists, with whom they have an established financial relationship and payment history, and those artists do not have to independently register with SoundExchange in order to be paid (something that, in my experience, they often do not do). One needs only to look at SoundExchange's own outreach efforts to labels to find artists on its huge lists of "missing artists" to know that this is true.

20. To the extent that a direct-licensing record label chooses to apply the artist's share royalties to unrecouped advances (another supposition used by various industry groups to disparage the direct licenses), that is a decision made by the record company, not Sirius XM. If artists so affected have a complaint, it is not with Sirius XM, which is paying competitive royalties for the use of the artists' songs, but instead with longstanding practice reflected in the recording agreements they signed with their labels, which provide for royalty advances with the understanding that those advances will be recouped from all royalty sources.

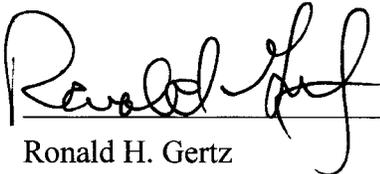
³ Notably, Section 114 originally provided for payment of statutory royalties directly to the record labels, which would subsequently pay the artists their share. Even when the statute was modified in 2002 to provide that artists' shares of statutory royalties were to be made instead through a collective "agent," 114(g) was retained to continue to give precedence to voluntary agreements between users and labels.

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of)	
DETERMINATION OF RATES AND TERMS FOR PREEXISTING SUBSCRIPTION AND SATELLITE DIGITAL AUDIO RADIO SERVICES	)	Docket No. 2011-1 CRB PSS/Satellite II

DECLARATION OF RONALD H. GERTZ

I, Ronald H. Gertz, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 28th day of November 2011 at Woodland Hills, CA.



Ronald H. Gertz

SOUND RECORDING CATALOG LICENSE

This Agreement (the "Agreement") is entered into as of August 10, 2011 by and between SIRIUS XM RADIO INC., 1221 Avenue of the Americas, New York, New York 10020 (collectively along with its Affiliates, "Licensee") and SCI FIDELITY RECORDS, at 2060 Broadway St Ste 225, Boulder CO 80302-5226, US (collectively along with its Affiliates, "Label") (each referred to as a "Party").

WHEREAS, Label owns and/or controls certain sound recordings during the Term hereof (collectively, "Label's Catalog"); and

WHEREAS, Licensee operates a digital audio radio service consisting of a wide variety of music and non-music (e.g., news, weather, sports and talk) programming (the "Service(s)") in the Territory; and

WHEREAS, Licensee desires to obtain from Label a blanket license covering Label's Catalog for the rights set forth herein, and Label is willing to grant such rights to Licensee;

NOW THEREFORE, the Parties hereto agree as follows:

1. Grant of Rights:

(a) Service Programming: Label hereby grants to Licensee, solely in the Territory and solely during the Term, the right, through to the listener, to edit, reproduce, distribute, and publicly perform by means of digital audio transmission some or all of the sound recordings in Label's Catalog (the "Recording(s)") solely in connection with the Service (including, without limitation, as made available to subscribers via satellite radio, the Internet, multi-channel video programming distributors, and commercial business establishment services). The grant of rights will further extend to the public performance, reproduction, and distribution of Label's Catalog on or through devices that have the functional capability set forth on Exhibit A in connection with the Service. Label will be free to grant licenses to others.

(b) The Service operates pursuant to the statutory license at 17 U.S.C. §114(f) and 17 U.S.C. §112(c) (collectively, the "Statutory Licenses"). Label acknowledges, however, that this Agreement is a voluntary license, and Service may from time-to-time introduce product and programming features (artist-specific channels, for example) that extend beyond the Statutory Licenses. Label agrees that such features will be licensed hereunder, and that restrictions which apply under the Statutory Licenses will not apply in relation to Label's Catalog, including but not limited to: (i) the so-called "sound recording performance complement"; (ii) the publication of advance playlists; and (iii) the six-month limit on retention of ephemeral recordings.

2. Royalties:

(a) Service Royalty Pool. For each calendar quarter of the Term, Label's pro-rata share of royalties for the license granted hereunder to Licensee will be determined by multiplying the "Service Royalty Pool" for that quarter by a fraction, the numerator of which is the total number of "Transmissions" of identified Recordings from Label's Catalog in that quarter, and the denominator of which is the total number of "Transmissions" of all sound recordings performed on the Service in that quarter.

(i) As used herein: the "Service Royalty Pool" will mean [REDACTED] of revenue recognized by the Licensee in accordance with U.S. GAAP from:

(A) Subscription revenue recognized by Licensee directly from subscribers in the Territory for the Service; and

(B) Advertising revenues, or other monies received from sponsors, if any, attributable to advertising on channels other than those that use only incidental performances of sound recordings, less advertising agency and sales commissions.

(ii) The Service Royalty Pool will exclude:

(A) Monies or other consideration attributable to the sale and/or license of equipment and/or other technology, including but not limited to bandwidth, sales of devices that receive the Service and any taxes, shipping and handling fees therefor;

(B) Royalties paid to Licensee for intellectual property rights;

(C) Monies or other consideration received by Licensee from the sale of phonorecords and digital phonorecord deliveries;

(D) Sales and use taxes, shipping and handling, credit card, invoice, and fulfillment service fees;

(E) Bad debt expense; and

(F) Revenues earned by Licensee for the provision of: (1) current and future data services (e.g., weather, traffic, destination information, messaging, sports scores, stock ticker information, extended program associated data, video and photographic images, and such other telematics and/or data services as may exist from time to time); (2) channels, programming, products and/or other services offered for a separate charge where such channels offer only incidental or occasional performances of sound recordings; (3) channels, programming, products and/or other services provided

outside of the Territory; and (4) performances of sound recordings (and/or ephemeral recordings) that are exempt from any license requirement.

(iii) As used herein, a "Transmission" will mean each instance in which any portion of thirty seconds or more of a sound recording is publicly performed by digital audio transmission on the Sirius XM satellite radio service, but excluding performances of less than 30 seconds and performances that make no more than incidental use of sound recordings (including, without limitation, brief musical transitions in and out of commercials or program segments, brief performances during news, talk and sports programming, brief background performances during disk jockey announcements, brief performances during commercials of sixty seconds or less in duration, or brief performances during sporting or other public events).

(b) Methodology for Transmission Counts: Transmissions will be counted without respect to the number of subscribers receiving the performance of the sound recording. For example, without limitation, if a particular sound recording is transmitted on a particular channel or program only once during the reporting period, then there is one Transmission, and if the sound recording is transmitted ten (10) times on a particular channel or program during the reporting period, then there are ten (10) Transmissions.

(c) Direct "All-In" Royalties: All royalties hereunder will be payable directly to Label and not to a "Collective" (as described in section 370.1(h) of Title 37, Code of Federal Regulations). Such royalties will be inclusive of, and Label will be responsible for paying, all amounts payable to all third parties in connection with the use of the Recordings in the Service as provided herein, including but not limited to: (i) any artist(s); (ii) any producer(s); (iii) any sample owner(s); and (iv) any union(s) (including but not limited to AFM and AFTRA). (For clarity, royalties payable to Label hereunder include, without limitation, both the so-called "copyright owner's share(s)" and the so-called "performer's share(s)" of royalties). Licensee will be responsible for obtaining any required licenses from the owners of the musical compositions embodied in the Recordings in connection with their use in the Service and making all payments in connection therewith.

3. Accounting:

(a) Quarterly Accountings: Commencing with the first calendar quarter accounting period, Licensee will calculate and pay any royalties due hereunder to Label quarterly, within forty-five (45) days after the end of each calendar quarter during the Term and provide accounting statements in connection therewith. All royalty payments will be in U.S. Dollars payable to Label and sent to the Label's address as set forth above. If Label's pro rata share of royalties for a quarter is subsequently determined by Licensee to be less than the amount paid to Label for that quarter, then such payment will be deemed to be an overpayment. Label will reimburse Licensee on demand for any such overpayment. In the alternative, Licensee may deduct the amount of the overpayment from future amounts payable to Label under this or any other agreement. If Label's pro rata share of royalties for a quarter is subsequently determined by Licensee to be more

than the amount paid to Label for that quarter, then such payment will be deemed to be an underpayment, and Licensee will pay the underpayment to Label during the accounting period after the accounting period in which the underpayment is determined by Licensee.

(b) Audits: Licensee will maintain books and records concerning the use of Label's Catalog in connection with the Service. Label will have the right, upon ninety (90) days notice to Licensee, to designate an independent certified public accountant on Label's behalf, who will not be retained on a contingency basis, to examine those books and records, at its sole cost and expense, solely for the purpose of verifying the accuracy of royalty accountings hereunder, only once per accounting statement, only once per year, and solely during Licensee's normal business hours. Prior to commencing any such examination, Licensee, Label, and Label's auditor will enter into a confidentiality agreement to protect the confidential information of Licensee which will be exposed during the course of the examination.

(c) Audit Restrictions: Each accounting statement hereunder will be binding and not subject to any objection unless Label notifies Licensee of that objection within two (2) years after the date such statement is required to be rendered hereunder (and each accounting statement will be deemed rendered on time unless Label notifies Licensee to the contrary not later than sixty (60) days after the date on which such statement is required to be rendered). Label may not commence legal action against Licensee in respect of any accounting (or failure to account) unless Label commences such legal action in accordance with Section 7(c) within two (2) years after the date the applicable accounting is required to be rendered, and the scope of any such legal action will be limited to a determination of the amount of royalties, if any, payable to Label for such accounting concerned. Label's sole and exclusive remedy in connection therewith will be the recovery of the royalties Label is adjudged to be owed hereunder, if any.

4. Term And Territory:

(a) Term: This Agreement will commence as of the date first written above and will continue for a period of three (3) years (the "Initial Period"), after which it will renew automatically for successive periods of one (1) year, each a "Renewal Period," unless terminated by either Party as provided herein. The Initial Period, together with all Renewal Periods, if any, will constitute the "Term." Either Party may terminate this Agreement, effective as of the end of the Initial Period or any Renewal Period, by notice to the other not less than ninety (90) days prior to the conclusion of the then-current period of the Agreement.

(b) Territory: The "Territory" of this Agreement will mean the United States, its territories, possessions, commonwealths and military bases.

5. Representations and Warranties/Indemnity:

(a) Mutual Ability: Each Party represents and warrants to the other that: (i) it has full right, power and authority to enter into this Agreement and to perform its

obligations hereunder; (ii) this Agreement and its performance will not constitute a breach or default under any agreement to which such Party or its assets are bound; and (iii) no consent from any party is required for the execution or performance of this Agreement.

(b) Non-Infringement: Label represents and warrants that the use of Label's Catalog in the Services as provided herein will not infringe the rights, including but not limited to intellectual property rights or contractual rights, of any third party.

(c) Indemnity: Each Party hereto will indemnify and hold the other Party harmless from any third party claim, cost, or expense (including, without limitation, legal costs and attorneys' fees) arising out of a breach by the other Party of such Party's representations or warranties hereunder.

(d) Availability/Catalog File:

(i) Label represents and warrants that the entirety of Label's Catalog will be available for use by Licensee as provided herein during the Term.

(ii) Label will promptly deliver to Licensee (or Licensee's agent) an MS Excel spreadsheet including, without limitation, complete metadata for Label's Catalog (a "Label Metadata Spreadsheet"), inclusive of the following fields: title; artist; album; ISRC; UPC; duration; Distributing Label; Sub-Label; Label Catalog Number; and Initial Release Date. Label represents and warrants that it will similarly deliver updated Label Metadata Spreadsheets to Licensee promptly, but in no event later than once per month, during the Term.

(iii) Licensee will identify the Recording(s) in textual data by reference to the title of the Recording(s) and the featured recording artist, in a manner to permit it to be displayed to subscribers.

6. Confidentiality:

(a) Both Licensee and Label may disclose the existence of this Agreement, the identity of any and all Recordings subject to this Agreement, the scope of rights granted and the term and territory of the grant of rights.

(b) All other terms of this Agreement and information required to be disclosed pursuant to this Agreement will be considered confidential and may not be disclosed to third parties without the written consent of the other Party, provided, however, that:

(i) either Party may disclose such other terms of this Agreement to its employees, officers, directors, owners, agents, consultants, representatives, attorneys and auditors, in their capacity as such, on a need-to-know basis and subject to the confidentiality obligations set forth herein; and

(ii) either Party may disclose such other terms of this Agreement to third parties in the context of legal proceedings, government investigations, or compliance with federal or state securities laws or regulations (provided reasonable prior notice of such disclosure, if permitted by law, is given to the other Party and, in each case, the disclosing Party takes all reasonable steps to prevent impermissible further disclosure by recipients authorized hereunder).

7. Miscellaneous:

(a) Definitions: (i) "Affiliates" will mean, with respect to any specified person or entity, any other person or entity that now or in the future, directly or indirectly, through one or more intermediaries, owns or controls, is owned or controlled by, or is under common ownership or control with, such specified person or entity. As used in this definition, the term "control" of a person or entity means the ownership of at least fifty percent (50%) of the voting equity of that person or entity or possessing the power to direct or cause the direction of the management of that person or entity. (ii) "Business Day" will mean any day other than: (A) a Saturday or Sunday; and (B) a day in which the banks in New York City are authorized or required to close.

(b) Addresses and Notices: All notices hereunder must be in writing and sent by certified mail, return receipt requested, to the address of the Party set forth above, in order to be effective. Notices so sent will be deemed to be effective when mailed (except for notice of change of address, which will be effective upon receipt).

(c) New York Law & Venue: This Agreement will be governed by and construed in accordance with the laws of the State of New York, and the New York courts, state and federal (located in the borough of Manhattan), will have exclusive jurisdiction and venue over any disputes arising out of this Agreement.

(d) Notice Of Breach: Neither Party will be deemed to be in breach of this Agreement unless the non-breaching party has notified the breaching Party of the breach with specificity, and the breaching Party has failed to cure the breach concerned within thirty (30) days.

(e) Merger/No Oral Amendments: This Agreement sets forth the entire understanding between the parties with respect to the subject matter hereof, and all prior and contemporaneous agreements are merged herein. No modification of this Agreement, or waiver of any right hereunder, will be binding on either Party unless memorialized in a writing signed by the Party to be charged with such amendment or waiver.

(f) Counterparts: This Agreement may be executed in counterparts, all of which, when taken together, will constitute one and the same document. Facsimile or scanned signatures hereto will be deemed original for all purposes.

(g) Assignment: This Agreement may not be assigned in whole or in part by either Party without the prior written consent of the other Party. This Agreement will be binding upon the Parties and their permitted successors and assigns and will be binding on all Affiliates of Label (including, without limitation, when they cease to remain an Affiliate of Label).

(h) LIMITATION OF LIABILITY. IN NO EVENT WILL ANY PARTY BE LIABLE TO THE OTHER PARTY HEREUNDER FOR ANY AMOUNTS REPRESENTING ITS RESPECTIVE LOSS OF PROFITS, LOSS OF BUSINESS, INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY, CONSEQUENTIAL, OR PUNITIVE DAMAGES (EVEN IF PREVIOUSLY APPRISED OF THE POSSIBILITY THEREOF) IN CONNECTION WITH OR ARISING FROM THIS AGREEMENT OR RELATED ACTS OR OMISSIONS. NO PARTY MAKES ANY REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE SUBJECT MATTER HEREOF EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT.

(i) Severability. If any term of this Agreement is invalid, illegal or incapable of being enforced by any rule of law or public policy, all other terms of this Agreement will nevertheless remain in full force and effect.

ACCEPTED AND AGREED:

SCI FIDELITY RECORDS

By: 

Name (printed): MATT HEENAN

Title: GENERAL MANAGER

SIRIUS XM RADIO INC.

By: 

Name (printed): PATRICK DONNELLY

Title: EVP

EXHIBIT A
SERVICE ACCESS RULES

1. The Service may be accessed in any of the following ways:
 - (a) Through devices and applications which are authorized by Licensee ("Authorized Devices/Applications") which enable such subscribers to record a discrete number of individual sound recordings while listening to Service channels and retain such recordings only for so long as the user remains a subscriber;
 - (b) Through Authorized Devices/Applications which automatically record a discrete number of individual sound recordings from the Service (based on subscriber preferences) and present the recordings to the subscriber, on a non-interactive basis, as a customized "channel";
 - (c) Through Authorized Devices/Applications which record subscriber-designated blocks of Service programming for later playback by the subscriber;
 - (d) Through Authorized Devices/Applications which enable subscribers to select and listen to blocks of pre-recorded Service programming;
 - (e) Through Authorized Devices/Applications where the Service programming concerned has been "cached" (i.e., copied locally) for access when Authorized Devices are not connected to the Service; and
 - (f) Through Authorized Devices/Applications which enable one to fast-forward; skip; rewind; pause; and/or resume Service programming.
2. Notwithstanding the foregoing, Licensee will not:
 - (a) Take affirmative steps to enable Service subscribers to transfer Recordings to media other than Authorized Devices/Applications; or
 - (b) Take affirmative steps to enable Service subscribers to access Recordings after their subscriptions have expired or been terminated for any reason (provided that if a subscriber subsequently restores its subscription, then access to such Recordings may be re-instated).
3. For the avoidance of doubt, this Exhibit A is intended solely to illustrate the rights granted in this voluntary Agreement; it is not intended to describe the rights or limitations of the Section 112 and 114 statutory licenses, or to indicate what service offerings/features are allowed, required, or prevented or otherwise encompassed under the statutory licenses.

Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity
From: Jim Olsen <jim@signaturesounds.com>
Date: 10/27/2011 12:45 PM
To: Jake Terrell <jterrell@musicreports.com>

Jake,

After reading about the positions of AAIM and NARAS on this issue, we've decided to stay with Sound Exchange for now. Feel free to send along new information as it becomes available.

Best, Jim

On Thu, Oct 27, 2011 at 3:40 PM, Jake Terrell <jterrell@musicreports.com> wrote:

Hi Jim,

I hope you're doing well. SXM would like to implement a transition to direct licenses asap, so I'd be remiss if I didn't check in and see what I can do to help move this proposal along. Any news?

Thanks again & kind regards,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
p: 818.558.1400 x7108
f: 818.558.3474
e: jterrell@musicreports.com

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity
From: Jake Terrell <jterrell@musicreports.com>
To: Jim Olsen <jim@signaturesounds.com>
Date: 10/17/2011 12:56 PM

Hi Jim,

I don't mean to be a pest, but we think this direct Sirius XM deal is a significant opportunity for labels (indeed, more are signing up all the time), and so I'm hoping you and I can still coordinate and see about moving things along. What do you think?

Thanks again & best regards,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
p: 818.558.1400 x7108
f: 818.558.3474
e: jterrell@musicreports.com

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity

From: Jake Terrell <jterrell@musicreports.com>

To: Jim Olsen <jim@signaturesounds.com>

Date: 10/4/2011 1:10 PM

Hi Jim,

Just following up on our scheduling a call to further discuss this Sirius XM proposal. Do you have availability tomorrow (the 5th)?

Thanks again & all best,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
tel. [818 558-1400 x7108](tel:8185581400)
fax. [818 558-3474](tel:8185583474)
jterrell@MusicReports.com

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity

From: Jake Terrell <jterrell@musicreports.com>

To: Jim Olsen <jim@signaturesounds.com>

Date: 9/15/2011 3:29 PM

Hi Jim,

I hope you're doing well. I thought I'd touch base and see if you'd be up for scheduling a quick call to discuss this Sirius XM direct license proposal a bit further. As I mentioned below, getting a sense of what you've been paid by SoundExchange relative to Sirius XM is not readily apparent in the statement you provided. That said, I think sharing some further insight on this would be worth while as you further consider the proposal.

Please let me know when you'd be free to chat. Thanks again for your time.

Best regards,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
tel. [818 558-1400 x7108](tel:8185581400)
fax. [818 558-3474](tel:8185583474)
jterrell@MusicReports.com

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity

From: Jake Terrell <jterrell@musicreports.com>

To: Jim Olsen <jim@signaturesounds.com>

Date: 9/1/2011 11:21 AM

Hi Jim,

Thanks for this. It looks like this encompasses the label share of payments received; do you have corresponding "featured artist" share statements?

As I'm sure you've noticed, it's difficult to get a sense of which of these payments applied to Sirius XM Radio... upon receipt of the artist share statements we'll see what we can glean from them.

Thanks again,
Jake Terrell

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity

From: Jim Olsen <jim@signaturesounds.com>

To: Jake Terrell <jterrell@musicreports.com>

Date: 8/30/2011 12:34 PM

Jake,

I believe that this is the statement you need to do the comparison. I appreciate the additional information,

Best, Jim

On Tue, Aug 30, 2011 at 3:07 PM, Jake Terrell
<jterrell@musicreports.com> wrote:

Hi Jim,

Thanks for your response - I appreciate it. We do think there are a number of pluses to keep in mind when considering this direct license proposal.

In addition to avoiding SoundExchange deductions by licensing direct, Sirius XM will also provide detailed quarterly account statements (within 45 days after each quarter) on a "per play" basis, and afford you with a direct audit right. We believe that this will give you a much higher level of transparency into Sirius XM plays and royalties, when compared to the reporting by SoundExchange.

Furthermore, we would use your metadata to work with Sirius XM to help maximize the identification of your directly-licensed plays.

With all that in mind, along with the service enhancements provided for under this license (which allow for the potentiality of additional royalties), we believe that by licensing directly, labels may make more than they

would otherwise make when paid by SoundExchange under statutory licenses (after SoundExchange deductions). By the way, we have performed a label marketshare analysis of Sirius XM plays from July 2009 to June 2010 and would welcome the opportunity to review your SoundExchange statements covering those periods for purposes of comparing the royalties you received from SoundExchange to the Sirius XM plays of your recordings. If you would kindly send those along, we'll take a look and see about matching the two up for a comparison.

I hope these additional thoughts help, Jim. If I can answer any questions, please let me know.

Best regards,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
tel. 818 558-1400 x7108
fax. 818 558-3474
jterrell@MusicReports.com

----- Original Message -----

Subject: Re: Sirius XM Radio - Signature Sounds - Direct Licensing Opportunity
From: Jim Olsen <jim@signaturesounds.com>
To: Jake Terrell <jterrell@musicreports.com>
Date: 8/30/2011 12:01 PM

Hi Jake,

I did receive this request a few weeks back and have been weighing if we want to do this. Obviously the agreement with Sound Exchange has been favorable to this point and we're hesitant to move forward with this. If you have any additional information that might sway our decision, please let me know. Otherwise I think we'll probably sit on the sidelines and see how this plays out.

Best, Jim

On Tue, Aug 30, 2011 at 2:30 PM, Jake Terrell <jterrell@musicreports.com> wrote:

Dear Jim,

I'm writing to follow-up on the Sirius XM Radio license request

we initially provided on 8/10 (license reattached here for convenience). Have you had an opportunity to give this a closer look? If I can answer any questions to help move this along, please do let me know. If everything is in order, would you kindly return a signed copy to me via email or fax?

Our continued thanks for your time and attention. I look forward to hearing from you.

Best regards,

Jake Terrell
Licensing Coordinator
Music Reports, Inc.
21122 Erwin St.
Woodland Hills, CA 91367
tel. 818 558-1400 x7108
fax. 818 558-3474
jterrell@MusicReports.com

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Jim Olsen
Signature Sounds Recordings
PO Box 106
Whately, MA 01093
(413) 665-4036 X2
(413) 222-9651
Jim@signaturesounds.com
www.signaturesounds.com



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Jim Olsen
Signature Sounds Recordings
PO Box 106
Whately, MA 01093
(413) 665-4036 X2
(413) 222-9651
Jim@signaturesounds.com
www.signaturesounds.com

	A	B	C	D	E
1	LABEL	ROYALTY RATE	LICENSE EFFECTIVE DATE	GENRE	KEY ARTIST(S)
2	PS Classics		8/5/2011	Broadway	Stephen Sondheim, Liz Callaway, Kate Baldwin, Anne Steele
3	K-Tel Music, Inc.		8/16/2011	re-records	Chubby Checker, Little Richard, Jan & Dean, Ray Price
4	Indica Records		8/11/2011	alternative	The Dropouts, James Murdoch, John Butler Trio, Joseph Arthur, Phantogram, The Cat Empire
5	Hep Records		8/20/2011	jazz	Buddy DeFranco, Herb Galler, Dan Lanphere, Joe Temperley, Jessica Williams
6	Phoenix Music International Ltd. (formerly See For Miles Records)		9/7/2011	rock	Sort Machine, The Fool, Family, Nico, Canned Heat
7	Tyscot Records		8/10/2011	gospel	VaShawn Mitchell, Shirley Murdock, Rance Allan Group, Joe Pace
8	Master's Records		8/10/2011	Christian	Platinum Trend, Nicois
9	Cleopatra Records		8/10/2011	rock	Sly Stone, L.A. Guns, Ray Charles, Nektar, DoggyStyle, Powerman 5000, Wanda Jackson, BulletBoys, Everclear
10	Homeland Entertainment Group		8/10/2011	gospel	The Anchormen, Heirline, Toney Brothers, The Songfellows Quartet, Don DeGrate
11	Milan Records		10/1/2011	soundtracks	Astor Piazzola, West Indian Girl
12	Bumstead Productions Ltd.		8/10/2011	alternative	The Tress, Two Hours Traffic, Yukon Blonde, k.d. lang
13	Nu Groove Records		9/16/2011	jazz	Jay Soto, Darren Rahn, Dee Brown, Eddie Benitez
14	In The Red Records		8/10/2011	punk	The Dirtbombs, Thee Oh Sees, Black Lips, Jay Reatard, The Horrors
15	Stone Table Records		8/10/2011	Christian	JJ Heller
16	Amherst Records		8/10/2011	pop/r&b	Spyro Gyra, The Stylistics, Glenn Medeiros
17	NorthernBlues Music		8/10/2011	blues	Eddie Turner, Watermelon Slim, Zac Harmon, Paul Reddick
18	12K Records		9/7/2011	electronic	Taylor Deupree, Kenneth Kirschner, Fourcolor, Moss, Marcus Fischer, Ryuichi Sakamoto
19	Cordova Bay Entertainment Group Inc.		8/10/2011	rock	Acres of Lions, David Gogo, Raghav, Krome
20	Fader 4 Music		10/1/2011	country	Kenny Ray Horton
21	Adjett Productions		8/18/2011	country	Jett Williams
22	Boyds Tone Records		10/1/2011	kids	Daddy A Go Go
23	Cameron Productions		8/18/2011	Christian	Tatiana
24	Mamanook Music		8/18/2011	kids	Jay Pancoast
25	Saustex Media		10/1/2011	country	Stevie Tombstone, Eric Hisaw, The Hickoids, Los Gringos
26	Frenchkiss Records		9/12/2011	alternative	Passion Pit, Les Savvy Fav, The Antlers
27	Magnatune		9/13/2011	New Age	Kourosh Dini, Chiwawa, Svava, Jami Sieber
28	FatCat Records USA		9/15/2011	alternative	Animal Collective, Dustin O'Halloran, Frightened Rabbit, Sigur Ros
29	Les Productions Simon Says		9/7/2011	rock	S.E.N.S., Krystel
30	Bulls Eye Records		9/7/2011	bluegrass	Bull Harmon
31	Warlock Records		10/1/2011	hip-hop	C-Bo, Jungle Brothers, Todd Terry
32	Anjunabeats		10/7/2011	electronic	Arty, Above & Beyond, Super 8 & Tab, Tranquility Base
33	Smalltown Super Sound		8/10/2011	electronic	Annie, Jaga Jazzist, 120 Days, Mental Overdrive

SIRIUS XM SIGNED DIRECT LICENSES

	A	B	C	D	E
1	LABEL	ROYALTY RATE	LICENSE EFFECTIVE DATE	GENRE	KEY ARTIST(S)
34	Yellow Dog Records		10/13/2011	blues	Eden Brent, The Asylum Street Spankers, Mary Flower, The Soul of John Black
35	Bullet Tooth / TrustKill Records		10/13/2011	punk	Bullet For My Valentine, Burn It Down, Crash Romeo, It Dies Today
36	Star 69 Entertainment LLC		8/18/2011	electronic	Chus & Cheballos, David Morales, Robbie Rivera, Suzanne Palmer
37	Centricity Music		10/7/2011	Christian	Aaron Shust, Andrew Peterson, Downhere, Jason Gray
38	Gotee Records		11/1/2011	Christian	Relient K, Sonicflood, Abandon Kansas, House of Heroes, Jamie Grace, Stephanie Smith
39	Park The Van Records		10/4/2011	alternative	Dr. Dog, The Teeth, Generationals
40	Pravda Records		11/1/2011	alternative	Glenn Mercer, Andre Williams, New Ducan Imperials, The Civil Tones, Diplomats of Solid Sound
41	Temporary Residence Limited		9/15/2011	alternative	Explosions in the Sky, Caroline, Grails, Rob Crow, Pinback
42	Lonesome Day Records		8/10/2011	bluegrass	Girls Guns and Glory, Julie Neumark, Wildfire
43	Sonic Unyon Records		10/13/2011	alternative	Tristan Psionic, Sianspheric, Eric's Trip, Shallow North Dakota, Hayden
44	Shelflife Records		9/12/2011	alternative	The Radio Dept., Acid House Kings, Majestic
45	Plug Research Music		10/17/2011	alternative	Dntel, Flying Lotus, Mia Doi Todd, John Tejada
46	Captured Tracks		11/1/2011	alternative	Craft Spells, Beach Fossils, Wild Nothing
47	Grammercy Records		11/1/2011	jazz	Sidney Bechet, Django Reinhardt, Dizzy Gillespie, Bing Crosby
48	Angel Air Records		11/1/2011	rock	Mott the Hoople, Ian Gillain, Warhorse, Andromeda, Atomic Rooster, Saxon
49	Delta Groove Productions		11/1/2011	blues	The Mannish Boys, Lynwood Slim, Sean Costello, Philip Walker
50	Justice Records		11/1/2011	rock	...And You Will Know Us By the Trail of Dead, Nelo, Electric Touch, Greta Gaines
51	101 Records		8/10/2011	folk	Phil Hare, The Family Mahone, Ben & Joe Broughton, Mark Radcliffe
52	Murderecords		8/10/2011	alternative	Sloan, Local Rabbits, The Inbreds, The Super Friendz
53	Bonsound Records		8/10/2011	pop	Yann Perreau, Radio Radio, Randon Recipe, Monogrenade, Philippe B
54	Labrador Records		10/28/2011	alternative	The Radio Dept., Acid House Kings
55	SCI Fidelity Records		8/10/2011	alternative	The String Cheese Incident, Keller Williams, Younger Brother, Lotus, The Greyboy Allstars
56	Ape Machine LLC		11/10/2011	rock	Ape Machine
57	Sharp Nine Records		11/22/2011	jazz	One For All, Joe Locke, Brian Lynch, Mike DiRubbo, Eddie Henderson
58	Earache Records		8/19/2011	metal	Bolt Thrower, Carcass, Deicide, Dillinger Escape Plan, Morbid Angel, Napalm Death, Sleep
59	Paracadute		11/22/2011	alternative	OK Go
60	TMB Productions		11/22/2011	alternative	They Might Be Giants
61	Michael Doughty		11/22/2011	alternative	Mike Doughty
62	Michael Viola		11/22/2011	alternative	Mike Viola

SIRIUS XM SIGNED DIRECT LICENSES

	A	B	C	D	E
	LABEL	ROYALTY RATE	LICENSE EFFECTIVE DATE	GENRE	KEY ARTIST(S)
1					
63	Eardrum Records		11/1/2011	comedy	George Carlin

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of)	
)	
)	
DETERMINATION OF RATES AND TERMS	)	Docket No. 2011-1
FOR PREEXISTING SUBSCRIPTION AND	)	CRB PSS/Satellite II
SATELLITE DIGITAL AUDIO RADIO)	
SERVICES)	

WRITTEN DIRECT TESTIMONY OF STEVEN BLATTER

(On behalf of Sirius XM Radio Inc.)

I. Introduction

1. I am Senior Vice President and General Manager of Music Programming at Sirius XM Radio Inc. (“Sirius XM”). I have worked professionally in radio, as well as in marketing, promotion and online for over 25 years. In terrestrial radio, I was responsible for the programming of local stations in New York and Los Angeles. My prior experience also includes the creation and oversight of content syndicated to hundreds of local radio stations across North America. Prior to the merger of Sirius Satellite Radio Inc. (“Sirius”) and XM Satellite Radio Holdings, Inc. (“XM”), I was at Sirius for approximately five years.

2. I testified on behalf of Sirius in the prior proceeding before the Copyright Royalty Board (“CRB”) to set rates for the period from 2007 through 2012 (“*Satellite I*”). In my prior written testimony, which is incorporated herein (and which has been designated for inclusion in this proceeding according to the governing regulations), I covered three key areas: (1) the range and coverage of the Sirius music channels; (2) how each music channel is developed and programmed and Sirius’ creative contribution to that process; and (3) the promotional benefits of radio, including satellite radio. To the extent that there have been any material changes since the

last proceeding before the CRB, I will update each of these categories in my testimony here. In addition, I will provide testimony describing how airplay on Sirius XM channels has a direct impact on the sale of recorded music. The correlation between Sirius XM airplay and music sales – which has been repeatedly acknowledged to me and my staff by record company executives, artists, and their managers – is substantially greater than it was when I testified in the *Satellite I* proceeding five years ago.

II. Description Of Sirius XM’s Music Programming And Current Music Channels

A. Sirius XM’s Services And Music Programming Structure

3. As is described in more detail in the accompanying testimony of James Meyer, even after the merger of Sirius and XM, Sirius XM maintains two separate distribution platforms. For the most part, the content offerings on the two services, including the music channels, are almost identical. Although there remain “Sirius” and “XM” platforms, by illustration, a subscriber listening to the 80s on 8 channel on the Sirius platform hears the same channel as a subscriber listening to the 80s on 8 channel on the XM platform.

4. I am responsible for all of Sirius XM’s music programming operations and I have a significant role in other areas related to music programming, such as artist and talent relations. I currently supervise approximately 285 full and part-time employees, including six Music Programming heads, two Programming Operations supervisors, and one head of Production. Each Music Programming head is responsible for a genre or two of music, including Jazz, Standards, Latin, Pop, Rock, Urban/Hip Hop, and Country, and supervises the programming personnel responsible for Sirius XM’s various music channels within each genre.

5. The Sirius satellite platform offers 71 full-time music stations without commercials (64 are produced by Sirius XM in the United States; the other seven are produced

by our Canadian affiliate).¹ The XM satellite platform offers 71 full-time music stations without commercials (67 are produced by Sirius XM in the United States; the other four are produced by our Canadian affiliate).² The most current versions of the channel line-ups are attached as Sirius XM Direct Exhibit (“SXM Dir. Ex.”) 1. These line-ups do not include limited-engagement channels, which are offered for shorter periods of time and which I discuss below in paragraphs 56-58.

6. As can be seen on the channel line-ups, most of the music stations continue to be era- or genre-based. For example, our thirteen pop stations (fourteen on XM) include Sirius XM Hits 1 (Top 40 hits), '40s on 4, '50s on 5, '60s on 6, and so on. Our 22 rock channels include a wide mix of classic rock, alternative and indie rock, hard rock and heavy metal, and several more mellow, “adult” rock formats. Each of the Hip-Hop/R&B, Dance, Country, Christian, Jazz/Standards, and Classical categories likewise offers between three and seven stations covering several listening options – including a variety of niche channels (like Bluegrass, Reggae and Show Tunes) that cannot be found on terrestrial radio.

7. As I described in my *Satellite I* testimony, a number of our music channels are devoted almost exclusively to music recorded before 1972 (and thus, as I understand, not subject to the statutory license at issue in this proceeding). These include '40s on 4, '50s on 5, '60s on 6, and Elvis Radio. Other music stations on our services make substantial (though not exclusive) use of pre-1972 recordings, including Classic Vinyl, the Grateful Dead Channel, Underground

¹ Sirius XM recently introduced sixteen additional full-time music stations that are available to subscribers that purchase the latest Sirius XM radio and one of our new “SiriusXM” branded packages which come with a suite of 20+ “Xtra” channels. The required radio includes the new Sirius XM Edge and Lynx products. Over time, more and more of our subscribers will be able to access these stations.

² There are slight differences between the full-time music channels of XM and Sirius. For example, there are a few music channels offered on XM that are not available through Sirius because the XM platform is capable of hosting a few more channels than the Sirius platform, and there are a few Clear Channel-programmed radio stations available on XM that are not available on Sirius.

Garage, Siriusly Sinatra, Radio Margaritaville, On Broadway, The Bridge, '70s on 7, and Soul Town.

B. Development Of Channel Style And Identity

8. Sirius XM goes to great lengths to create an identity for each of its music channels. In many cases, our distinctive channel identities have been crafted over the course of eight or ten years. During this time, we have strategically built true national “brands” for each of these channels, as follows:

- While the era or genre will define the universe of music upon which the programmers will draw, the channel style and personality will shape the overall energy level of the channel, for example, whether it is edgy and energetic or conservative and mellow.
- The channel identity also helps determine the appropriate on-air hosts for the channel – and is in turn shaped by the personalities of those hosts.
- Each channel has a concise name that captures its format and identity such as “Octane,” (uptempo hard rock) or “BPM” (dance). Moreover, a distinctive channel logo is associated with the channel name so as to permit instant visual identification in our marketing materials and on receivers. Further, the name and logo are supported by additional positioning or attitudinal statements that are used to reinforce the brand image of the channel. For example, the slogan of our flagship Top 40 Station, Sirius XM Hits 1, is “The Sound of Generation Now.”
- Sirius XM music channels also typically include production elements or interstitial audio pieces heard between the songs that further develop the image and personality of the channel for the intended audience. Each music channel has its own station voice and slogan, and some even employ custom jingles that help enhance the mood and flow of the channel.
- Interactive contests and promotions are aired on the appropriate channels to further build listener loyalty and create an even stronger bond with the audience.
- The identity of a channel guides the types of special programming that may be created and scheduled. Artists often participate in interviews and perform live on certain rock channels, while on our pop channels artists will guest-host special programs like countdown shows and new music showcases.

9. All of these factors – which go beyond simply playing music – work together to enhance the personality of each station, make the listening experience more engaging to the

target audience, and create meaningful and satisfactory channel options for the subscriber. As a result of Sirius XM's success in building these national channel brands, our listeners develop valuable relationships with their favorite Sirius XM channels.

C. The Music Selection Process For Sirius XM Music Channels

10. Our stations are far from mere "jukeboxes" of songs from a given era or genre. Rather, each channel has a clearly defined style and identity that shapes the programming and presentation of the channel in multiple ways. As I mentioned in my *Satellite I* testimony (at paragraph 25 through 30), the creation and maintenance of a particular music channel requires a great deal of planning and resources. Selecting, sequencing and packaging music is a difficult and ongoing task carried out by our music programming specialists. It is not enough just to rotate down an alphabetical or random list of pieces that are within the universe defined by a channel's format. Instead, trained music programming experts who are deeply familiar with the music bring to bear both scientific and artistic judgment to curate an optimal musical flow and mood on a song-by-song basis. Each Music Programmer also utilizes software called MusicMaster that helps in maximizing the rotation and sequencing of songs for each music channel. While this software assists programmers in managing their music libraries and facilitates the music scheduling process, it is no substitute for the informed judgment of programmers with in-depth knowledge of the genre. Every hour of music scheduled across all Sirius XM music channels is carefully reviewed and specially selected by a Sirius XM programmer before it is then presented to our listeners.

D. Sirius XM's Direct Licensing Initiative

11. One additional factor that will play into our music selection going forward is Sirius XM's recent direct licensing initiative. As discussed, the music selected and played across

the Sirius XM platform is curated by our programmers using their professional judgment, as well as proprietary and non-proprietary research data as it applies to a particular channel. Where appropriate, the programmer also takes into account the relationship that the artist and/or their representatives have with Sirius XM. This is sometimes measured by the artist's willingness to participate in our programming with specials like live performances, interviews, guest DJs sessions and other unique opportunities. Going forward, we also will take into account whether the artist's record label has a direct licensing relationship with Sirius XM.

12. Sirius XM has recently entered into a number of direct licenses with more than 60 record companies. I have reviewed the list of companies, and can attest that their catalogs include songs that are already featured on Sirius XM music channels. For example:

- The band LA Guns, whose music is now directly licensed via our agreement with Cleopatra Records, is a mainstay of our Hair Nation (hard rock) channel – we feature thirteen tracks by the band in rotation. Many other classic 80s hair metal tracks regularly played on Hair Nation, including “Turn Up the Radio” by Autograph and “Seventeen” by Winger, are likewise licensed by Cleopatra, whose Deadline Records imprint specializes in the genre.
- The band Local Natives has two songs – “Wide Eyes” and “Airplanes” – that are now covered by Sirius XM's direct license with Frenchkiss Records. These songs have been playing on Sirius XMU and/or Alt Nation for over a year.
- Sirius XM's direct license with Sci Fidelity Records covers more than twenty songs by the artist String Cheese Incident. These songs are actively being played on Sirius XM's Jam On channel.
- Our direct license with PS Classic covers many soundtracks, including Sondheim on Sondheim, A Little Night Music, and Finian's Rainbow. Currently, more than fifteen songs covered by our license with PS Classic are in active rotation on Sirius XM channels.

13. Our primary objective is to provide our subscribers with the most satisfactory listening experience possible. While the merits of the artist and song always come first, we will favor a directly licensed song when the programmer feels that it will fit just as well as other non-directly licensed tracks.

E. Sirius XM's Top Quality On-Air Talent

14. Sirius XM makes major investments in identifying and developing top quality on-air talent, and our programmers and other creative workers regularly support that talent.³ Sirius XM employs over 200 credible and authentic on-air personalities to present music and timely information about each artist and song played. The relationships that Sirius XM's hosts develop with their audience are strong and valuable, as the listeners come to trust the on-air hosts who "sell" the music they play in a passionate and engaging manner.

15. Sirius XM's 200-plus music programming hosts include well-known musicians like Tom Petty, Bob Dylan, Lou Reed, Nancy Sinatra, Peter Frampton and Steven Van Zandt. In the hip-hop genre, our hosts include DJ Sway, the Aphiliates, DJ Kay Slay, Tony Touch, and Whoop Kid – who might not be household names like Bob Dylan, but are well-known by hip-hop fans. Sirius XM is particularly influential in the electronic dance genre, where the world's most popular DJs host regular shows on Sirius XM's electronic dance channels such as Electric Area and BPM. These DJs include Avicii, David Guetta, Skrillex, Laidback Luke, Tiesto, Armin Van Buuren, Afrojack, Kaskade, Bob Sinclar, Above and Beyond, Steve Aoki, Paul Oakenfold, Ferry Corsten, Josh Wink, Eddie Halliwell, Markus Schulz, Sander Van Doorn, Carl Cox, John Digweed, Robbie Rivera, Benny Benassi, George Acosta, Adam Beyer, Dave Aude, Crystal Method, Pretty Lights, and Nervo. SXM Dir. Ex. 18 contains a full list of celebrity hosts on Sirius XM music channels.

16. Sirius XM listeners recognize that the hosts and programmers behind the stations – people whose taste the listeners have come to know, appreciate, and rely on – have hand-

³ In contrast, the largest radio operator in the United States – Clear Channel Communications – reportedly just cut a significant number of DJs from its payroll. See Brian Stelter, *Clear Channel Cuts DJs Across the Country*, N.Y. Times, Oct. 27, 2011 (attached as SXM Dir. Ex. 17).

selected the music they hear. Curation causes our listeners to take notice of and be open to the songs we select.

F. Sirius XM's Unique Artist Channels And Specialty Programming

17. We also have developed channels and programs in most of the main music categories in conjunction with well-known artists such as Jimmy Buffett (“Radio Margaritaville”), Eminem (“Shade 45”), and Steven Van Zandt (“Underground Garage”). Since I last testified in *Satellite I*, we have developed additional channels with several artists, including Pearl Jam (“Pearl Jam Radio”). Most recently, Sirius XM announced that Ozzy Osbourne will launch his own music channel to be titled “Ozzy’s Boneyard.” SXM Dir. Ex. 19. We also continue to offer channels devoted to the music of Elvis Presley (“Elvis Radio”), Frank Sinatra (“Siriusly Sinatra”), Bruce Springsteen (“E Street Radio”), and the Metropolitan Opera (“Met Opera Radio”), among others.

18. The channels that we have developed with these artists involve exclusive relationships that often entail not just lending their name to a channel, but significant contributions by the artists themselves. For example, Willie Nelson is deeply involved in Willie’s Roadhouse, and has at times asked to review and approve *every artist* whose music is played on his channel. Similarly, Jimmy Buffet also has significant involvement with his channel, Margaritaville, and Eminem’s manager, Paul Rosenberg, has daily interactions with Sirius XM regarding the programming of Eminem’s Shade 45 channel. With respect to Elvis Radio, the Presley estate is in regular contact with Sirius XM and our dedicated channel programmer, who is located at the Elvis headquarters in Memphis, Tennessee.

19. In addition to bringing their creative talents to bear on shaping the overall listening experience, these artists often make available a range of unreleased recordings that listeners otherwise could not access.

20. We also program a variety of specialty shows that play music that listeners would not typically hear elsewhere. For example, on Sirius XM's channel The Spectrum, we have a show called "Nordic Rox" that plays music by Scandinavian artists, "Celtic Crush" plays all Celtic music, and the "Cool Bobby B's Doo Wop Shop" show on our '50s on 5 channel plays exclusively Doo Wop music. A complete list of Sirius XM's 53 specialty programs is attached as SXM Dir. Ex. 20.

III. The Sirius XM Music Channels Compared To Terrestrial Radio: Promotional Benefits Of Wider Variety And More Exposure To New Music

21. In my *Satellite I* testimony, I discussed (at paragraphs 21-23) the fact that free terrestrial radio tends to be limited in its ability to offer anything other than the most mainstream music formats that appeal to adults. For example, a single format focused on playing both new alternative rock and hip-hop will likely appeal to male listeners who are 16 to 24 years-old. In most local radio markets, it is extremely difficult to find enough advertisers interested in that demographic to support a financially viable radio station. As a result, the tendency is for each local market to have several stations with musically conservative formats, supplemented, perhaps, with a few specialty formats supported by institutions such as colleges or local ethnic concentrations. Even in a major urban area such as Washington, D.C., it is difficult for most listeners to receive more than fifteen different music formats, and channel options in much of the country can be far fewer.

A. Terrestrial Radio Has Become Even More Conservative During The Past Five Years

22. Since I last testified, terrestrial radio stations have become even more conservative in embracing a range of music. Because local stations are forced to play music that appeals to relatively broad audiences and fear that listeners will change channels when unfamiliar music is played, they typically will not take the risk of playing songs with potentially narrow appeal and are less willing to introduce new songs into their limited playlists.

23. Some of the omissions forced by the constraints on terrestrial radio are striking, and the omissions have only grown more notable over the past five years. For example, two of the largest local markets in the United States, New York and San Francisco, lack any country music format. Many major markets, including New York, Los Angeles, Chicago, San Francisco, Dallas, Houston, Atlanta, Philadelphia, Washington, D.C. and Boston, have no dance music stations. Several of the largest markets, including Houston, Atlanta, Washington, D.C., and Boston, lack an oldies format.

24. A prime example of the increasingly conservative nature of terrestrial radio is the current state of rock radio. In March 2011, *Rolling Stone* published an article by contributing editor Steve Knopper titled, “Where Did the Rock Hits Go?” The article, which explored the reasons for the decline in rock music sales, attributed part of the decline to changes in radio:

Thanks to important stations switching formats in recent years, a Number One rock-radio hit reaches just 12 million listeners, compared with 81 million for Top 40. This gap is far wider than it was in 2009 than 2006, according to Nielsen SoundScan. And many of the stations that are left have seen their ratings fall.

SXM Dir. Ex. 21. Knopper wrote another article on this continuing trend in November 2011, published in *Rolling Stone* and titled “Rock Radio Takes Another Hit.” He there noted the continued presence of this gap: “[a] Number One rock hit reaches just 13 million listeners,

compared to 138 million for a Number One Top 40 hit.”⁴ SXM Dir. Ex. 22. With terrestrial radio stations changing formats to play more mainstream music, less new rock music is playing on terrestrial radio, and those stations that do play rock music are reaching fewer listeners.

B. Sirius XM Can Provide A Mix of Music That Terrestrial Radio Cannot

25. Currently, Sirius XM is reaching more than 21 million subscribers with its national reach, which, along with our broad channel capacity, allows us to support many different musical channels with distinctive formats. Even where a particular niche genre – bluegrass, for example – may not attract enough listeners in a given city to justify devoting a local station to the format on a full-time basis, the audience for the genre on a national basis is large enough, and our channel capacity great enough, to allow us to devote an entire channel to the genre. SXM Dir. Ex. 24 highlights the 40 music formats on Sirius XM that are generally not available on terrestrial radio.

26. Even where we offer “mainstream” channels comparable to those one would expect to find on the local radio dial (for example, classic rock), our national footprint, subscription model, and lack of advertising make us much less risk-averse than terrestrial radio programmers. Because our music stations are supported by subscription fees, not advertising, we provide listeners with mixes of music that often do not fit with the advertising interests of automobile dealerships, supermarkets, and other businesses that provide the core advertising for terrestrial radio stations. The absence of commercials also translates into a listening experience that is more sustained and satisfying than advertiser-supported radio. *See* SXM Dir. Ex. 25 at Slide 16 (study conducted by Arbitron Inc., Edison Research, and Scarborough Research

⁴ For another discussion on the decline of rock music radio, *see also* Christine Pawlak, *We Won't Rock You*, Slate, November 15, 2011, *available at*, http://mobile.slate.com/articles/arts/culturebox/2011/11/alternative_rock_radio_the_sad_unwarranted_decline_of_fm_rock_stations_.html (attached as SXM Dir. Ex. 23).

demonstrates that Sirius XM listeners “love” using the satellite radio in their car more than, *inter alia*, AM/FM radio). The greater variety and listener satisfaction explains why subscribers are willing to purchase Sirius XM radios and pay subscription fees when music can be heard for free on terrestrial radio.

27. Because our music channels are listener-driven (and not advertiser-driven), Sirius XM can dig much deeper into an artist’s music catalog than what is typically heard on terrestrial radio. With 71 music channels available to our subscribers, we can be more specialized and play lesser-known songs and artists that terrestrial radio would typically ignore. This music is then heard by listeners who selected a channel that is specifically committed to playing a variety of music that is wide and deep. For these reasons, listeners are much more likely to discover and purchase music when listening to Sirius XM than they are listening to terrestrial radio.

C. Sirius XM Plays And Promotes More New Music Than Terrestrial Radio

28. Because Sirius XM does not have the same constraints on its playlists as terrestrial radio stations, Sirius XM is able to place emerging songs and artists on our channels long before they might appear on terrestrial radio. For example:

- Sirius XM’s Indie Rock channel, Sirius XMU, first played Amy Winehouse’s “Rehab” on November 6, 2006. In contrast, terrestrial radio stations did not begin playing the song until January 16, 2007. “Rehab” went on to become Winehouse’s most famous song (it won three Grammy Awards in 2008), and her album “Back to Black” was a massive success.
- Sirius XM’s Alt Nation first began playing Foster the People’s song “Pumped Up Kicks” on June 18, 2010, before the song was officially released or even monitored by Mediabase. “Pumped Up Kicks” did not start playing on terrestrial radio until a few months later in August 2010. In 2011, the song became a major hit. On December 9, 2011, Foster the People will be doing a special performance for Sirius XM listeners. In connection with that performance, a member of the band stated: “Alt Nation played our music before any other radio outlet in the country—this show is a way for us to thank the SiriusXM team and do something special for our fans.” SXM Dir. Ex. 26.

29. Terrestrial radio is not exposing listeners to as much new music as does Sirius XM. To demonstrate this, I looked at Mediabase’s “Current and Recurrent vs. Gold Ratios” for twelve Alternative and Active Rock terrestrial radio stations in the Top 10 radio markets in the nation on a particular date (in this case October 19, 2011). SXM Dir. Ex. 27. As used in Mediabase’s calculations, “Current and Recurrent vs. Gold Ratios” compare the amount of Current and Recurrent music to Gold music being played on a particular station. “Current music” is generally music that is currently on a most-played chart for a particular genre. After current music falls off the chart, it is considered “recurrent” for approximately two years. “Gold” music encompasses all music in a particular genre that has been off the chart for more than two years, and hence represents older music. An examination of the ratios demonstrates that Sirius XM’s Alternative Rock station (Alt Nation) and Active Rock station (Octane) play a significantly higher percentage of Current and Recurrent music than other Alternative and Active Rock terrestrial radio stations. SXM Dir. Ex. 27. On average, 65.8% of music played on Octane and Alt Nation is Current and Recurrent music. *Id.* In contrast, the twelve terrestrial radio stations examined only play an average of 35.1% Current and Recurrent music (with the highest Current and Recurrent percentage being 59.9%, and the lowest being 16.1%). *Id.* This data set demonstrates that Sirius XM is exposing listeners to newer Alternative and Active Rock music, while terrestrial radio tends to play older music that the audience is more familiar with.

30. Steve Knopper of *Rolling Stone* has noted the importance of Sirius XM in breaking new bands in the current industry environment: “Some of those [bands] like Mumford and Sons, Vampire Weekend and the Black Keys, thrived by touring relentlessly *and breaking their singles via college stations, SiriusXM programs and ad licensing to clients from Cadillac to Tommy Hilfiger.*” SXM Dir. Ex. 21 (emphasis added).

31. Well-known artists have attested to the fact that Sirius XM (and not terrestrial radio) is where they turn to hear new music. In an interview with widely respected music journalist and filmmaker Cameron Crowe, dated October 12, 2010, pop icon Elton John made the following comments about satellite radio:

Cameron Crowe: We are here on satellite radio now – SIRIUS – which is kind of a seismic event in the way music is heard now. What is your opinion of satellite radio?

Elton John: Thank God. Thank God, you know. It's a savior of music, you know. . . . To have people who love music and love promoting people that haven't been necessarily heard of, but, you know, deserve to be heard. It's fantastic and that is the only way these people are going to get played on the radio.

Crowe: Yeah.

John: They're not gonna be played on the normal format of radio. So, Sirius is a Godsend And nobody I know listens to normal radio. I can't stand it. 'Cause you hear the same 10 songs all the time You listen to [satellite radio].

SXM Dir. Ex. 28.

32. Kirk Hammett, a member of the iconic heavy metal band Metallica, had the following to say:

- “Satellite radio for me now, is what radio used to mean to me in the ‘70s, which played a lot of hard rock. You know, FM radio is still cool now, but they’re not pushing the envelope, not like satellite radio is.” SXM Dir. Ex. 29.
- “It’s great to hear metal bands I wouldn’t otherwise hear, or wont have the time to hear, or I just don’t know about.” *Id.*
- “Satellite radio, for me, it’s like MTV was, you know, in the ‘80s. Basically, it keeps me informed. I love that.” *Id.*

33. David Draiman, a member of the platinum selling hard rock band Disturbed, said the following about Sirius XM and in particular, the channel Octane, during an interview with Sirius XM in August 2010:

- “Look, I – honestly. I mean, you can ask my girl, you can ask anybody – that’s pretty much all I listen to. . . I listen to Octane, I listen to Hair Nation, I listen to Faction, and every once in a while I listen to a little bit of Liquid Metal.” SXM Dir. Ex. 29.
- “But um, you know, I – why bother with terrestrial radio when it’s become an ipod? you know, or when it has become shuffle? When it’s this jack format nonsense? I really am much more about when I want to listen to something, that’s what I want to listen to. And, if I want to go ahead and take a break from the hard rock or heavy metal, I’ll go ahead and put on other stuff.” *Id.*
- “But when it comes to just serious back-to-back continuity of the kind of music that we want to listen to – even – I can speak for the whole band. We love it, we’re all about it.” *Id.*
- “But you know, for the newer stuff, I kinda count on you guys. We feel very at home you know, it’s a station you can count on to play the types of music you want to hear. And, it reflects our personal universe. You know, and it gives us kinda the lay of the land. In fact, to be perfectly honest with you, sometimes we’ll get ideas for new bands that we may wanna take out on tour from listening to you guys. . . . In all honesty, we’ve gotten some of our first, initial exposure to bands from hearing them on Octane.” *Id.*

34. Successful DJ Robbie Rivera has commented on satellite radio’s impact on dance music: “I think the most important thing that’s happening in America that has really brought dance music into the mainstream is probably the satellite radio shows. They have all those DJs playing their mix shows on Sirius XM. I have a mix show there, but you can listen to dance music all the time. I think that helped a lot because they put dance music all over the place, all over America.” Adam Stewart, *House Legend Robbie Rivera On The State of Music, Deadmau5 And ‘Jersey Shore’* (Apr. 7, 2010), available at, <http://newsroom.mtv.com/2010/04/07/robbie-rivera-deadmau5-jersey-shore/> (attached as SXM Dir. Ex. 34).

35. Newer artists also have recognized the role of Sirius XM in exposing their music to listeners. For example, during an interview in 2010, Elaine Bradley of the alternative band Neon Trees told Sirius XM: “I never assume that somebody has heard us before. So we play a show and then people are like ‘oh you were so great.’ And I was like, ‘oh is this your first time

hearing us?’ And surprisingly, more and more people have said: ‘No.’ And it’s like ‘wow! where’d you hear us?’ And a lot of people say ‘Alt Nation [a Sirius XM channel].’” SXM Dir. Ex. 31.

36. In a mid-2010 interview, Justin Tranter of the band Semi Precious Weapons commented: “I swear that every single time our song is played on Alt Nation I get – whether it is a Facebook message or a Tweet or a text – it’s been really amazing just to see what Alt Nation has done for us.” SXM Dir. Ex. 32.

37. As is apparent from these examples, not only do Sirius XM’s music channels expose listeners to music they otherwise would not hear; they also give emerging artists a unique opportunity to be heard.

D. Sirius XM Music Channels Efficiently Provide Other Promotional Benefits Not Typically Offered By Terrestrial Radio

38. Sirius XM’s marketing reach provides great value to artists that choose to work with us. Because Sirius XM can efficiently reach millions of listeners on a national scale, we provide marketing and promotional opportunities that are generally unique to satellite radio, as described below.

39. **Special Programming:** Sirius XM produces several different artist-specific programs that can promote artists and their music. Sirius XM produces a program called “Artist Confidential,” each episode of which focuses on a particular artist and includes a live performance and interview. A newer initiative involves a “Town Hall” broadcast, which features a particular artist or band and a question-and-answer session with fans. We also work with artists to host Guest DJ sessions that then air on appropriate Sirius XM channels. A list of artists involved in these special programs is attached as SXM Dir. Ex. 35.

40. **On-air Promotion:** Live or recorded announcements will air across multiple Sirius XM music, talk, and sports channels to promote an artist-specific special program or contest, typically revolving around a new album release.

41. **Retail Marketing:** Depending on the artist, we may offer retail marketing opportunities. For example, Sirius XM will include an artist's name and a mutually agreed-upon song title on the retail packaging for one of Sirius XM's radios, as well as on radio screens featured in marketing/advertising materials created with our retailers (Best Buy, RadioShack, etc.). Such marketing materials would include point-of-purchase materials and newspaper circulars. Further, Sirius XM may offer to use an artist's image in Sirius XM retail brochures, channel guides and other marketing materials offered by our retailers and OEMs.

42. **Direct Marketing:** Sirius XM also has the ability to promote an artist by highlighting the artist in the email newsletters sent to Sirius XM subscribers across the country. Sirius XM may offer to dedicate an email blast to Sirius XM subscribers promoting a particular artist's event (for example, an album release, tour or exclusive Sirius XM programming).

43. **Online Promotion:** Sirius XM can promote an artist through its online presence. Sirius XM can dedicate a page on the Sirius XM website to a particular artist. Sirius XM can also promote an artist through its social media presence (including Facebook and Twitter), Sirius XM's YouTube page, and ongoing viral marketing by Sirius XM.

44. **Publicity:** Sirius XM may issue a press release to announce the commencement of a special program created around a particular artist, such as an artist-hosted album preview, live performance or guest DJ session. These press releases are provided to national and local media outlets by the Sirius XM Corporate Communications group.

45. **Contests:** Sirius XM creates contests in connection with featured artists. If an artist is announcing a new tour or a special live performance exclusively for Sirius XM subscribers, Sirius XM can launch a sweepstakes on its platform and extensively promote it on air and online. SXM Dir. Ex. 39 provides examples of how the above-discussed marketing capabilities are offered to artists. Local terrestrial radio stations cannot provide similar promotional opportunities on a national basis.

IV. Record Labels And Artist Management Companies View Satellite Radio As A Powerful Promotional Vehicle

46. As discussed above in Section II, Sirius XM goes to great lengths to develop channel brands, identify meaningful music selections, and develop relationships between on-air talent and Sirius XM listeners. Because of all these factors, record companies and artists recognize the value of our channel brands and that airplay of a song on a Sirius XM channel connects with our listeners in a more engaging manner than airplay on an Internet-delivered music service with generic channel brands that lack hosts and other production elements or on a local terrestrial station that lacks the passion, credibility, and authenticity of a listening experience on Sirius XM. As a result, record labels and artists view satellite radio as a multi-faceted promotional vehicle.

A. Record Labels Aggressively Seek Airplay on Sirius XM Music Channels

47. While there are numerous ways in which consumers are exposed to music, like stories in newspapers and magazines, television appearances, blog postings, and music videos, the simple and universally recognized fact is that airplay on radio has continually proven to be

the biggest driver of record sales.⁵ The music industry understands this well, as evidenced by the major investments record companies make to secure radio airplay for their music.

48. Record companies have large marketing and promotion operations specifically charged with obtaining radio airplay, typically organized with regional operations under national direction. They also use independent record promoters to encourage radio programmers to play their music. Record labels provide Sirius XM and other radio outlets their recordings for free, often weeks before public release, in hopes of generating pre-release demand. The labels recognize that it is incredibly difficult to have success with an album or song without extensive airplay. This is why many of the most influential executives at the major labels tend to be those who have demonstrated an ability to get music played on the radio. In my career in radio programming, culminating in my position in charge of programming for the 71 Sirius XM music channels, the desire of record labels to receive airplay on radio has been a constant reality.

49. Sirius XM is recognized as a leader in music selection. Oftentimes, music first played on Sirius XM music channels ends up on the playlists of more mainstream terrestrial radio stations. This has resulted in record labels citing airplay of their artists and works on Sirius XM as a reason why other programming outlets should expose these work and artists. Record companies similarly often mention airplay on Sirius XM in their advertising as a means of promoting individual artists and songs. Examples of these advertisements are attached as SXM Dir. Ex. 36.

50. Sirius XM also receives support from artist management companies that recognize the promotional value of airplay on Sirius XM. As a result, Sirius XM has built strong

⁵ See, e.g., James N. Dertouzos, *Radio Airplay and the Record Industry: An Economic Analysis*, (June 2008), attached as SXM Dir. Ex. 37; Edison Research, *The National Record Buyers Survey* (2001), attached as SXM Dir. Ex. 38.

relationships with well-known management companies such as Red Light Management (Dave Matthews Band, Tim McGraw), Q Prime (Red Hot Chili Peppers, Muse), and Monotone Management (Vampire Weekend, Foster the People).

51. In recognition of the promotional benefits of airtime on Sirius XM's channels, artists and/or their record labels are often willing to grant waivers of certain of the Section 114 statutory license restrictions and in particular, a waiver of the number of times Sirius XM can play a song in a given time period, in order to allow Sirius XM programmers to highlight more of the music from a particular artist or new album on our channels.⁶ For example:

- In April 2011, Warner Brothers agreed to a waiver regarding certain music of Metallica from April 9, 2011 through September 7, 2011 for use on a full-time channel dedicated principally to the music of Metallica. SXM Dir. Ex. 40. The waiver permitted Sirius XM to play certain songs “without restriction as to the number of songs from the same phonorecord or by the same artist that may be played in a certain time period.” *Id.* Additionally, Sirius XM was permitted to “promote and publicize, through the use of any means,” the Metallica songs covered by the waiver. *Id.*
- In November 2009, Warner Brothers agreed to a waiver regarding certain music of Tom Petty. SXM Dir. Ex. 40. The waiver allowed Sirius XM to play music from “The Live Anthology” without restriction as to airplay from November 18, 2009 through December 31, 2009.
- In September 2010, Universal Music Group granted Sirius XM the right to play certain of Elton John's songs from October 14, 2010 through October 22, 2010 in connection with a feature to be broadcast on Sirius XM. SXM Dir. Ex. 40. The waiver permitted Sirius XM to play certain songs “without restriction as to the number of songs . . . in a certain time period.” *Id.* Additionally, Sirius XM was permitted to promote the music, “through the use of any means,” including “announcing the dates and times of transmissions.” *Id.*

Sirius XM has received hundreds of such waivers in connection with recordings by artists including the following:

⁶ These waivers relate to the “sound recording performance complement,” which limits the number of tracks that can be played from a particular artist or album in a three-hour period.

- Katy Perry (Capitol Records)
- Eminem (Interscope Records)
- Bon Jovi (Island Def Jam Music Group)
- Vampire Weekend (XL Recordings)
- Janet Jackson (EMI Music North Americas)
- Rihanna (Island Def Jam)

SXM Dir. Ex. 40. Record companies obviously grant these waivers because they recognize the value in airplay on Sirius XM’s music channels, and the ability of such airplay to generate sales.

52. Artists are often interviewed by Sirius XM personalities or perform live in our studios. These performances and interviews provide another promotional opportunity for artists. In one recent example, on June 16, 2011, Aretha Franklin recorded a track-by-track preview of her new album and sat down for an interview with Sirius XM. In connection with that appearance, Franklin granted Sirius XM the right to use her name, image, and likeness and any transcripts, audio, video, photographs, and other recordings of the interview, performance, and/or appearance. SXM Dir. Ex. 41 We have received hundreds of similar such releases from artists including Patti Smith, Carrie Underwood, Colbie Callait, Queen Latifah, Jack Johnson, Lady Antebellum, and Kings of Leon. *Id.*

B. Record Labels Recognize That Beyond Airplay, Sirius XM Music Channels Offer Unique Promotional Opportunities Through Artist-Specific Channels And “Pop-up” Channels

53. Beyond regular airplay on our music platform, there are numerous other promotional benefits that artists and record labels enjoy through arrangements with Sirius XM.

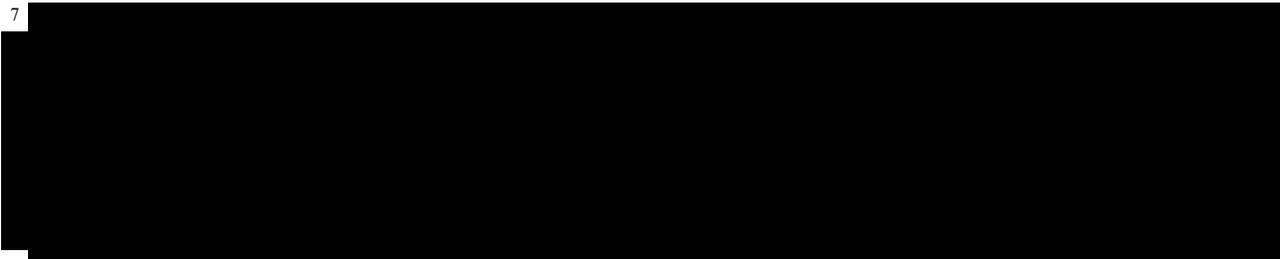
54. Record companies typically focus their promotional efforts on new music, rather than their existing catalog. As a result, a vast amount of older music remains unexposed, and thus effectively unavailable, to many listeners. As discussed above in Section II, we have

developed channels and programs in most of the main music categories in conjunction with well-known artists such as Elvis Presley and Bruce Springsteen, which focus exclusively on the music of Presley (Elvis Radio) and Springsteen (E Street Radio). Similarly, Jimmy Buffett’s Radio Margaritaville plays the music of several artists with older catalogs of music, including Jimmy Buffett, Bob Marley, Paul Simon, Little Feat, The Beach Boys, and Santana. These artist-themed channels provide a unique opportunity to record labels to promote music that otherwise would have very little opportunity for new exposure to listeners.

55. Notably, and evidencing the promotional value artists see in this experience, Sirius XM does not need to pay significant amounts to these artists to use their names and likeness in conjunction with our artist-themed channels. While we made some payments at the start of some of these relationships, artist have, by agreement, in most cases been reduced significantly or eliminated.⁷

56. Record labels and artists often approach Sirius XM with an expressed interest in creating an artist-themed “pop-up” channel (these temporary channels are distinct from our long-term artist-themed channels such as Elvis Radio and Siriusly Sinatra). These limited-engagement artist channels focus exclusively on the named artist’s catalog of music, and provide a record label with the opportunity to generate sales in an older catalog of music that may not otherwise receive a lot of promotional exposure. Temporary artist channels have included arrangements with George Strait and the estate of Miles Davis, among others.

⁷



57. Similarly, there is also significant interest from record labels and artists to work with Sirius XM to develop artist-themed “pop-up” channels that do not exclusively play the named artist’s music. While these short-term channels do not exclusively play a particular artist’s music, they do have a significant focus on a particular artist’s catalog of music.

Examples of these types of artist-branded “pop-up” channels include:

- Coldplay (EMI/Capitol)
- Metallica (Warner Bros. Records)
- Linkin Park (Warner Bros. Records)
- R.E.M. (Warner Bros. Music)
- Depeche Mode (Warner Bros. Music)
- Sheryl Crow (Universal Music Group)
- Weezer (Universal Music Group)
- Duran Duran (Sony/BMG)
- Dave Matthews Band (RCA)
- Michael Jackson (Epic)
- AC/DC (Columbia)

58. Additionally, record labels with artist catalogs from the 60s and 70s have approached Sirius XM seeking ways to generate sales in these older catalogs of music, which receive play on classic rock and oldies radio stations but no focused promotional attention. In response, we have created temporary “pop-up” channels with artists like Elton John and Simon and Garfunkel.

V. Airplay On Sirius XM Leads To Increased Record Sales

59. Going back to the birth of satellite radio, artists, their managers, and record labels have always recognized that increased record sales can be attributed to airplay on Sirius and XM

channels (and now Sirius XM channels). Time and again during my tenure at Sirius and now Sirius XM, airplay of a particular song on Sirius XM’s music channels has led directly – and demonstrably – to increased sales volumes of those songs and the albums on which they appear.

A. Record Labels Frequently Acknowledge Sirius XM’s Positive Impact On Sales

60. Over the past several years, artists and record labels have increasingly become vocal in acknowledging the impact that exposure of their works on Sirius XM has had on digital sales of those works. A sampling of these communications is provided below.

Bob Schneider’s Album “A Perfect Day”

61. On May 2, 2011, [REDACTED] emailed programming executives at Sirius XM to report on the success an artist named Bob Schneider had attained by virtue of exposure on Sirius XM. While Schneider is popular in Austin, Texas, he had received only limited national exposure until we began playing his music. Reporting on Schneider’s “BEST scan week EVER,” [REDACTED] commented: “[t]he sales are pretty spread out around the nation *which I am attributing to your airplay.*” SXM Dir. Ex. 42 (emphasis added).

“Bounce” By Emphatic

62. On May 20, 2011, [REDACTED] emailed Sirius XM regarding increased sales for a song titled “Bounce” by the band Emphatic. [REDACTED] reported a “4 week trend on ‘Bounce’ = 285, 319, 328, **854!** Up 160% this week. Seems to coincide[] pretty well with your airplay. Other stations just starting to play. Just wanted to say thanks for the HUGE support on ‘bounce by Emphatic!!!” SXM Dir. Ex. 43 (emphasis in original).

“I Am Doing Alright” By Jacob Lyda

63. On June 8, 2011, [REDACTED] emailed Mark Sebastian, Senior Director of Country Music Programming at Sirius XM (known

as “John Marks” in the industry), regarding the artist Jacob Lyda’s song “I’m Doing Alright.” He stated: “You guys re-engaged and my single sales doubled this week! It’s rare that I can directly correlate my sales like that. You’re the best!” SXM Dir. Ex. 44.

“Ultragigantor” By Red Line Chemistry

64. During the summer of 2011, the Octane and Faction channels began playing the band Red Line Chemistry’s song “Ultragigantor.” On August 3, 2011, [REDACTED] [REDACTED] emailed Jose Mangin (Music Programmer for Octane) and reported that since Sirius XM began playing “Ultragigantor,” “we have seen an explosion of sales we know it’s attributed to you since we see the reaction coming from non radio markets (album sales up 25%, single sales up 60% this week alone!) So thank you!” SXM Dir. Ex. 45.

Daniel Glass, President and CEO of Glassnote Records

65. Daniel Glass, President and CEO of Glassnote Records, has recognized the promotional aspect of Sirius XM’s music channels. In the May 2011 issue of industry trade magazine *Hits*, Glass stated “Sirius XM continues to grow and support meaningful music reaching more people than ever and we feel the impact on sales.” SXM Dir. Ex. 46.

B. Industry Sales Data Establishes That Sirius XM Promotes Sales

66. In addition to testimonials of the sort set forth above, since the *Satellite I* proceeding, we have tracked industry data from sources such as SoundScan (for sales data) and Mediabase (for airplay data) which lend further support for the proposition that airplay on Sirius XM promotes sales. I again provide several examples of this phenomenon.

“Colours” By Grouplove

67. During the first half of 2011, Alt Nation began playing the song “Colours” by the new artist Grouplove. On May 12, 2011, [REDACTED]

██████████ emailed Jeff Regan, Music Programmer for Alt Nation, to report on digital single sales for Colours. ██████████ wrote: “[D]igital single sales on ‘Colours’ were up again from 1,049 to 1,195. *Pretty great and because of Alt Nation. That is the only explanation.*” SXM Dir. Ex. 47 (emphasis added). ██████████ wrote again to various members of the Sirius XM Music Programming team on June 13, 2011: “Since you started playing Grouplove ‘Colours’ on Alt Nation we have seen our digital single sales go way up, *it can [be] directly attributed to your airplay.* Our sales went from 200 singles a week to 800 to around 1,000-1,200 a week since you started playing it.” *Id.* (emphasis added). Asking the Sirius XM team to attend the band’s launch in New York City ██████████ continued that “I think [it] would [be] important for you to attend, your early airplay to sales is certainly our focal point in our planning meetings on the band and very inspiring to us in our launch. We are so excited to have you leading the charge.” *Id.*

68. Industry sales data corroborates Alt Nation’s positive effect on sales of Colours. Mediabase data establishes that Alt Nation first played Colours on April 18, 2011. SXM Dir. Ex. 48. Alt Nation was not the first radio station to play the song, but the only radio station to give it more than ten spins per month prior to that time was WSUN-FM in Tampa, Florida. *Id.* For the week ending April 17, 2011 (the week before Alt Nation started playing the song), SoundScan data shows that there were a total of only 221 total digital sales of the work. SXM Dir. Ex. 49. During the second half of April (beginning on April 18, 2011), Alt Nation played Colours 69 times. SXM Dir. Ex. 48. During the first week Alt Nation played Colours (the week ending April 24, 2011), digital sales jumped to 773 – a 250% increase from the week prior. SXM Dir. Ex. 49. The following week (ending May 1, 2011), digital sales jumped again to 1,049 – a 36% increase from the prior week. *Id.* During the third week of airplay on Alt Nation (the week

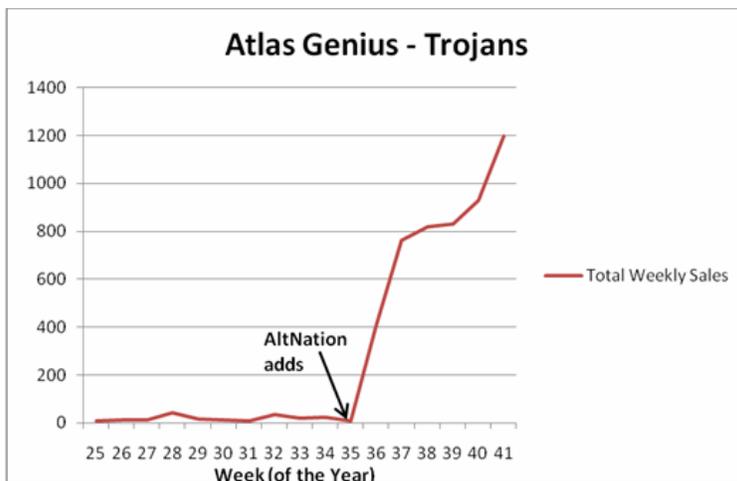
ending May 8, 2011), digital sales jumped from 1,049 to 1,195 (a 14% increase). *Id.* While WSUN-FM in Tampa continued to play the song and one other station in Little Rock, Arkansas gave the record some spins, no other radio stations were giving significant airplay to Colours during April and May 2011. SXM Dir. Ex. 48. This surge in record sales can only be attributed to Alt Nation's airplay.

“Trojans” By Atlas Genius

69. In September 2011, Sirius XM's Alt Nation was the only music station in America playing the music of Australian band Atlas Genius. The lead singer of the band, Keith Jeffery, wrote to Jeff Regan, Music Programmer for Alt Nation, “[p]eople from MTV and other management groups have contacted us after hearing Trojans on Alt Nation, and we’ve picked up a lot of fans.” SXM Dir. Ex. 50. Jeffery wrote to Regan again on September 29, 2011: “Just want to thank you for the continued support. We’ve been getting a crazy amount of traffic.” *Id.*

70. SoundScan and Mediabase data again demonstrate that Alt Nation's airplay of this work had a significant impact on sales. According to Mediabase, Alt Nation first played Trojans on September 13, 2011, at which time it was the *only* radio station in the country playing the song. SXM Dir. Ex. 51. As of September 11, 2011, there were 405 digital downloads of the song. SXM Dir. Ex. 52. From September 13, 2011 through the end of September, Sirius XM's Alt Nation played the record 88 times. SXM Dir. Ex. 51. For the week ending September 18, 2011 – representing the first week of airplay on Alt Nation – digital sales of “Trojans” jumped 88% (to 761). SXM Dir. Ex. 52. By October 2, 2011, as Alt Nation continued to feature the song, digital sales had risen even further – to a total of 829. *Id.* For the week ending October 9, 2011, digital sales rose 12% to 930. For the week ending October 16, 2011, sales continued to

rise another 29% (to 1199). *Id.* The table below illustrates the dramatic increase in digital sales of Trojans following Alt Nation’s addition of the song to its playlist.



The correlation between Alt Nation’s airplay of the song during September and October 2011 and the increase in sales of Trojans during this time period seems indisputable.

“Dancing Shoes” By Green River Ordinance

71. In November 2011, Green River Ordinance sent Sirius XM a “thank you” video message. The band stated:

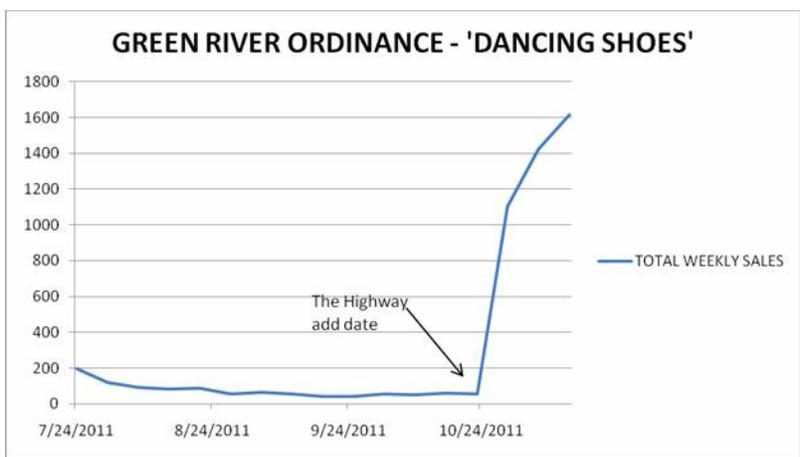
Thank you so much for playing “Dancing Shoes.” It’s been crazy, just the response and the people have been hearing our music for the first time . . . thanks so much for playing the song and just taking a chance on new music . . . that’s kinda one of the coolest things that has ever happened to our band and so people are lovin’ it, a bunch of our fans are listening and just new people who have never heard of the Green River Ordinance . . . so you guys are the reason for that and we just wanted to say thanks. . .

SXM Dir. Ex. 33.

72. Industry data corroborate that The Highway’s airplay of this work had a considerable impact on sales. On October 24, 2011, Sirius XM’s The Highway became the first and only radio station to play Green River Ordinance’s song “Dancing Shoes.” SXM Dir. Ex.

53. Prior to the song’s addition to The Highway’s playlist, sales of the song were very weak.

SXM Dir. Ex. 54 The week after the song began receiving airplay (the week ending October 30, 2011) on The Highway, sales skyrocketed from 58 to 1,105 digital sales – the SoundScan data notes this increase as a 999% change from the previous week. *Id.* This trend continued during its second week of airplay on Sirius XM, as sales increased 29%. *Id.* During its third week of airplay on The Highway (the week ending November 13, 2011), sales increased again by 13%. *Id.* The dramatic increase in sales that occurred when The Highway added the song to its playlist is demonstrated in the chart below.

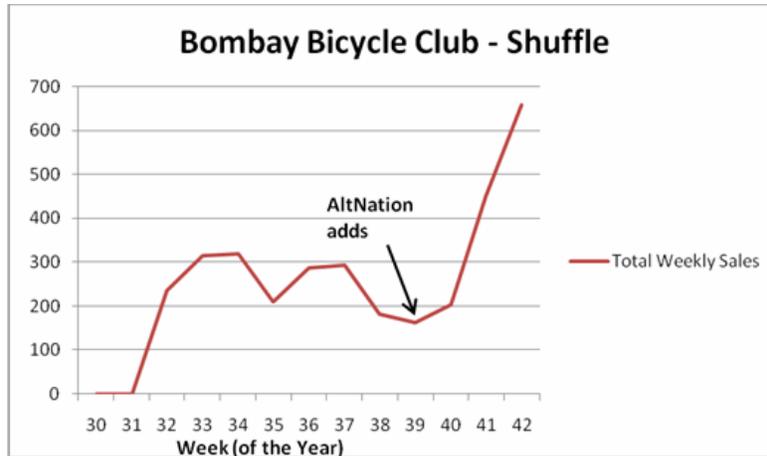


The direct correlation between airplay on The Highway and the dramatic increase in digital sales of Dancing Shoes seems apparent.

“Shuffle” By Bombay Bicycle Club

73. Another recent band that had breakout success after getting its song played on Sirius XM’s music channels is the Bombay Bicycle Club. Sirius XM’s Alt Nation began playing Bombay Bicycle Club’s song “Shuffle” on October 6, 2011. SXM Dir. Ex. 55. In the weeks prior to getting played on Alt Nation, sales of Shuffle were demonstrating a declining trend. SXM Dir. Ex. 56. During the first week of airplay on Alt Nation (week ending October 9, 2011), sales of the song improved by 25%. *Id.* During the second week of airplay on Alt Nation (week

ending October 16, 2011), sales of the song increased even more – this time by 122%. *Id.* The table below illustrates this trend and the impact of Alt Nation’s addition of it to its playlist.



VI. Conclusion

74. Sirius XM offers 71 commercial-free music channels in a wide variety of music genres. Each of these originally-produced radio channels is hand-crafted by our team of programming and production experts and are presented to more than 21 million subscribers a week. The combination of our nationally-branded music channels, our stable of talented DJs and artist partners, along with the vast array of specialty programming and unique promotional opportunities offered, creates tremendous value for the artists we play and their respective record labels and management companies. This is evidenced by the direct feedback we regularly receive from artists, their record companies, and artist managers, as well as by the airplay data and highly correlated music sales data illustrated in my testimony.

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

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In the Matter of)	
)	
DETERMINATION OF RATES AND TERMS)	Docket No. 2011-1
FOR PREEXISTING SUBSCRIPTION AND)	CRB PSS/Satellite II
SATELLITE DIGITAL AUDIO RADIO)	
SERVICES)	
<hr/>		

DECLARATION OF STEVEN BLATTER

I, Steven Blatter, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 28th day of November 2011 at New York, New York.



Steven Blatter

The New York Times

Media Decoder

Behind the Screens, Between the Lines

OCTOBER 27, 2011, 3:52 PM

Clear Channel Cuts D.J.'s Across the CountryBy **BRIAN STELTER**

5:16 p.m. | Updated Clear Channel Communications, the largest radio station operator in the United States, dismissed dozens of local D.J.'s this week, affecting small stations from Syracuse to Spokane, Wash., and raising fresh concerns about the homogenization of radio programming.

Clear Channel Radio, which operates about 850 stations in the United States and employs 12,000 people, declined to say how many employees were dismissed, but some of the D.J.'s said they believed that the number was in the hundreds.

Fred Prouser/Reuters
Clear Channel Communications, the largest radio station operator in the United States, dismissed dozens of local D.J.'s this week.

The company said the layoffs were not made to cut costs but were part of a revamping of its about 600 regional radio stations. (Its 250 other stations are in large markets like New York and Los Angeles.)

“We’ve completely rethought our regional market strategy and reinvented our operations in those markets in a way that will let us compete on a new level — and succeed using all of Clear Channel’s resources, scale and talent,” a company spokeswoman, Wendy Goldberg, said Thursday.

To some in the radio business, the layoffs signaled the continuation of a several-years-old strategy that replaces locally produced programming with less costly nationally syndicated shows. Media reform groups have long assailed Clear Channel’s consolidation.

In Albuquerque, Tony Lynn and Myles Copeland were the only live local hosts left at the country music station KBQI. On Wednesday, the morning hosts were let go.

“I guess it all comes down to the bottom line, and as a small business owner, I understand that,” Mr. Lynn said Thursday. “But on the other hand, sometimes it’s more than just a few dollars more. Radio is an intimate medium and that’s what’s being ignored. Listeners develop a special bond with the on-air personalities, and in the long run that proves beneficial for both the station and the advertisers.”

For now, the afternoon host at KBQI, who records her show in advance, is doubling as the morning host until the station announces a new morning show.

Mr. Lynn said KBQI had been shifting away from local programming for the last couple of years. Micki Goldberg, who simultaneously worked D.J. shifts at as many as four Clear Channel stations in Ohio and was dismissed on Wednesday morning, said the gradual shift from local to national production was “a real loss for communities.”

“While people are trying to blaze trails with new technologies, they are forgetting the power” they already have, she said. Advertisers, she added, can demand more local programming by voting “with their advertising budgets.”

Hosts like Ms. Goldberg and Mr. Lynn were not given the opportunity to say goodbye on the air.

The layoffs were conducted less than a month after Clear Channel named Robert W. Pittman the company’s chief executive. Mr. Pittman joined the company as chairman for entertainment and media last year.

With nearly \$20 billion in debt, Clear Channel has been trying to revamp its operations — to run the business, as Ms. Goldberg, the spokeswoman, put it, “like it’s 2011, not 1970.”

On Thursday, one day after the layoffs, the company announced a new national programming operations team that would take successful shows on one station and share them with other stations and would develop programs for broadcast across the country.

Ms. Goldberg said that through this week’s regional reorganization, “some of the top on-air talent in the country will conduct custom breaks and produce localized content for each city.” She suggested that “the content our listeners hear will be more localized, not less,” even though some of the hosts won’t be living or working in those local areas. And she emphasized that listeners will still hear local traffic, weather and news.

“Just about every station that’s used this strategy has delivered better ratings than the content it replaced, even if the person giving the information isn’t located on-site in that city, because the product is better,” she said.

Shane Warner, who was until Wednesday the morning host and the program director for KWTX in Waco, Tex., said he did not resent Clear Channel or its management team “one bit” for the moves they made.

“I don’t envy for a second the guy who had to make the decision and ultimately pull the trigger on this move — or the manager who had to deliver the news,” he said in an e-mail. “What we tend to overlook in these situations is what would have happened if costs were not cut.”

He added, “I’ll move on, look for my next gig and try to be a better host. That’s all I can do.”

Celebrity Hosts On Sirius XM Music Channels

<u>Celebrity/Artist</u>	<u>Channel</u>
A Trak	Electric Area
Adam Beyer	Electric Area
Afrikaa Bambaataa	Backspin
Afrojack	Electric Area
Alan Hunter	80s on 8 Classic Rewind
Andrew Loog Oldham	Underground Garage
Aphiliates	Shade 45
Armin Van Buuren	Electric Area
Avicii	Electric Area
Bam Margera	Faction
Bernie Taupin	The Loft
Bill Gaither	The Message
Bill Wyman	Various Channels
Bob Dylan	Deep Tracks and his own online channel
Bob Sinclar	Electric Area
BT	Electric Area
Carl Cox	Electric Area
Chris Carter	Underground Garage
Christian McBride	Real Jazz
Cousin Brucie	60s on 6
Crystal Method	Electric Area
Daniel Britt	The Message
Dave Aude	BPM
Dave Marsh	The Loft, E Street Radio
David Gans	Grateful Dead Channel
David Guetta	Electric Area
David Johansen	The Loft
Dee Dee Bridgewater	Real Jazz
Del McCoury	Bluegrass Junction
Diplo	Electric Area
DJ Chuckie	Electric Area
DJ Green Lantern	Hip Hop Nation
DJ Kay Slay	Shade 45
DJ Muggs	Shade 45
DJ Whoo Kid	Shade 45
Don Was	Outlaw Country

<u>Celebrity/Artist</u>	<u>Channel</u>
Eddie Halliwell	Electric Area
Ferry Corsten	Electric Area
Hal Willner	The Loft
Handsome Dick Manitoba	Underground Garage
Jason Ellis	Faction
Jellybean Benitez	The Strobe
Jesse Malin	The Spectrum
Jim Norton	Boneyard
John Digweed	Electric Area
John McEueun	The Village
John Varvatos	The Spectrum
Jonny Moseley	Faction
Josh Wink	Electric Area
Kay Slay	Shade 45
Kent	The Spectrum
Larry Kirwan	The Spectrum
Little Steven	Underground Garage
Lou Reed	The Loft
Mark Goodman	80s on 8, The Spectrum
Marky Ramone	Faction
Martha Quinn	80s on 8
Mickey Hart	Grateful Dead Channel (launches in December)
Mojo Nixon	Outlaw Country
Nancy Sinatra	Siriusly Sinatra
Nervo	BPM
Nicky Siano	The Strobe
Nina Blackwood	80s on 8
Paul Oakenfold	Electric Area
Per Gessle	The Spectrum
Pete Wentz	Hits 1
Peter Frampton	Deep Tracks
Seth Rudetsky	On Broadway
Shooter Jennings	Outlaw Country
Skrillex	Electric Area
Statik Selektah	Hip Hop Nation
Steve Aoki	Electric Area
Steve Earle	Outlaw Country
Steven Van Zandt	Underground Garage
Tiesto	Electric Area

<u>Celebrity/Artist</u>	<u>Channel</u>
Todd Barkan	Real Jazz
Tom Petty	Deep Tracks
Tony Hawk	Faction
Tony Touch	Shade 45
Vin Scelsa	The Loft
Whoo Kid	Shade 45
Yoshiki	Boneyard

Ozzy Osbourne Launches his Own SiriusXM Channel

The "Prince of Darkness" to present classic hard rock and heavy metal channel Ozzy's Boneyard to feature shows hosted by Ozzy Osbourne family members

NEW YORK, Nov. 21, 2011 /PRNewswire/ -- Sirius XM Radio (NASDAQ: SIRI) announced today that hard rock and heavy metal legend Ozzy Osbourne will have his own SiriusXM channel.

(Logo: <http://photos.prnewswire.com/prnh/20101014/NY82093LOGO>)

Ozzy's Boneyard, channel 38, will feature classic hard rock and metal music from artists like Black Sabbath, Metallica, AC/DC, Jimi Hendrix, Pantera and Van Halen. The 24/7 music channel is expected to launch later this year.

SiriusXM listeners will hear Ozzy present music as well as share personal stories about his career as a solo artist and as front-man for Black Sabbath. The channel will also air shows and specials hosted by Ozzy family members, Sharon, Jack and Kelly.

"After everything I've been through in my career I never imagined I'd end up with my own radio channel on SiriusXM. This is f*****g amazing! Does this mean I can play whatever I want?" said Ozzy Osbourne.

"No one represents the evolution of hard rock and heavy metal more than Ozzy Osbourne," said Scott Greenstein, President and Chief Content Officer, SiriusXM. "We know Ozzy's Boneyard will be alive and kicking."

Ozzy Osbourne recently announced that Black Sabbath has reunited to record their first new studio album in 33 years and that the band will launch a world tour in 2012.

Ozzy's Boneyard joins SiriusXM's roster of channels created in partnership with legendary musicians, including Bruce Springsteen's E Street Radio, Pearl Jam Radio, Eminem's Shade 45, Willie Nelson's Willie's Roadhouse, B.B. King's Bluesville, Elvis Radio, Jimmy Buffett's Radio Margaritaville and Sirusly Sinatra.

For more information on SiriusXM, please visit www.siriusxm.com.

About Sirius XM Radio

[Sirius XM Radio](#) is America's satellite radio company. SiriusXM broadcasts more than [135 satellite radio channels](#) of [commercial-free music](#), and [premier sports](#), [news](#), [talk](#), [entertainment](#), [traffic](#), [weather](#), and data services to over 21 million subscribers. SiriusXM offers an array of content from many of the biggest names in entertainment, as well as from professional sports leagues, major colleges, and national news and talk providers.

SiriusXM programming is available on more than 800 devices, including pre-installed and after-market radios in cars, trucks, boats and aircraft, [smartphones](#) and [mobile devices](#), and consumer electronics products for [homes](#) and [offices](#). SiriusXM programming is also available at siriusxm.com, and on [Apple](#), [BlackBerry](#) and [Android](#) -powered mobile devices.

SiriusXM has arrangements with every major [automaker](#) and its radio products are available for sale at shop.siriusxm.com as well as retail locations nationwide.

This communication contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements about future financial and operating results, our plans, objectives, expectations and intentions with respect to future operations, products and services; and other statements identified by words such as "will likely result," "are expected to," "will continue," "is anticipated," "estimated," "intend," "plan," "projection," "outlook" or words of similar meaning. Such forward-looking statements are based upon the current beliefs and expectations of our management and are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are difficult to predict and generally beyond our control. Actual results may differ materially from the results anticipated in these forward-looking statements.

The following factors, among others, could cause actual results to differ materially from the anticipated results or other expectations expressed in the forward-looking statement: our competitive position versus other forms of audio and video entertainment; our ability to retain subscribers and maintain our average monthly revenue per subscriber; our dependence upon automakers and other third parties; potential economic recessionary trends and uncertain economic outlook; our substantial indebtedness; and the useful life of our satellites, which, in most cases, are not insured. Additional factors that could cause our results to differ materially from those described in the forward-looking statements can be found in our Annual Report on Form 10-K for the year ended December 31, 2010, which is filed with the Securities and Exchange Commission (the

"SEC") and available at the SEC's Internet site (<http://www.sec.gov>). The information set forth herein speaks only as of the date hereof, and we disclaim any intention or obligation to update any forward looking statements as a result of developments occurring after the date of this communication.

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P-SIRI

Contact for SiriusXM Radio:
Samantha Bowman
SiriusXM Radio
212 901 6644
samantha.bowman@siriusxm.com

SOURCE Sirius XM Radio

News Provided by Acquire Media

SPECIALTY PROGRAM ON SXM CHANNELS

Channel	Show Name	Description
Hits 1	Hit-Bound	Indie, unsigned or up and coming music
50's on 5	Cool Bobby B's Doo Wop Shop	Doo-wop
	Rockabilly Roadtrip	Rockability, Country Western mixed w/R&B
70's on 7	Saturday Night Party Fever w/Deney Terrio	Extended mixes of classic '70s party tunes
Elvis Radio	Sunday Morning Gospel Time	Elvis southern gospel music
	Elvis Goes Hollywood	Elvis' movie music
E-Street	Cover Me	Springsteen songs covered by other artists
Underground Garage	Breakfast With The Beatles	Classic Beatles songs as well as rare B-sides
	Chicks and Broads	Women in Rock & Roll history
	Goldie's Garage	Great Garage Bands
Deep Tracks	Deep Tracks Undercover	Cover songs
	Blacklight Room	Psychedelic rock
	For Headphones Only	Progressive rock
The Spectrum	Celtic Crush	Irish and Irish-influenced rock
	Nordic Rox	Scandinavian pop and rock music
Jam ON	Weekly Live Stash	Live recordings of jam bands
	Jamtronica	Improvisational electronic music
The Loft	Your Roots Are Showing	Roots of American rock
Coffee House	Coffee House Live	Intimate acoustic performances
First Wave	Party 360	Classic alternative party songs
First Wave	Dark Waves	Darker side of of alternative rock- Gothic Rock
SiriusXMU	Blog Radio	Music Bloggers handpick new music
	SiriusXMU Sessions	Performances and conversations with groundbreaking artist
	Old School	Vintage alternative/indie bands
Alt Nation	Boombox Radio	Alternative rock remixes
Octane	When Worlds Collide	Global rock spotlight
Liquid Metal	Bloody Roots	Heavy metal heritage
	Beyond The Pit	Extreme heavy metal

Channel	Show Name	Description
Faction	Skantorreha	Ska/Punk show
	Cowabunga Uber Alles	Surf-punk
The Joint	Marley Mondays	Bob Marley focused day.
	Dancehall Saturday Night	Dancehall style reggae.
Hip Hop Nation	Femme Fatale Mix Show	Females perspective in Hip Hop
The Heat	Friday Night Fire	House party mix
Willie's Roadhouse	Rear View	Classic country music stories
	Classic Cowboy Corral	Music from the Golden Age of Singing Cowboys
Bluegrass Junction	DeRailed	Wild side of Bluegrass
	Gospal Train	Bluegrass gospel music
	Track By Track	New Bluegrass Album spotlight
The Message	The Message Amped	Christian Rock
	Sunday Praise	Praise and worship music
Real Jazz	In The Swing Seat	Connection between jazz and other genres
	Beyond Jazz	Roots of modern jazz music
	French Quarter	New Orleans jazz music
Latin Jazz	Manteca	Latin Jazz
Bluesville	Front Porch	Acoustic blues
	Stone Blue	Loud, rocking, and in your face blues
	Rockers Doing The Blues	Rock and Roll meets the blues
Pops	Boundaries	Alternative classical
	Linked	Classical Connections Rock, Pop, Jazz
Symphony Hall	Baroque and Beyond	Baroque classical music
	Millennium of Music	Early days of classical music
	Vox Chorale	Classical music with vocals

Rolling Stone

March 3, 2011

Where Did the Rock Hits Go?

In 2010, there wasn't a single major rock hit. What happened?

By Steve Knopper

IN THE ENTIRE HISTORY of rock & roll, 2010 was a commercial low point, a year without hits. Not a single rock record wound up in the year-end Top 25. Jack Johnson's *To the Sea* scored highest, coming in at Number 27. In an era of tanking sales, rock did even worse than the competition, falling more sharply than country, hip-hop or pop. And bands that sold millions of copies of their last albums, from Linkin Park to the Kings of Leon, stiffed. Says Doug Podell, a veteran Detroit programmer who is now a consultant and WCSX classic-rock DJ, "Rock isn't dead yet, but it's getting pushed around pretty good."

So what happened? **ROLLING STONE** spoke to 21 music-business sources, and the picture that emerged was of a rock drought driven by two forces: a lack of compelling mainstream releases and broad, industrywide trends that work against the genre.

The first problem is partially the result of top acts' release cycles coincidentally making 2010 an off year. "There just weren't that many strong releases," says Ish Cuebas, Trans World

Entertainment's vice president for merchandising music. Even Mike Shinoda, Linkin Park's co-founder, didn't find much to listen to: "As a music listener, I was gravitating a little bit away from [new] rock records, because stylistically it was a little boring."

But rock's real problems are trickier, and interconnected. Many in the business blame radio for failing to break a major album for the first time in memory. (Even in 2000, the year of Britney and boy bands, Creed's *Human Clay* sold 6.5 million copies.) Thanks to important

stations switching formats in recent years, a Number One rock-radio hit reaches just 12 million listeners, compared with 81 million for Top 40. This gap is far wider than it was in 2009 or 2006, according to Nielsen SoundScan. And many of the stations that are left have seen their ratings fall. "I don't know if it's cyclical - it's problematic," says Richard Palmese, executive vice president for promotion at the RCA Music Group, home of the Kings of Leon and Daughtry. "Rock-radio stations are struggling in markets around the country to deliver winning ratings."

In addition, two of rock's biggest subgenres petered out in 2010 - emo/pop-punk and Nickelback-and-Shinedown-style "active" rock. "Emo had its heyday - then there were too many bands that sounded like Fall Out Boy," says Bob McLynn, manager of that band, as well as Hole, Train and Panic! at the Disco. As a result, major record labels are shying away from signing new rock acts and spending less money on the ones they have, according to industry sources.



COLDPLAY The Brit band leads a strong field of rock acts expected to release new albums in 2011, including Radiohead, U2, Green Day and Foo Fighters.



LINKIN PARK Sluggish sales of *A Thousand Suns* brought the album to a disappointing year-end tally of just 619,000 units moved - a fraction of their previous releases.



KINGS OF LEON Without a radio hit like 2008's "Use Somebody," *Come Around Sundown* has failed to go gold in the months since its October release.

"[Labels] seem like they don't want to be in that business anymore - not ideally, anyway," says Peter Katsis, manager of Korn and Jane's Addiction. "You're just seeing them spend a lot less money on marketing and promoting rock acts."

Major labels have also made 360-degree deals the standard for new acts, which gives the labels a cut of concert and merchandise sales. With majors and rock radio losing their power to reliably produce hits, bands that do well on the road have little incentive to sign such deals. "We still are extremely, extremely focused on bands

who can tour," says James Diener, president of A&M/Octone, which reps Flyleaf and Maroon 5.

Given the unfriendly environment, top artists have begun fleeing the majors, either to release music on their own (Wilco, Nine Inch Nails, Radiohead) or to shift to smaller, more attentive labels, as Paul McCartney and Paul Simon have done with Concord Music Group. Says Tony Margherita, Wilco's manager, "For a certain level of artist who has spent some time building a career and has a fan base, the structure and the services pro-

vided by a major label - and the percentage they take to provide those services - doesn't make a lot of sense."

Rock maintains its dominance in one crucial area: touring. Bon Jovi, Roger Waters and the Dave Matthews Band were *Pollstar's* top three acts on the road last year, grossing a combined \$270 million.

A new middle class of bands - Arcade Fire, the National and Spoon - all sold respectable numbers of records while thriving on the road, without needing hits on rock radio. Some of those, like Mumford and Sons, Vampire Weekend and the Black Keys, thrived by touring relentlessly and breaking their singles via college stations, SiriusXM programs and ad licensing to clients from Cadillac to Tommy Hilfiger. "If you look at the most prominent festivals - Coachella, Bonnaroo, Austin City Limits - they're doing pretty good business with basically a rock-band format," says Daniel Glass, chief executive of Glassnote Entertainment Group, Mumford and Sons' independent label. "The club business, in most parts of America, also has a healthy circuit of artists that are touring and doing quite well."

And 2011 looks better than 2010, with planned releases by superstar rock acts including Green Day, Coldplay, Radiohead, R.E.M., the Strokes, the Red Hot Chili Peppers, U2 and Foo Fighters. "It's just the cycle," says Rob McDermott, former manager of Linkin Park. "The 'Is Rock Sleeping?' article comes out every five years, and I actually think it's the greatest article in the world, because you're foreshadowing it's about to make a big comeback." 

Rock Radio Takes Another Hit

Radio chains slash jobs, as local DJs are replaced with syndicated talent

CONTINUING RADIO'S shift away from local programming in favor of centralized playlists and nationally syndicated shows, two of America's biggest radio chains laid off dozens of DJs and programmers at stations from Albuquerque to Toledo in recent weeks. Clear Channel Communications, which owns 850 stations nationwide, cut hundreds of jobs in late October, and rival radio company Cumulus cut almost 30, including legendary L.A. rock DJ Jim Ladd - the inspiration behind Tom Petty's scathing 2002 hit "The Last DJ," which pilloried the homogenization of playlists in the Clear Channel era. "It's really bad news," says Ladd. "It was people in my profession that first played Tom Petty, first played the Doors. But the people programming stations [now] are not music people - they're business people."

"How are people going to find out about new acts?" asks a top manager.

"It's a decrease in expense for the company, but the dirty little secret is it's going to be less local - it just is," adds Tony Florentino, who was laid off as program director for two Clear Channel pop stations in Columbus, Ohio, in September. "That's ultimately not good for listeners in those markets."

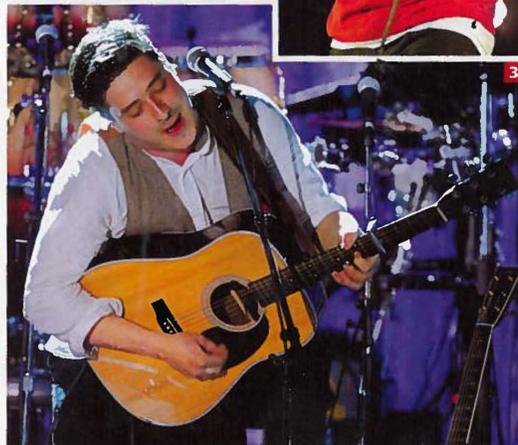
For rock stations - which have struggled in recent years - the blow was especially hard. So what will take the place of shows helmed by local DJs? Expect to hear more über-syndicated personalities like Ryan Seacrest and Steve Harvey, and *The Big D and Bubba Show*. "This is not about DJs, this is about effectiveness, efficiency and giving our listeners what they want," says Clear Channel spokeswoman Wendy Goldberg. Adds Skip Bishop, senior VP of promotion for Sony Music

Nashville, "They're just exploiting their most successful talents. I don't think their purpose is redefining radio, but that's the end result."

Two influential modern rock stations, New York's WRXP and Chicago's Q101, switched formats over the summer, leaving those markets without a single major outlet to break new rock acts. A Number One rock hit reaches just 13 million listeners, compared to 138 million

records that get the biggest audience now, it's through the combination of pop radio and TV exposure," says Jim McGuinn, program director for the Current, the Minneapolis public-radio rock station that helped break Mumford & Sons.

In the end, radio's cutbacks



Radio Daze

Influential L.A. DJ Ladd - who inspired Petty's "The Last DJ" - lost his job (1). Top acts from the Chili Peppers (2) to Mumford (3) can't count on rock radio to break singles anymore.

for a Number One Top 40 hit - a gap that has widened dramatically since 2006, according to Nielsen SoundScan.

Even proven hitmakers, from the Red Hot Chili Peppers to Coldplay, just don't get enough spins on the limited number of stations left to rely on rock radio to break a single. "A lot of the

and strategy shifts are just more bad news for a record industry still reeling from tanking sales. And while rock continues to rule the concert business, radio support has always been required to grow a band's audience from the hardcore fans who go to club shows to the more mainstream masses needed to fill arenas and amphitheaters.

"Some of the biggest rock markets in the country have no rock radio," says Bob McLynn, manager of acts like Gym Class Heroes, Train, Hole and Fall Out Boy. "How are people going to find new acts in a lot of these markets?"

STEVE KNOPPER

CHECKING IN

Scott Weiland

On the least likely holiday LP of the year and STP's tour trouble

Who knew that rock's biggest Christmas guy might just be Scott Weiland? The Stone Temple Pilots frontman was thrilled at the opportunity to put his unique spin on holiday standards, from "Winter Wonderland" to "White Christmas," on his new LP, *The Most Wonderful Time of the Year*. "My memories of Christmas are very special, especially as a youngster," he says. "These songs have been done and redone by so many different people - yet



people love to listen to them every holiday season."

REGGAE CHRISTMAS Most of the versions on *The Most Wonderful Time of the Year* stick to familiar arrangements, but a few are more daring. "We wanted to do a reggae-ish 'Silent Night,'" says Weiland. "There's a sort of swinging version of 'What Child Is This?' and we have a bossa-nova Sixties-kitschy version of another song. It all worked out quite amazing."

PILOT DOWN STP's latest U.S. tour was postponed in September due to Weiland's throat problems. "My voice was shot," says the singer. "I've been on the road non-stop ever since I got in with Velvet Revolver. Finally, a specialist put a camera down my throat. One of my vocal cords was strong, but the other one was very weak. He was afraid that I was going to do irreparable harm."

CHILL WINTER Weiland has a brief solo tour lined up behind the Christmas disc, but after that, he's looking forward to taking some rare downtime. Says the singer, "I want to spend time with my kids, and I want to have a personal life." ANDY GREENE

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We Won't Rock You

The sad, unwarranted decline of rock music on FM radio.

By [Christine Pawlak](#)

Updated Tuesday, Nov. 15, 2011, at 11:14 AM ET



I was 24 when I first lost my job as a radio DJ. I was 30 when it happened again. In both cases, my employers changed the stations' formats, abandoning "alternative rock" for gospel (at Philadelphia's Y100) and news (at Q101 in Chicago). Just this year, [another Philadelphia station, WYSP](#), as well as [New York's WRXP](#) and [WVRX in Washington, D.C.](#), have shifted from rock music to talk radio formats. This is just the most recent round of deaths—over the last few years, major rock stations like [New York's K-Rock](#), [Indie 103.1 in Los Angeles](#), and [WBCN in Boston](#) have gone silent. These stations haven't been disappearing because the format's a money loser. It's because a handful of executives have decided that rock radio doesn't belong on the FM dial.

In February of 2004, I moved to Philadelphia to host the night show at Y100. I was incredibly excited about being on the air in such a big city. During each five-hour show, I wrote "Weekend Update"-esque zingers about music and entertainment news and counted down the day's most-requested songs. I had just fallen in love with the band Muse, and watching them at a private show for our listeners was one of my favorite Y100 moments. But about a year after I arrived, I walked into our weekly DJ meeting and found the station in chaos. We were told that Y100 was going off the air immediately, and our services would no longer be needed. I thought I'd never get such a cool opportunity again.

Thankfully, I was wrong. Emmis Communications owned Chicago's Q101 when I started my new gig as a midday host in 2005. At the time, the station had responded to the iPod's popularity by using the phrase "on shuffle"—you never knew which random musical gem might pop up after Nirvana, Pearl Jam, or Foo Fighters. We supported local bands and those

with local roots, like Rise Against, Fall Out Boy, Chevelle, and Smashing Pumpkins. And to the chagrin of many “alternative” fans, we played Metallica.

I’m actually not a fan of the alternative label. It’s limiting because it’s subjective: One listener’s alternative is another’s mainstream. I just knew that Q101 played music that I loved when I was growing up, and that made it fun to go to work. I’d walk into the studio excited to play a request or crack a joke that made someone’s workday a little better. My enthusiasm caught the eye of *Chicago Magazine*, which [named me Best Radio DJ in 2008](#), praising my “playful riffs on topics breathtaking for their sheer randomness.” I loved my job, and my listeners—eventually—grew to love me.

Behind the scenes, though, the station’s parent company was facing financial struggles. Emmis, a publicly traded company boasting more than 30 media properties, limped through the recession and a failed attempt to take the company private. With [more than \\$300 million in long-term debt and its stock valued at around \\$1 per share](#), CEO Jeff Smulyan decided to sell off three of Emmis’ radio stations: WRXP in New York, and The Loop and Q101 in Chicago. A few hours after the sale went through, we learned that both Q101 and WRXP would be shifting to all-news formats.

The man who decided that alternative rock radio was over in Chicago was Randy Michaels. Michaels, who [resigned from his executive position](#) at the *Chicago Tribune* after revelations of [inappropriate and loutish behavior](#) in 2010, made his triumphant return to media moguldom by buying my station. “My favorite format has always been spoken radio,” [Michaels said in the July 31 press release](#) announcing the launch of Chicago’s FM News 101.1. “I’ve long had a nostalgic love affair with the big AM stations known for the format, and today—as music moves to the iPod—it’s time for spoken word to move to FM.”

This isn’t the first time that one man’s actions have dealt a blow to rock radio. Howard Stern’s hugely popular morning show debuted on New York’s K-Rock in 1985 and was ultimately syndicated on dozens of rock stations. When Stern took his talents to satellite radio in 2006, K-Rock changed to an all-talk format called Free FM, [with disastrous results](#). Most critics blamed the plunging ratings on Stern’s departure, but I’m convinced that the sudden, drastic format change sealed the station’s demise. I wonder what might have happened if K-Rock’s programmers, or those at WBCN and Indie 103.1, had been patient and given rock music a chance. (Consider that multimedia giant Clear Channel, which owns 850 American radio stations, launched a [successful alternative rock station in Philadelphia](#) two years after the death of Y100.)

Though the rise of satellite radio was supposed to prophesy the death of AM and FM, [that’s not anywhere close to happening](#). Even so, Sirius/XM is unquestionably prying ears away from terrestrial radio. So are iPods; music-sharing services like Pandora and Spotify, which appeal to fans with instant access to millions of songs; social media outlets like Facebook and Twitter that provide constant streams of personalized content; and all the other entertainment options in this era of 1,000 cable channels and 24/7 connectivity.

An FM radio station, by comparison, lacks customization and can't be heard "on demand." But I don't think music is ready to vacate the airwaves, or that someone who acknowledges a bias toward another format should be the arbiter of that decision.

FM radio doesn't have the buzz of more recently minted technology, but that doesn't mean it lacks listeners. The Chicagoland area is the country's third-largest media market and has an audience of more than 7 million people. According to [Arbitron](#), the research firm responsible for radio ratings, Q101 had roughly 1.2 million different listeners during its final weeks on the air. They weren't all listening at once, and they wouldn't all say that Q101 was their favorite radio station. They did, however, all make a choice to tune in. It's too early to know if FM News 101.1 will match the size of that audience: Michaels' Merlin Media LLC is conjuring new stations from scratch, unlike other radio conglomerates that have decided to simulcast established AM stations on crisper FM frequencies. Currently, Arbitron is reporting that 1 million fewer people are tuning their dials to 101.1 than when I was on the air. When I look at those numbers, I wonder how many of those missing million listeners remember their old friend Q101 when they turn on their iPods.

Curiosity can make a listener tune in to a radio station. Loyalty will make him stay, and loyalty must be earned. Making that kind of connection isn't easy, and it takes patience. It helped that I worked for a company that trusted me to host a request hour and didn't require me to pre-record shows for the weekend or for stations in other cities. Recording a show to sound live or local when it's neither makes a DJ sound like the great and powerful Oz—a disembodied voice behind a curtain, not to be trusted. That practice, known as [voice-tracking](#), is a way to cut costs by consolidating stations into regional clusters with a minimal number of employees. The industry started moving in that direction in the late 1990s at the behest of Clear Channel, specifically the head of Clear Channel's radio division ... Randy Michaels.

It would be easy for me to resent Michaels, but radio is a business. He wanted to maximize his company's profits in a volatile, vulnerable industry, and he met that goal. Consolidation made financial sense, even if it sacrificed the medium's humanity.

Michaels' faith in FM news is more subjective. CD sales have fallen sharply with the rise of digital downloads, and there are few alternative rock artists topping the iTunes charts. It's tempting to conclude that tech-savvy consumers don't care about hearing new rock music on the radio. If so, the absence of oldies, classic rock, and Latin music on those iTunes charts would imply that those formats aren't financially successful on FM radio either ... but they are.

What I know from my years as a DJ is that listeners know what they like when they hear it. Q101 fans reached out en masse during our last days, sharing their memories of the station's almost 20-year run. Chicago natives who'd moved away for jobs, school, or military service listened via Q101.com and sent us heartfelt emails and texts. Even now, I get choked up reading the hundreds of comments on my old Facebook page: "I feel like I've lost my best friend." "You have no idea how much we'll all miss you guys." "A big piece of my generation's

life just died." Then, there's this: "Sure, the iPod can play music, but nothing can replace the personality that you brought to the station."

Once we knew that the end was near, Q101's programming department let the DJs pick their own music. I "dusted off" songs I hadn't played in years, like "Little Black Backpack" by Stroke 9, The Cure's "Lullaby," and "Song for the Dumped" by Ben Folds Five. I played newer artists I've grown to love: Mumford and Sons, Foster the People, and naturally, Muse. I allowed myself to be nostalgic, emotional, and honest.

Those last shows were the best of my career. Passion isn't quantifiable like ratings or revenue, but I'm proud that Q101 inspired it in our listeners, no matter how many we had. Technology will change; the need to connect with each other through stories and songs won't. When it comes to rock radio, I don't think the preferences of a few should affect the interests of so many.

Like 6k

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- [10 Really Unusual Sick Day Excuses](#) (SavvySugar)

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TOP ▲

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03	20:20	The Latest Pop Music and More
04	40:4	'40s Pop Hits/Big Band
05	50s on 5	'50s Pop Hits
06	60s on 6	'60s Pop Hits with Cousin Bruce
07	70s on 7	'70s Pop Hits
08	80s on 8	'80s Pop Hits
09	90s on 9	'90s Pop Hits
10	the PLS	2000s and Today
15	Studio 54 Radio	Studio 54 Radio
16	the blend	Lite Pop Hits
17	Love	Love Songs
18	Limited Engagements	Limited Engagements

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20	E-Street Radio	Bruce Springsteen 24/7
21	Underground Garage	Little Steven's Underground Garage
22	Pearl Jam Radio	Pearl Jam 24/7
23	Grateful Dead Channel	Grateful Dead 24/7
24	Radio Margaritaville	Escape to Margaritaville
25	Classic Rewind	'70s & '80s Classic Rock
26	Classic Vixen	'60s & '70s Classic Rock
27	Deep Tracks	Deep Classic Rock

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85	ESPN XTRA	The Latest Sports News
86	Mad Dog	Chris "Mad Dog" Russo is Unleashed
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90	NASCAR Radio	24/7 NASCAR® Talk
91	SiriusXM College Sports	The Best College Sports Talk & Games
92	SPORTS PLAYBYPLAY	European Soccer & More
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28	the SPECTRUM	Adult Album Rock
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32	The Bridge	Mellow Rock
33	F-WAVE	Classic Alternative
34	LITHIUM	'90s Alternative/Grunge
35	SiriusXM INDIE	Indie Rock
36	ALT NATION	New Alternative Rock
37	the SUR OCTANE	New Hard Rock
38	BONE YARD	Classic Hard Rock
39	HAIR NATION	'80s Hair Bands
40	MUSIC METAL	Heavy Metal
41	FACTION	Music of Action Sports with Tony Hawk
42	JOINT	Reggae

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44	hip-hop	Hip-Hop Hits
45	SHADE 45	Eminem's Uncut Hip-Hop Channel
46	Old Skool	Old Skool Rap
47	the heat	R&B Hits
48	Heart & Soul	Adult R&B Hits
49	Soul	Classic Soul/Motown

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53	SiriusXM Chill	Smooth Electronic

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58	PRIME COUNTRY	'90s Country & More
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60	CUTLAW COUNTRY	Rockin' Country Rebels
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136	MIAMI ORLANDO TAMPA/ ST. PETERSBURG	162 The Weather Network Canada Weather

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- 104 STARS 104 • Great Talk Radio for Guys •
- 106 ROAD DOG TRUCKING RADIO • Just for Truckers •
- 107 STARS 107 • Celebrity Hosts & Lifestyle Shows •
- 108 OUTQ • Gay & Lesbian Radio •
- 109 COSMO RADIO • Fun, Fearless, Female •
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- 102 PLAYBOY RADIO • Smart & Sexy Adult Radio •
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- 114 FOX NEWS RADIO • We Report. You Decide. •
- 115 CNN • The Worldwide Leader in News •
- 116 HNN • News & Views •
- 117 MSNBC • MSNBC: Lean Forward •
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- 852 PATRIOT PLUS 852 • More Conservative Talk •
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03		The Latest Pop Music and More	•
04		'40s Pop Hits/Big Band	•
05		'50s Pop Hits	•
06		'60s Pop Hits with Cousin Bruce	•
07		'70s Pop Hits	•
08		'80s Pop Hits	•
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14		2000s Pop Hits	•
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20		Bruce Springsteen 24/7	•
21		Little Steven's Underground Garage	•
22		Pearl Jam 24/7	•
23		Grateful Dead 24/7	•
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26		'60s & '70s Classic Rock	•
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87		Expert Fantasy Sports Opinion and Information	•
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29		Jam Bands	•
30		Contemporary Eclectic	•
31		Acoustic Singer-Songwriters	•
32		Mellow Rock	•
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34		'90s Alternative/Grunge	•
35		Indie Rock	•
36		New Alternative Rock	•
37		New Hard Rock	•
38		Classic Hard Rock	•
39		'80s Hair Bands	•
40		Heavy Metal XL	•
41		Music of Action Sports with Tony Hawk XL	•
42		Reggae	•

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45		Eminem's Uncut Hip-Hop Channel XL	•
46		Old Skool Rap XL	•
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49		Classic Soul/Motown	•
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56		Classic Country	•
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69		Beautiful Music	•
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134	WASHINGTON DC BALTIMORE ATLANTA	139	SAN FRANCISCO SEATTLE SAN DIEGO
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100 XL XM 101 XL XM

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111 Live Your Best Life

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106 Just for Truckers

107 Celebrity Hosts & Lifestyle Shows

108 Gay & Lesbian Radio XL

109 Fun, Fearless, Female XL

102 Smart & Sexy Adult Radio XL

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300 Pop, Rock & Dance Party Songs

310 Music By Rock Hall Inducted Artists

313 Rock & Roll Jukebox Songs

316 Live Classic Rock

319 Classic Indie Rock

350 Country Bar Songs

360 Chanting and Spiritual Music

800 Neil Diamond 24/7

801 Bob Dylan's Acclaimed Show 24/7

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816 Tim McGraw 24/7

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852 More Conservative Talk

853 More Left, Liberal, Progressive Talk

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98 Presented by Jamie Foxx XL

99 Comedy Uncensored XL

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506 Latin Urban Music

510 Regional Mexican Music

520 Latin Love Songs

523 Classic Ballads in Spanish & English

530 Latin Jazz

533 Classic Salsa

540 Latin Rock

560 News and More from Mexico

569 Smart, Sexy Adult Radio en Español XL

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169 All About Your Favorite Sports

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The Road Ahead

Media and Entertainment in the Car



How The Road Ahead Was Conducted

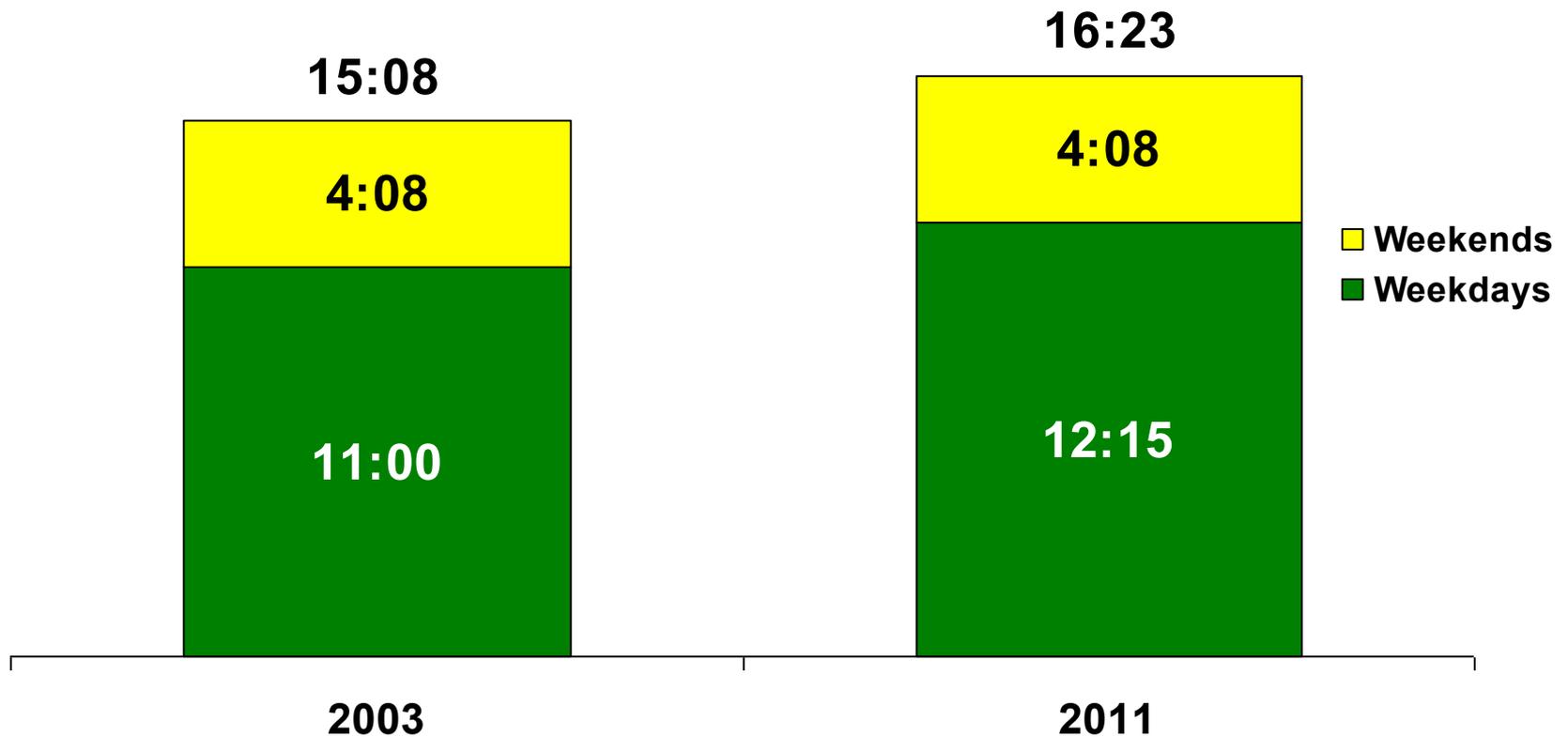
- » 1,505 telephone interviews were conducted in July 2011
- » Nationally projectable sample of Scarborough respondents age 18+
- » Data tracked with Arbitron/Edison 2003 National In-Car study
- » 96.5% of the sample had driven or ridden as a passenger in non-public transportation vehicles (car/truck/van, etc.) in the last month

The In-Car Media and Entertainment Landscape



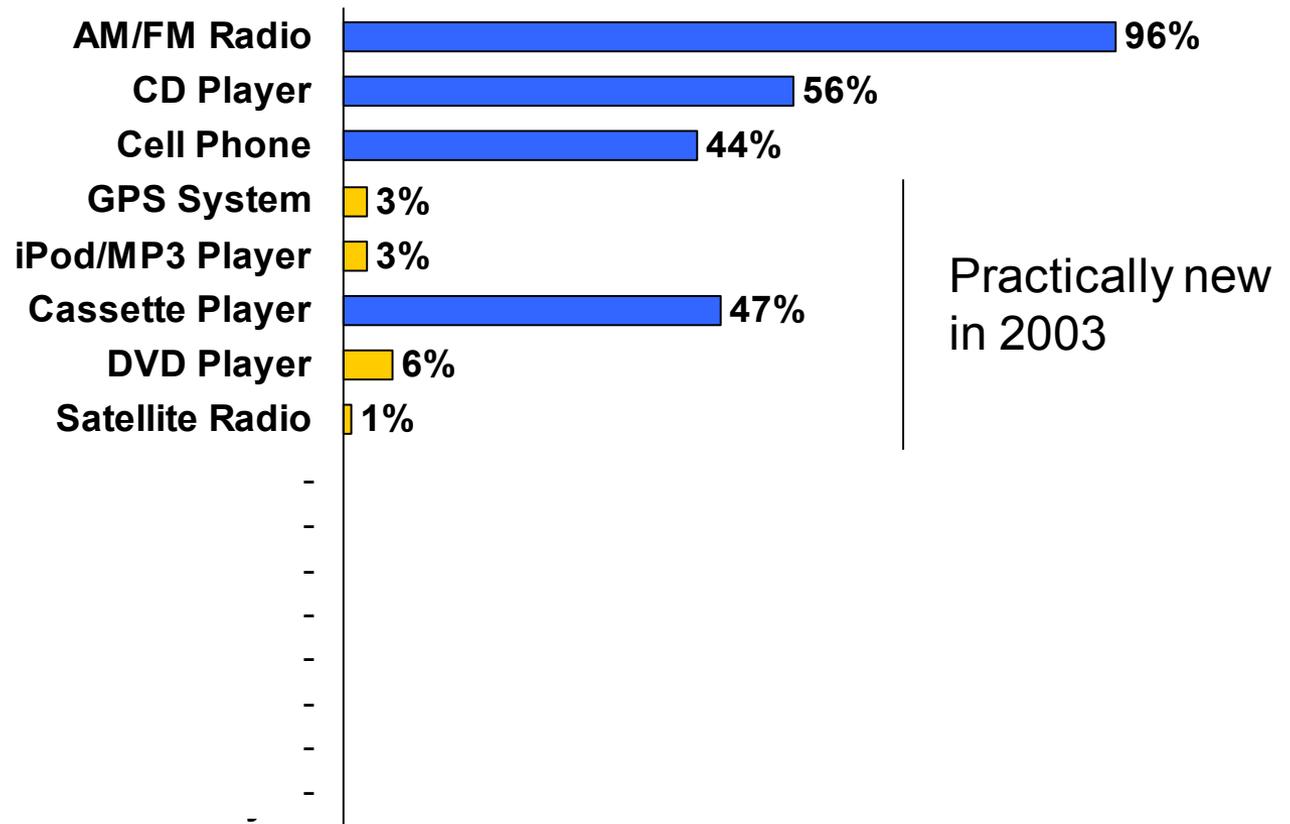
More Time Reported Spent In-Car Than in 2003

Average Reported Time Spent In-Car (as Driver or Passenger)
(Hours:Minutes)



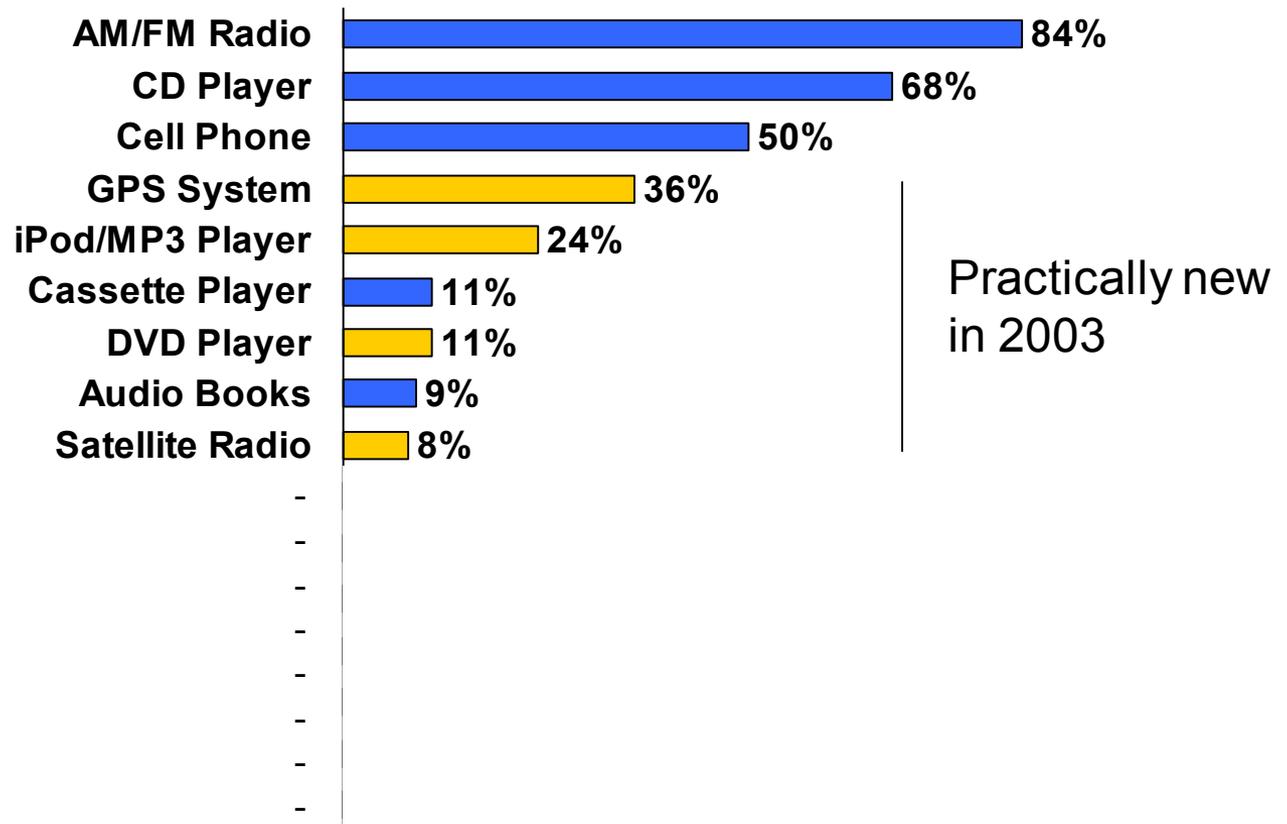
Radio Dominated a Simpler In-Car Landscape in 2003

% Using Device In Primary Car (2003)



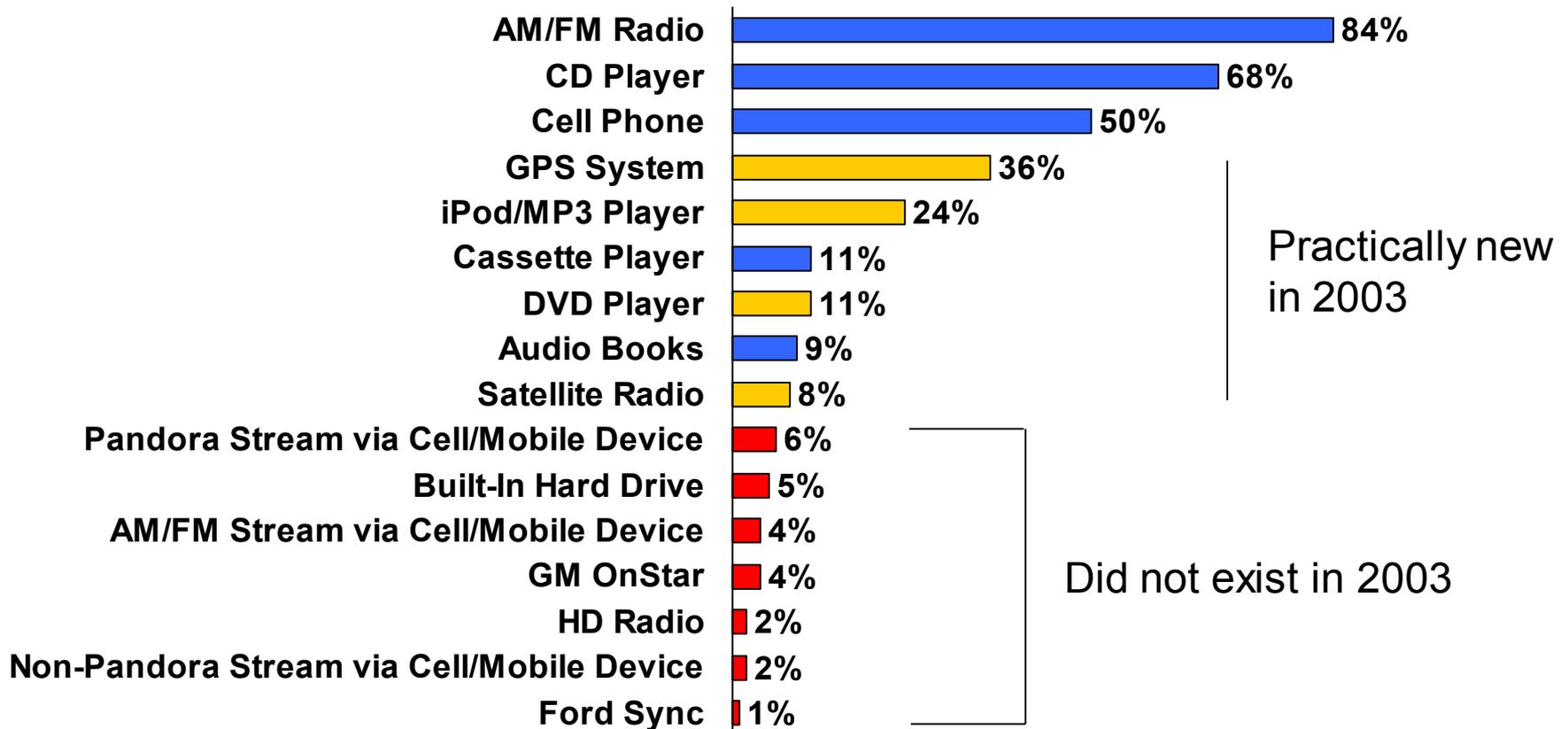
Radio Remains the King of In-Car Media in 2011

% Using Device In Primary Car (2011)



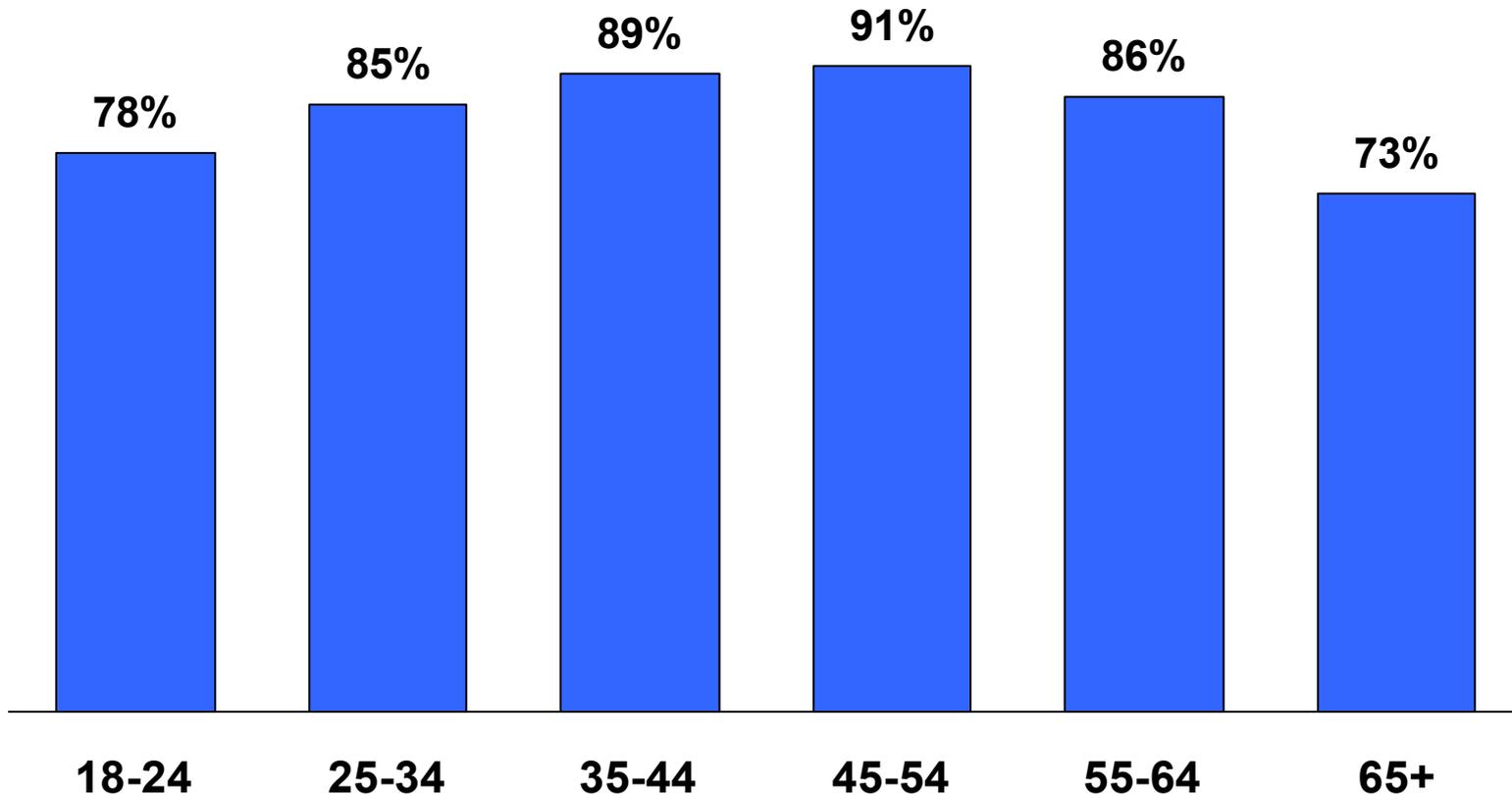
Radio Remains the King of In-Car Media in 2011

% Using Device In Primary Car (2011)



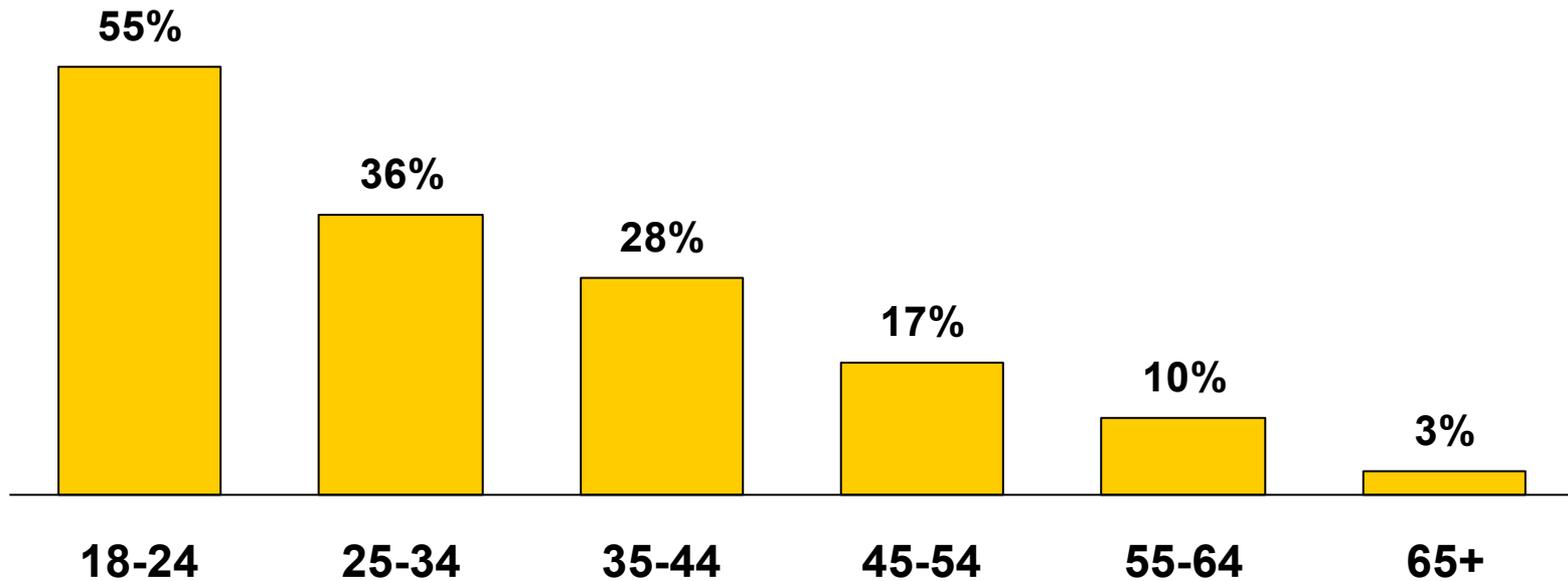
In-Car AM/FM Radio Usage is Strongest in Key Buying Demos it Has Long Targeted

% by Age Group Using AM/FM Radio In Primary Car



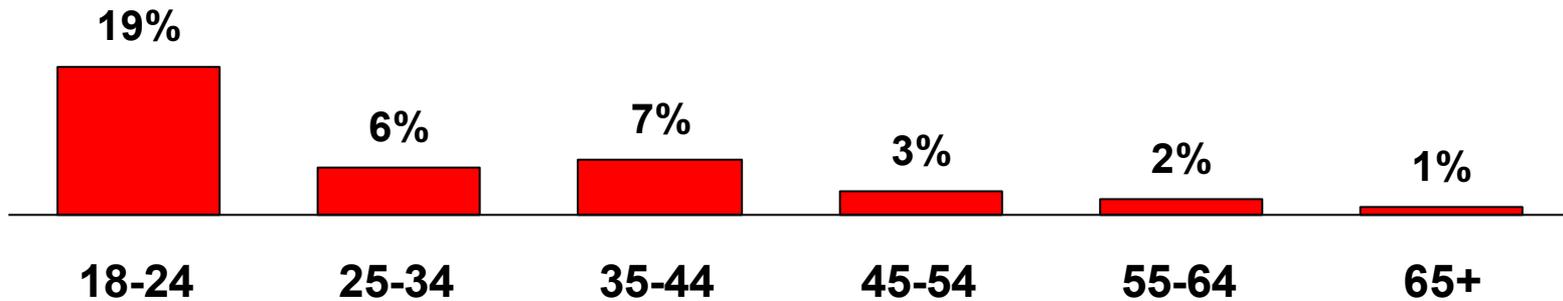
More than Half of 18-24s Use iPod/MP3 Players In-Car

% by Age Group Using iPod/MP3 Player In Primary Car



Usage of Pandora In-Car Approaches One in Five Among 18-24s

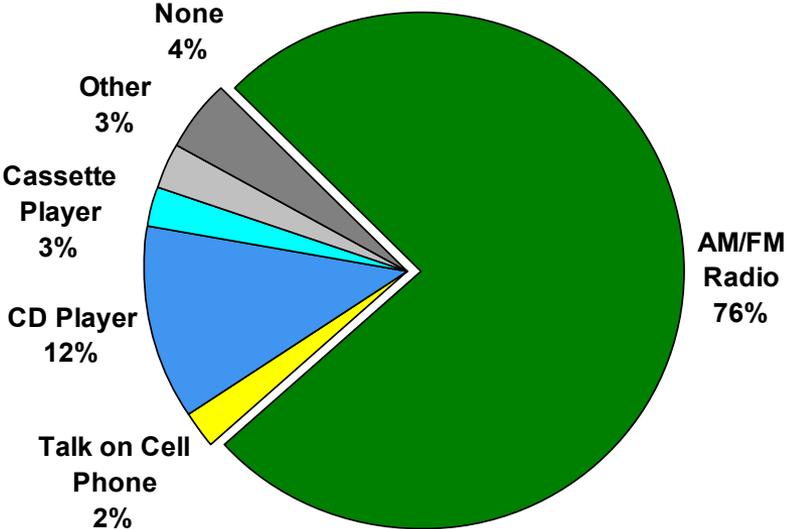
% by Age Group Using Pandora Stream via Cell/Mobile In Primary Car



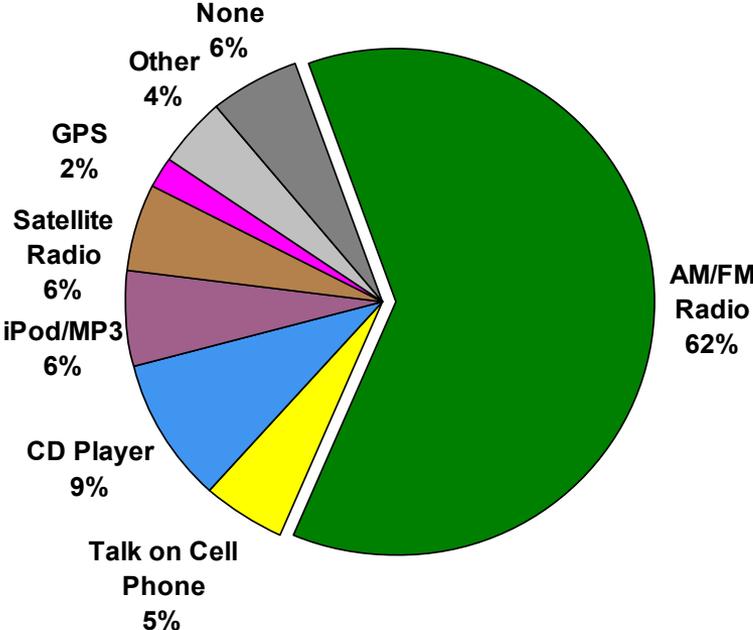
AM/FM Radio Continues to Command the Most Time Spent In-Car

% Spending Most Time with Device/Platform In-Car

2003

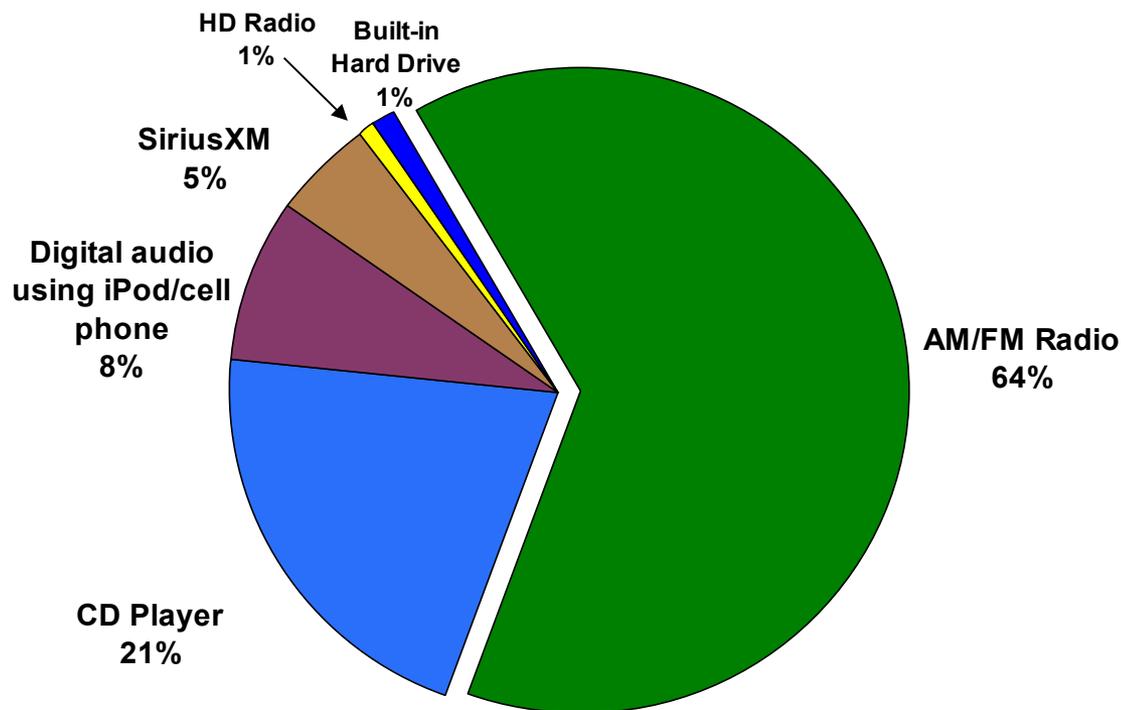


2011



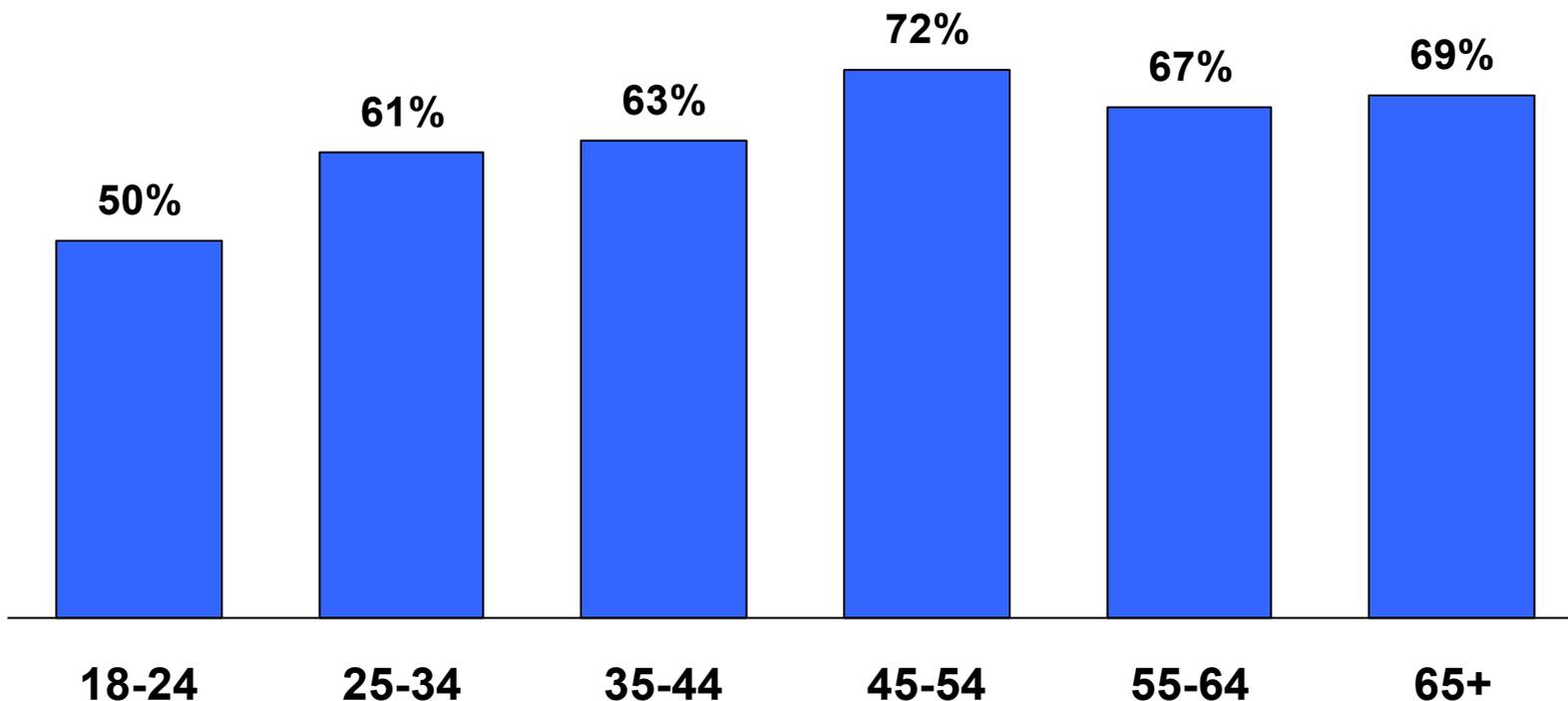
In-Car Listeners Spend Nearly Twice the Time With Radio vs. Other Audio Devices Combined

*“Think about the time you spend in your primary car.
What percent of the time would you say you listen to...”*



AM/FM Radio Commands Most Time Spent With In-Car Media Among All Age Groups

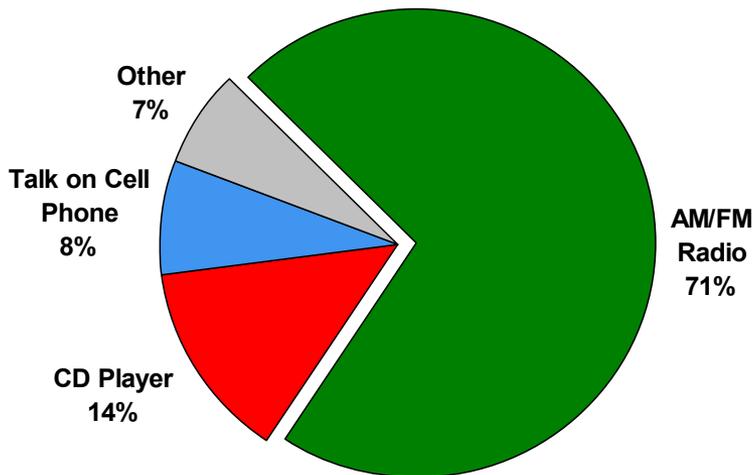
Average Self Reported Share of Time Spent In-Car with AM/FM Radio By Age Group



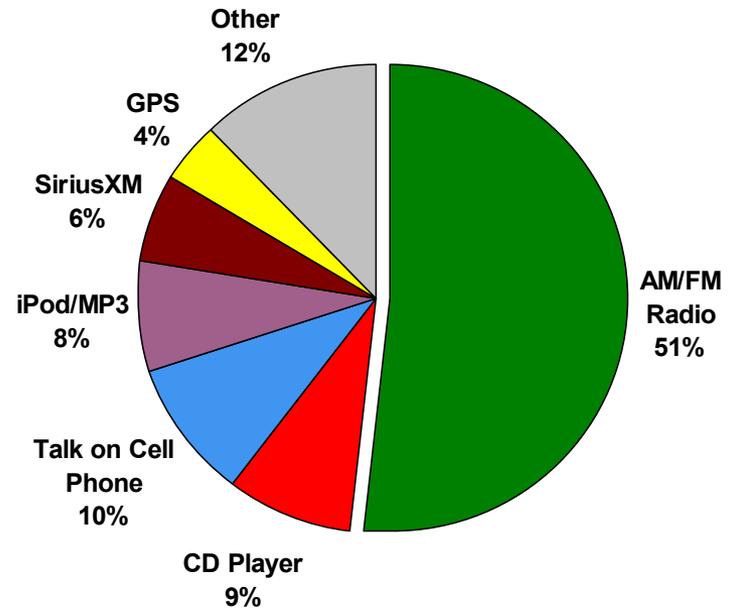
AM/FM Radio Is Still the Most Essential In-Car Device

“If you could ONLY EVER use ONE device in your primary car, which one device would you choose?”

2003



2011

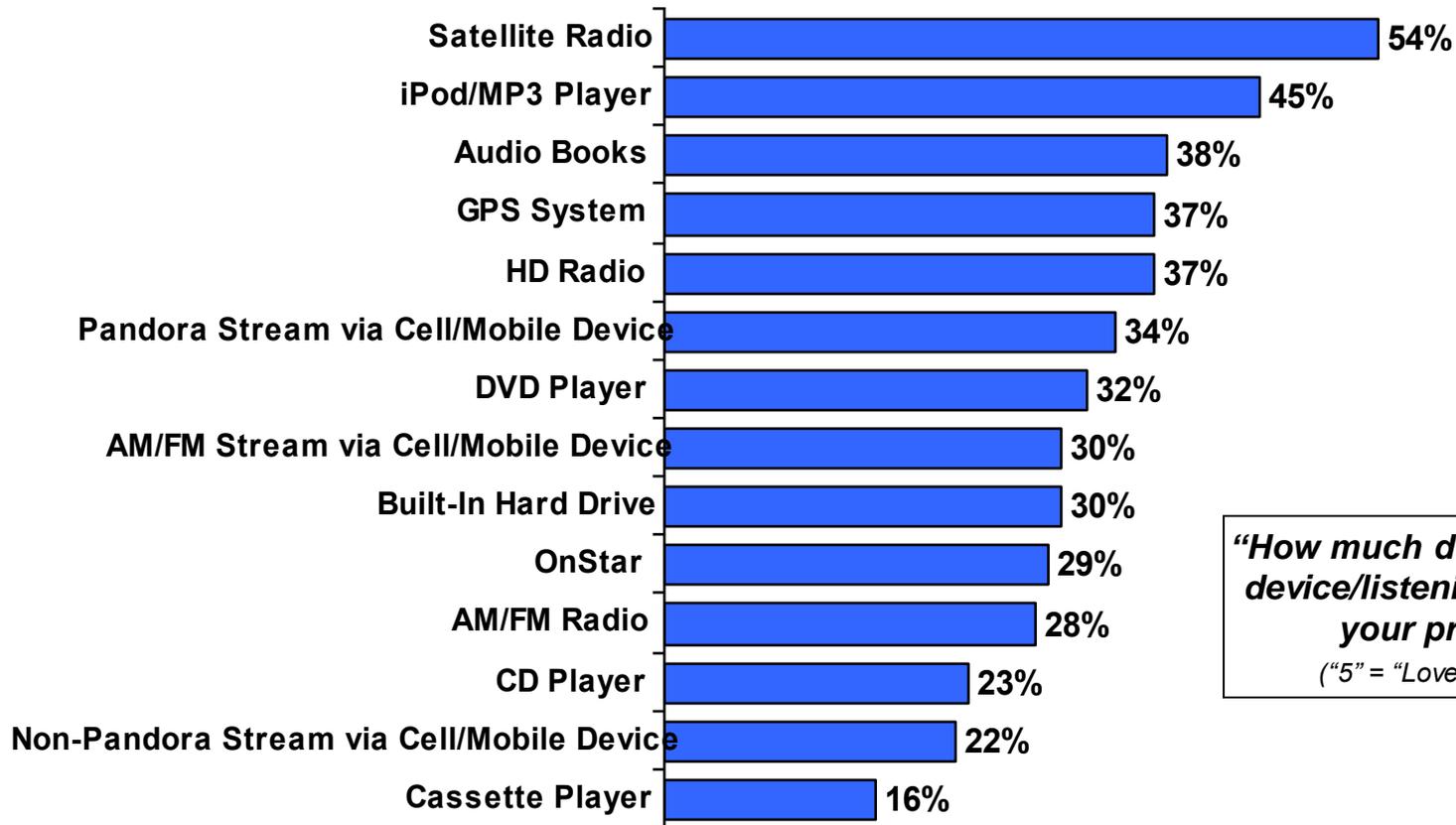


Passion for In-Car Media and Entertainment



Satellite Radio and iPod/MP3 Player Have the Highest “Love” Scores

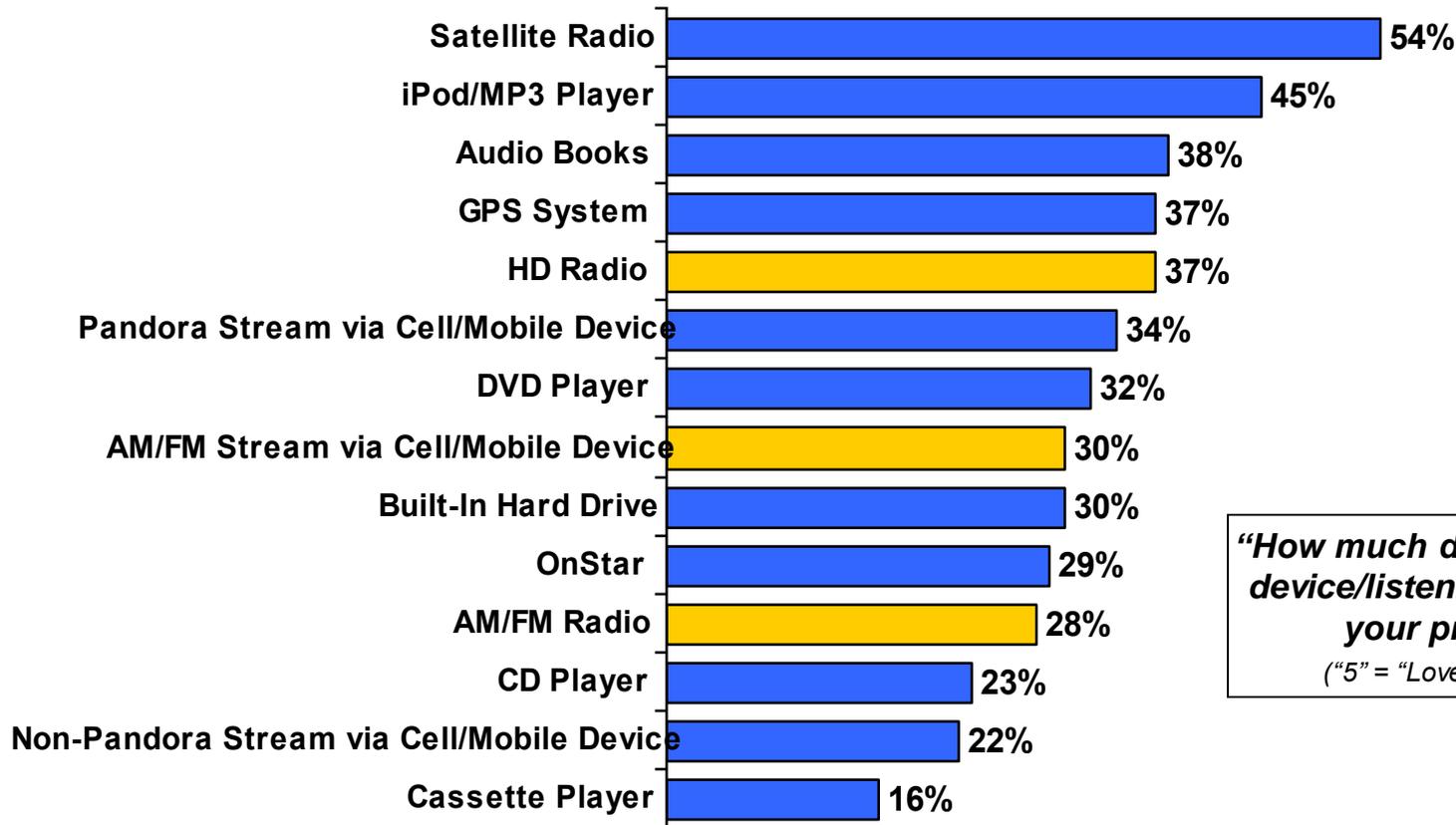
% of Users of Each Device Who “Love” Using Device/Platform In-Car



“How much do you enjoy (using device/listening to platform) in your primary car?”
(“5” = “Love It”, “1” = “Hate It”)

Higher "Love" Scores for AM/FM Content Distributed on New In-Car Technologies

% of Users of Each Device Who "Love" Using Device/Platform In-Car



"How much do you enjoy (using device/listening to platform) in your primary car?"
(*"5" = "Love It", "1" = "Hate It"*)

Number of Passionate Users: In-Car Devices/Digital Platforms

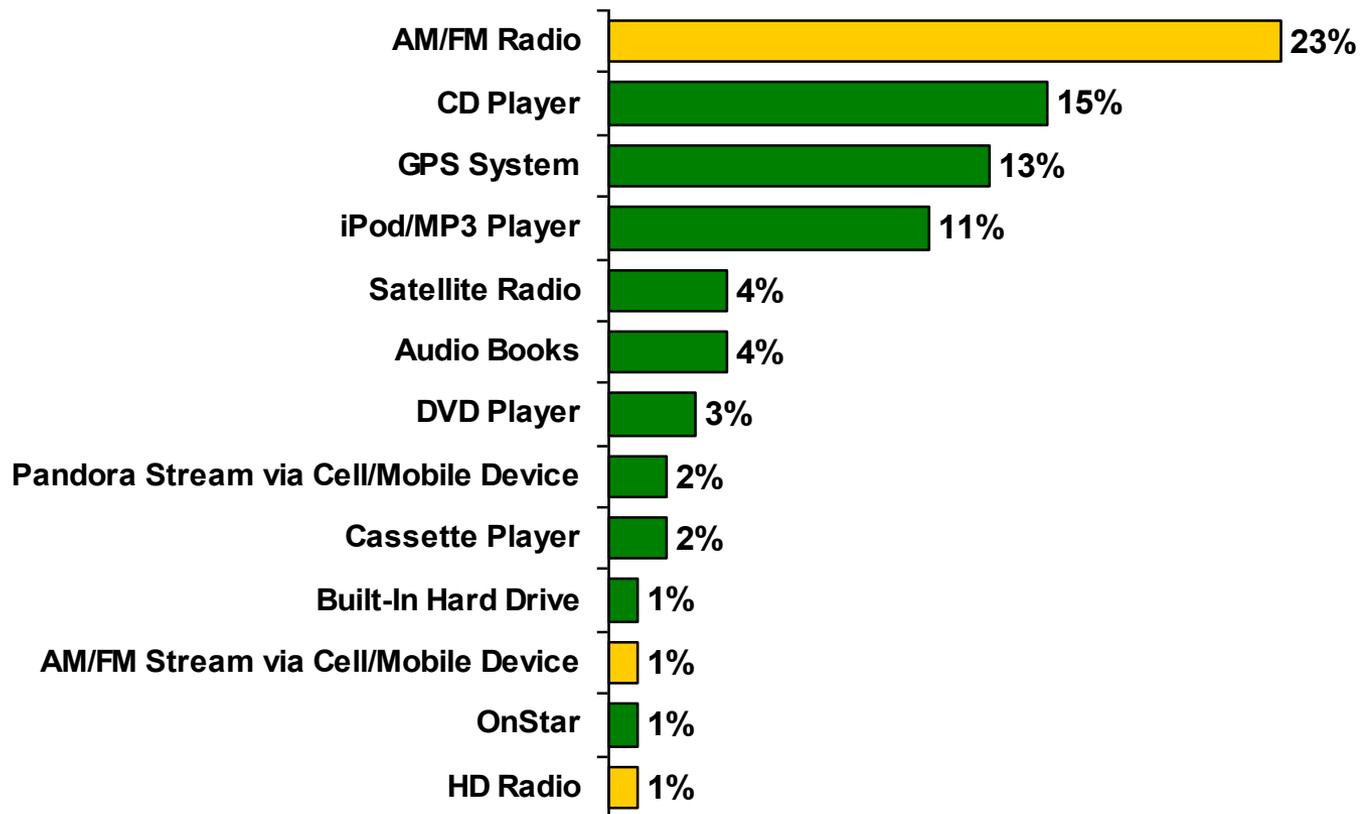
(Percent of Users) x (Percent Who “Love it”)

=

Number of Passionate Users

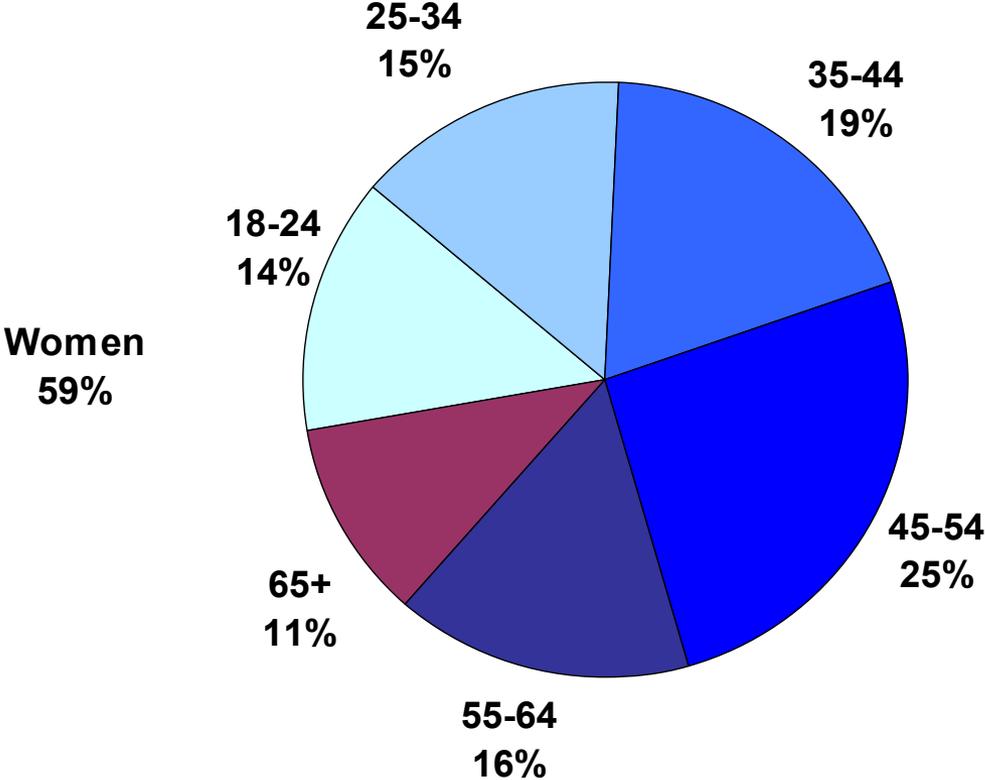
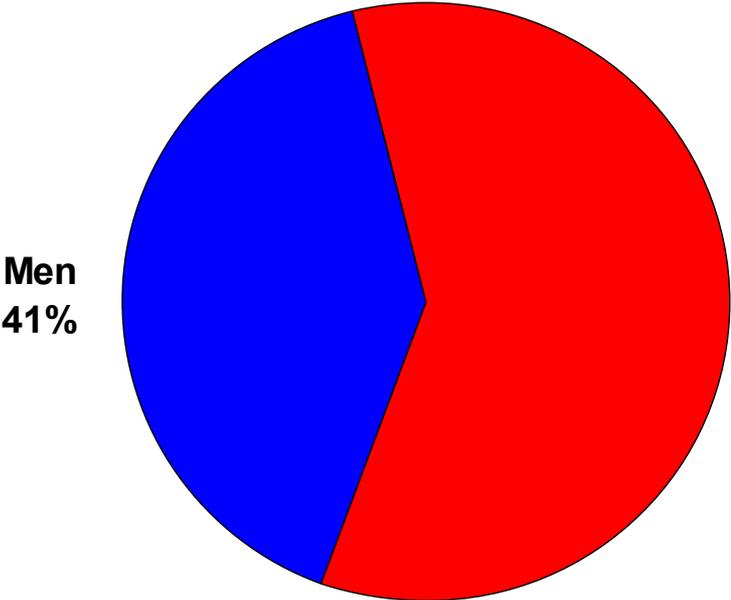
AM/FM Radio Has the Highest Number of Passionate Users Among In-Car Media

Passionate Users = (% Who Use In-Car) x (% "Love")



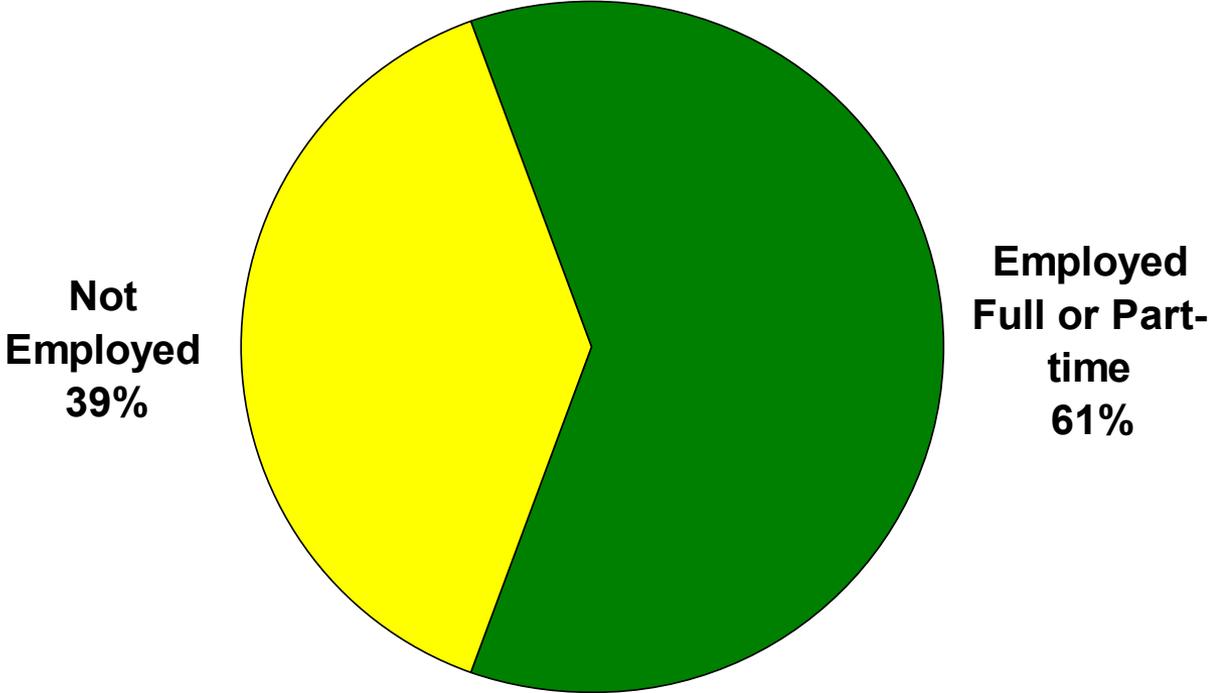
In-Car AM/FM Radio Lovers More Likely to be Women and in Prime 25-54 Buying Demo

Composition of People who “Love” In-Car AM/FM Radio



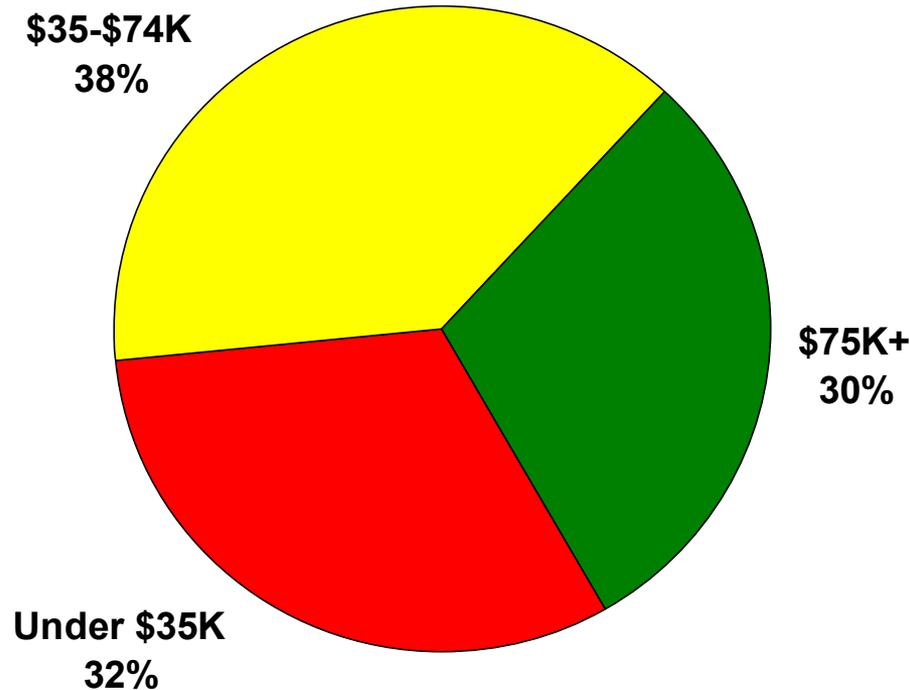
Six in 10 In-Car AM/FM Radio Lovers are Employed

Employment Status of Those Who “Love” Listening to AM/FM Radio In-Car



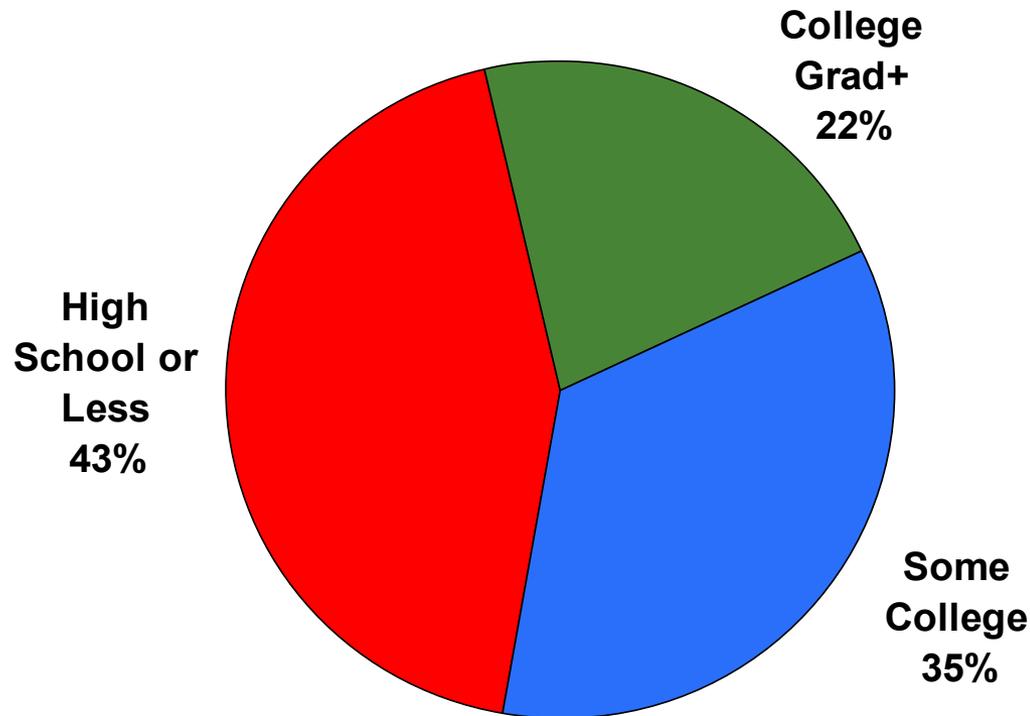
About One in Three In-Car AM/FM Radio Lovers Have Household Incomes of \$75k+

Annual Household Income of Those Who “Love” Listening to AM/FM Radio In-Car



More than One in Five In-Car AM/FM Radio Lovers Are College Graduates

Education Level of Those Who “Love” Listening to AM/FM Radio In-Car

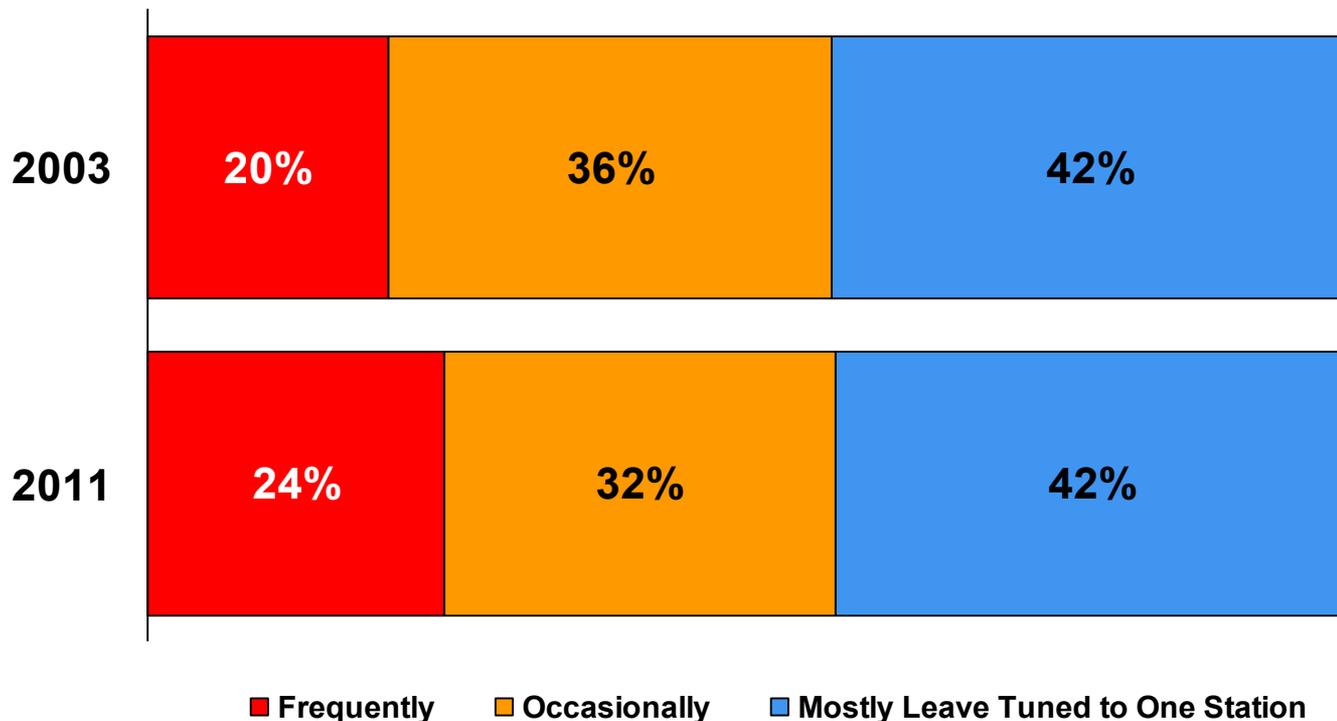


AM/FM Radio In-Car



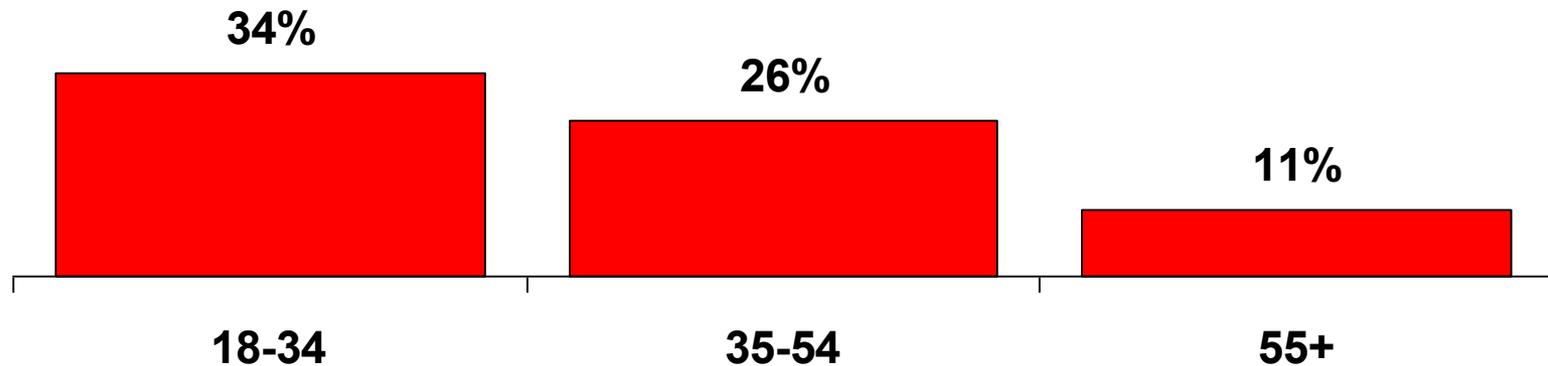
Few Radio Listeners Frequently Change Stations While in Their Car

“Think about the radio listening you do while you are in your primary car, how often would you say you change the station?”



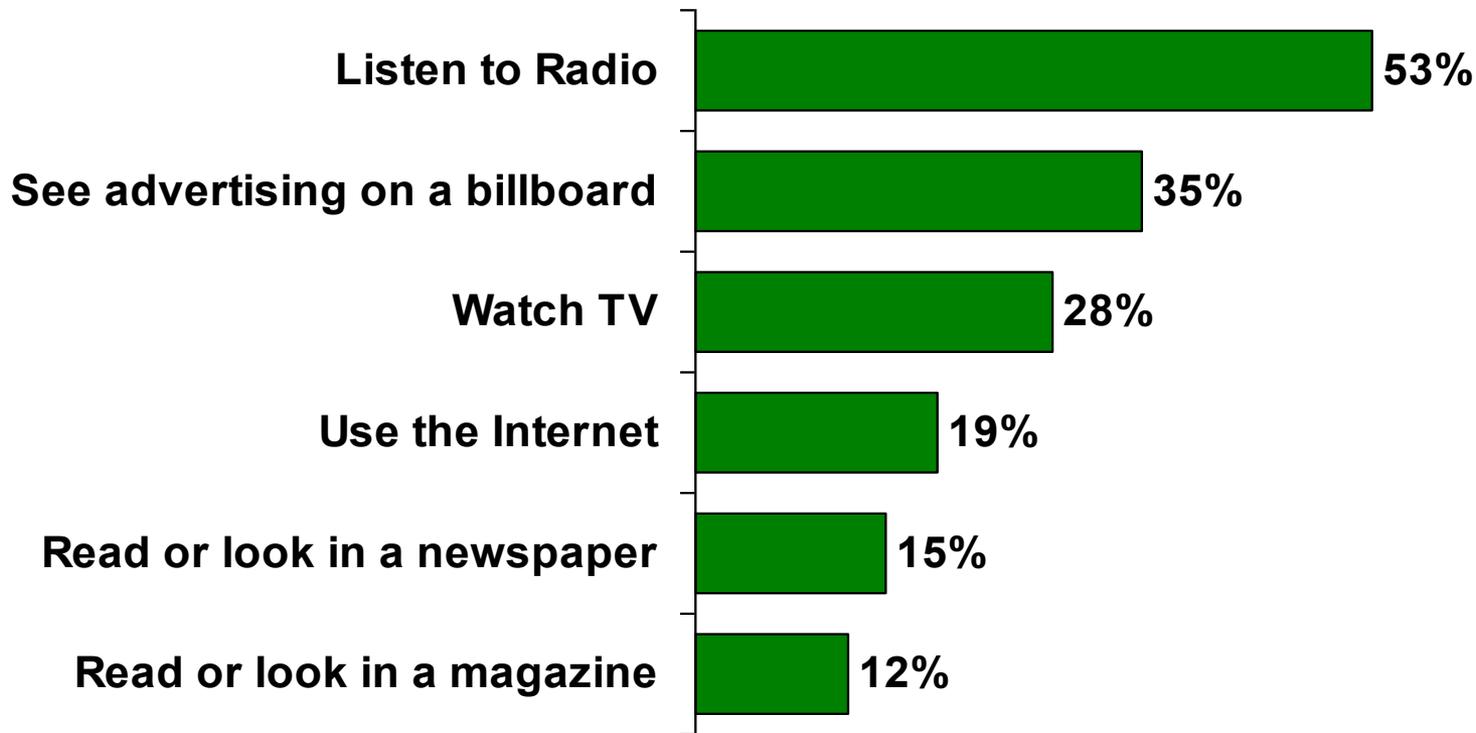
18-34s More Likely to Change Stations Frequently While In-Car

% Who Frequently Change Stations While in Their Primary Car



Radio Reaches the Most Consumers Right Before They Buy

% Who Used Medium Within 30 Minutes of Last Purchase

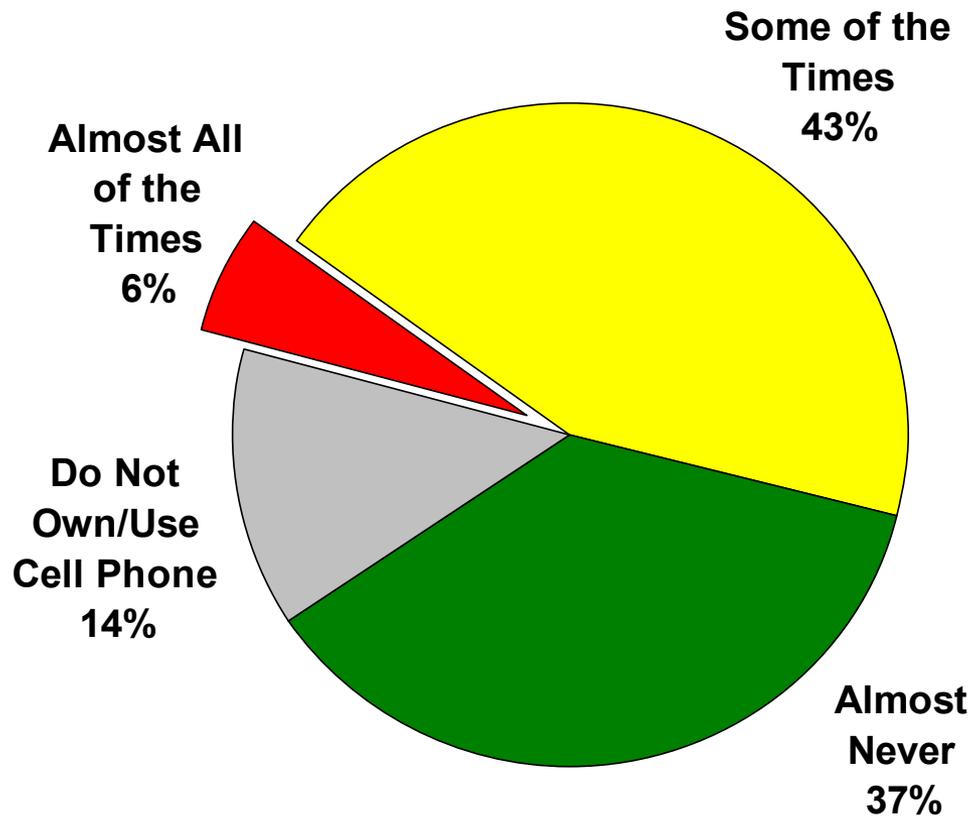


Cell Phone Use In-Car



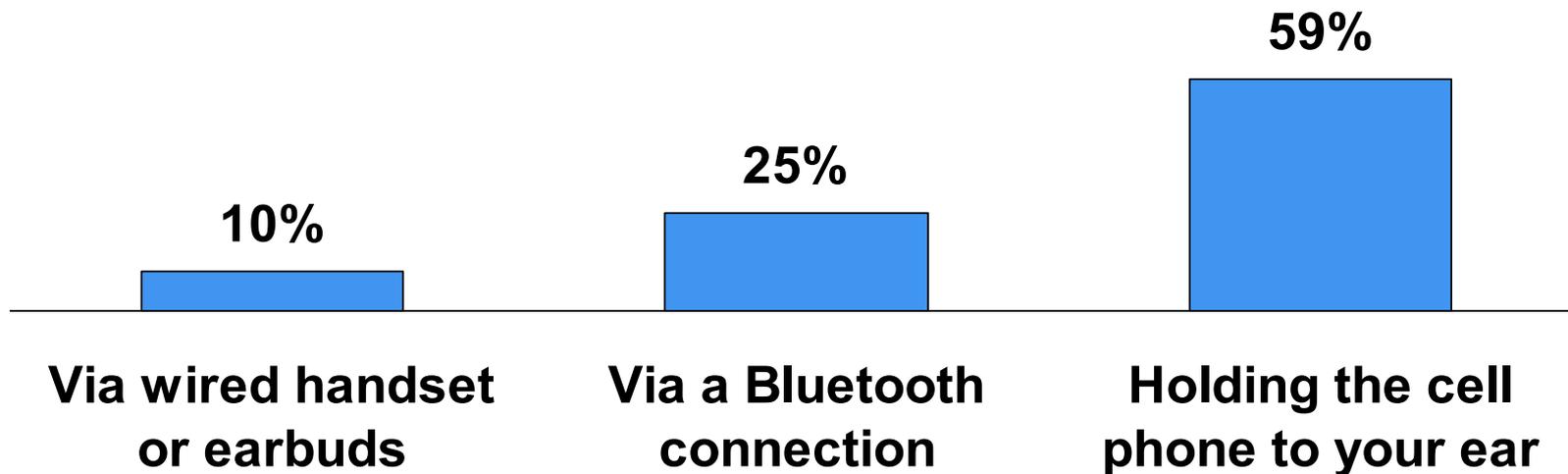
Only a Small Fraction Use their Cell Phone to Frequently Make Calls While In-Car

% of Total Times In a Car Using Cell Phone to Make Phone Calls



Most Still Hold the Cell Phone To Their Ear When Making Calls In-Car

“Which of the following ways do you most often make calls on your cell phone in your primary car?”



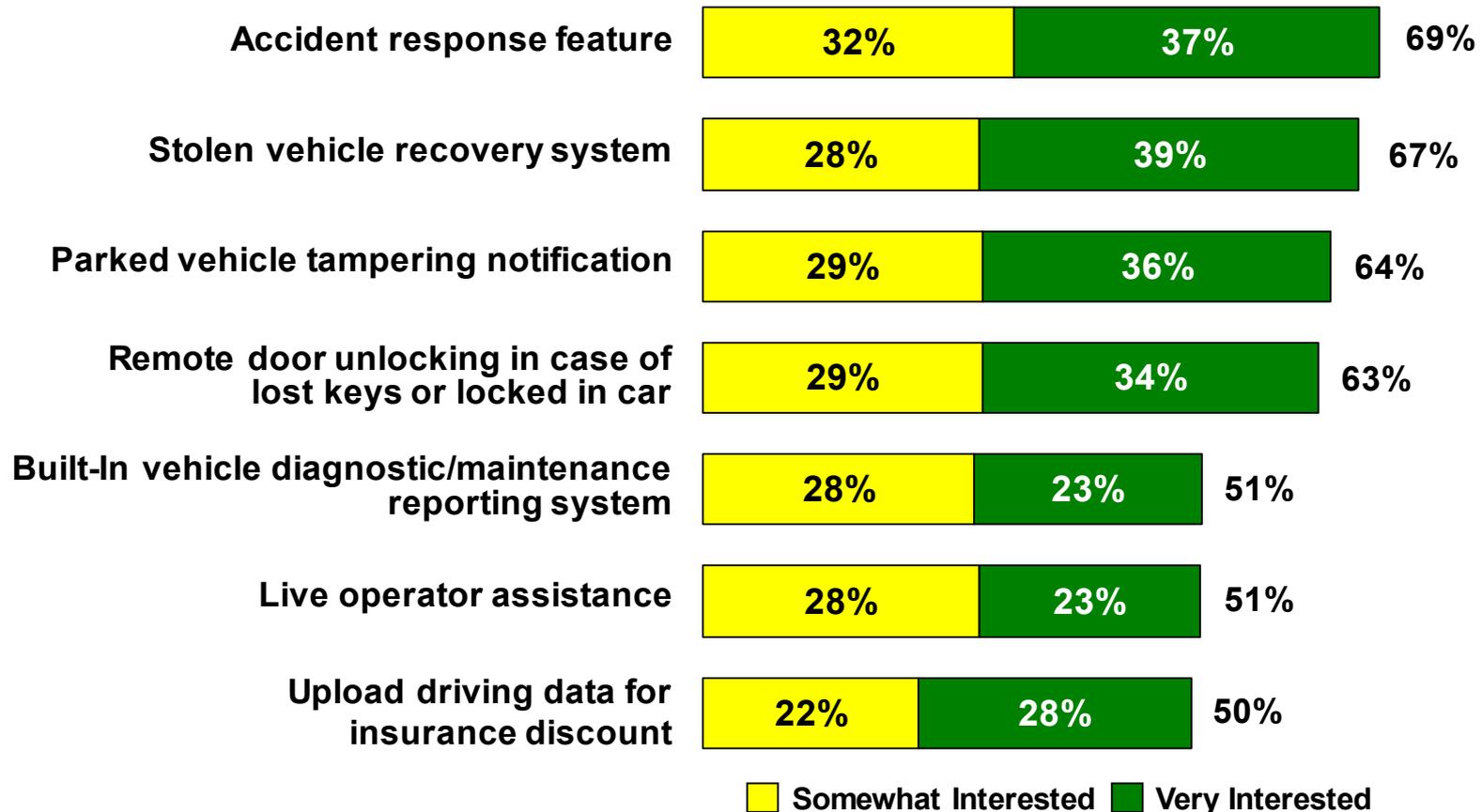
Interest in New In-Car Technologies



Majority Interested In Many In-Car “Telematics” Features

% “Somewhat” or “Very” Interested in New In-Car Features

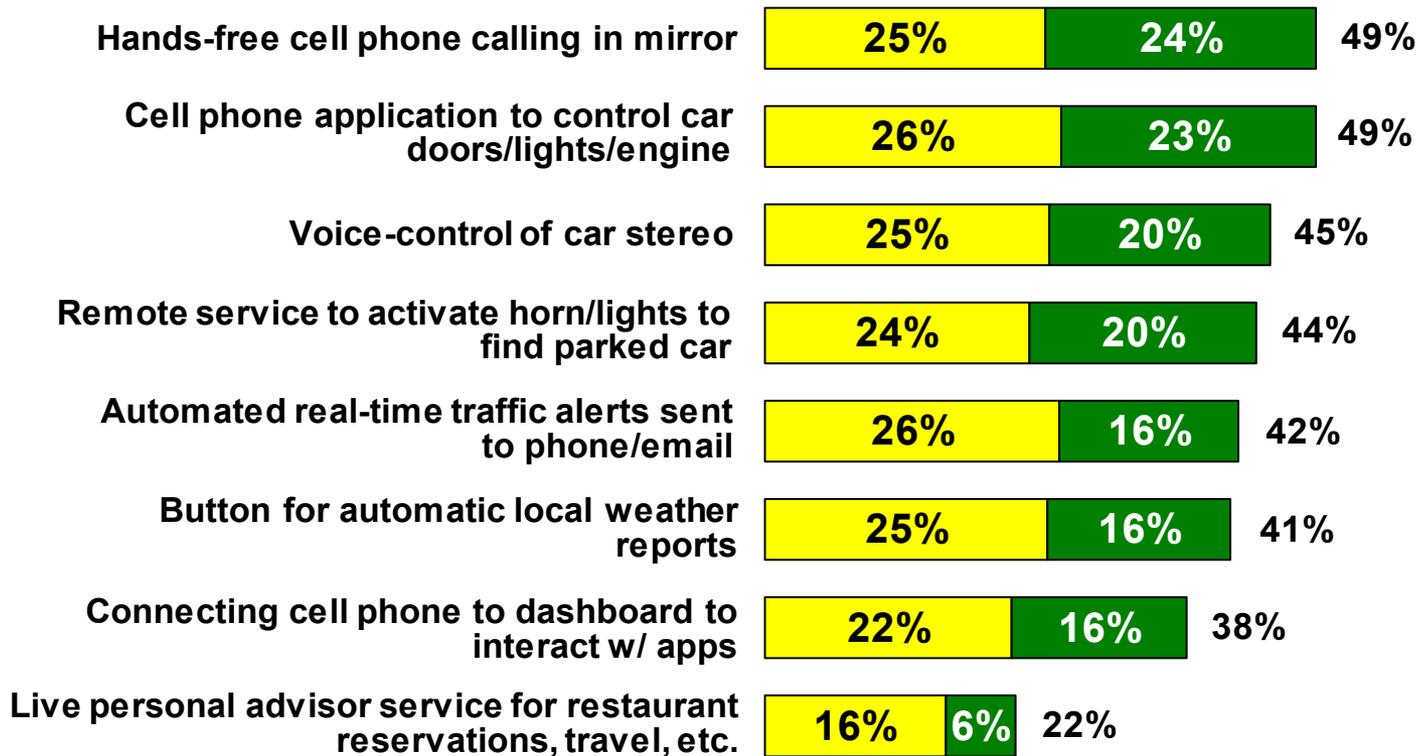
page 1



Majority Interested In Several In-Car “Telematics” Features

% “Somewhat” or “Very” Interested in New In-Car Features

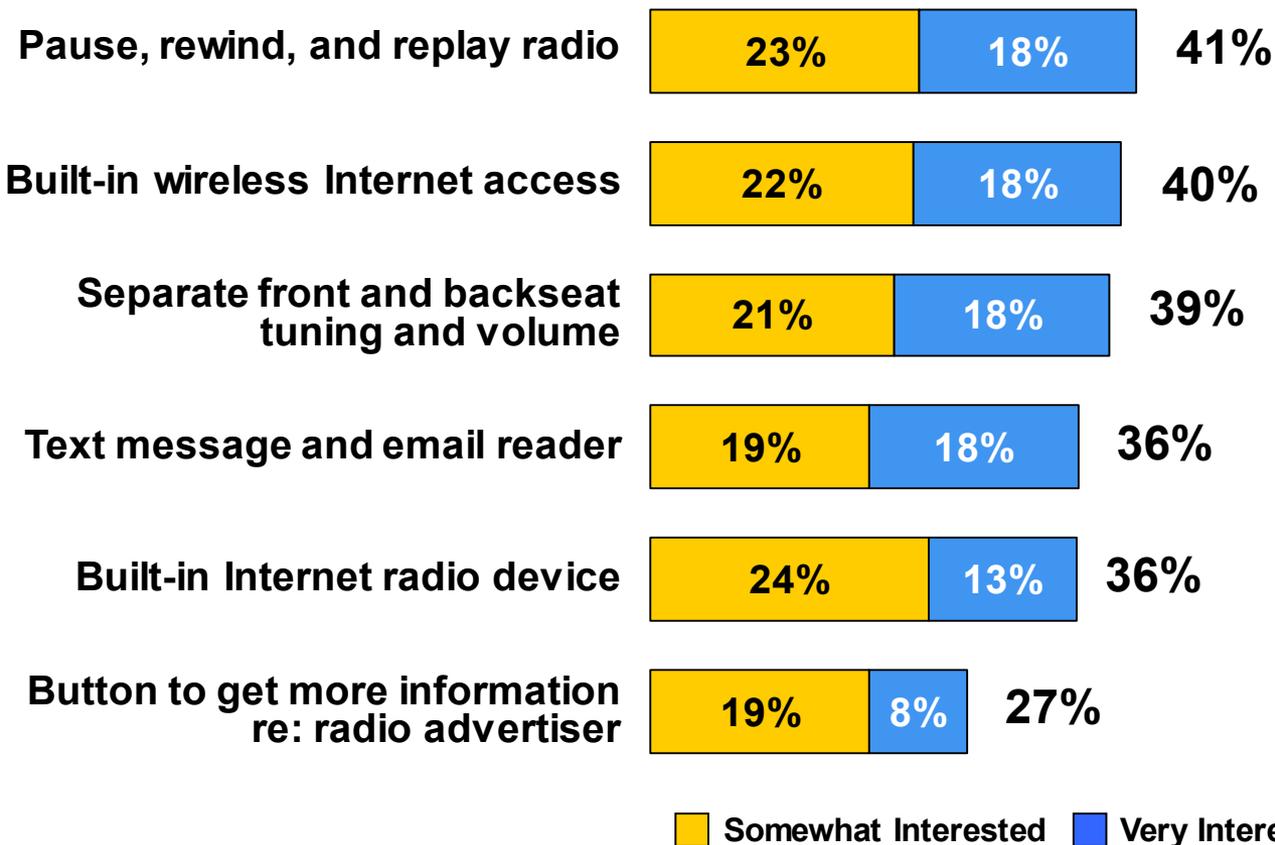
page 2



■ Somewhat Interested
 ■ Very Interested

Significant Interest in Many New In-Car Media and Entertainment Choices

% “Somewhat” or “Very” Interested in New In-Car Features



Takeaways



Takeaways

As was the case in 2003, the in-car landscape is once again becoming far more complex with a myriad of new technologies and devices being launched

Takeaways

Current users of in-car digital technologies exhibit significant passion for these products

Takeaways

Radio remains the king of all in-car media despite proliferation of new technology

- AM/FM Radio's ongoing strength in-car is not a "license" to be complacent
- Digital platforms are crucial to protecting radio's in-car franchise
- HD Radio retains the potential to provide the "wow" factor for AM/FM in-car Radio

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The Road Ahead

Media and Entertainment in the Car





P R E S S R E L E A S E

Foster the People to Perform Private Concert at New York City's Bowery Electric for SiriusXM Listeners

Performance to air on SiriusXM's Alt Nation

NEW YORK—November 7, 2011— Sirius XM Radio (NASDAQ: SIRI) announced today that Foster the People will perform at New York City's Bowery Electric for an exclusive, invitation-only concert for SiriusXM listeners.

The concert will be broadcast live on Friday, December 9 at 10:30 pm ET on Alt Nation, channel 36. Alt Nation was the earliest supporter of Foster the People's "Pumped Up Kicks," which back in June of 2010, had its first airplay with the channel before the song was even released. Since then, the track has been certified double-platinum and Alt Nation has continued to support the band with additional air play with their follow-up singles "Helena Beat" and "Don't Stop (Color On The Walls)."

"SiriusXM's Alt Nation played our music before any other radio outlet in the country—this show is a way for us to thank the SiriusXM team and do something special for our fans," said Mark Foster of Foster the People.

"We love it when our listeners hear new artists on SiriusXM before anywhere else and we are committed to discovering and playing new music consistently as part of our programming," said Scott Greenstein, President and Chief Content Officer, SiriusXM. "When our Alt Nation programming team heard Foster the People for the first time we knew we needed to share 'Pumped Up Kicks' with our listeners immediately."

SiriusXM subscribers will have the chance to attend the private concert. Listen to Alt Nation or visit www.siriusxm.com for Official Rules and details.

Alt Nation plays the latest alternative rock music. Listeners will hear Kings Of Leon, Foo Fighters, Black Keys, Weezer, Muse, The Killers, Death Cab For Cutie, Silversun Pickups and Green Day.

To view Foster the People performing "Pumped Up Kicks" in the SiriusXM studio, please visit: <http://www.youtube.com/watch?v=maZuT3uR-gM>

For more information, please visit www.siriusxm.com.

###

About Sirius XM Radio

[Sirius XM Radio](http://www.siriusxm.com) is America's satellite radio company. SiriusXM broadcasts more than [135 satellite radio channels](#) of [commercial-free music](#), and [premier sports](#), [news](#), [talk](#), [entertainment](#), [traffic](#), [weather](#), and data services to over 21 million subscribers. SiriusXM offers an array of

SXM DIR EX 26

content from many of the biggest names in entertainment, as well as from professional sports leagues, major colleges, and national news and talk providers.

SiriusXM programming is available on more than 800 devices, including pre-installed and after-market radios in cars, trucks, boats and aircraft, [smartphones](#) and [mobile devices](#), and consumer electronics products for [homes](#) and [offices](#). SiriusXM programming is also available at [siriusxm.com](#), and on [Apple](#), [BlackBerry](#) and [Android](#)-powered mobile devices.

SiriusXM has arrangements with every major [automaker](#) and its radio products are available for sale at [shop.siriusxm.com](#) as well as retail locations nationwide.

This communication contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements about future financial and operating results, our plans, objectives, expectations and intentions with respect to future operations, products and services; and other statements identified by words such as "will likely result," "are expected to," "will continue," "is anticipated," "estimated," "intend," "plan," "projection," "outlook" or words of similar meaning. Such forward-looking statements are based upon the current beliefs and expectations of our management and are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are difficult to predict and generally beyond our control. Actual results may differ materially from the results anticipated in these forward-looking statements.

The following factors, among others, could cause actual results to differ materially from the anticipated results or other expectations expressed in the forward-looking statement: our competitive position versus other forms of audio and video entertainment; our ability to retain subscribers and maintain our average monthly revenue per subscriber; our dependence upon automakers and other third parties; our substantial indebtedness; and the useful life of our satellites, which, in most cases, are not insured. Additional factors that could cause our results to differ materially from those described in the forward-looking statements can be found in our Annual Report on Form 10-K for the year ended December 31, 2010, which is filed with the Securities and Exchange Commission (the "SEC") and available at the SEC's Internet site (<http://www.sec.gov>). The information set forth herein speaks only as of the date hereof, and we disclaim any intention or obligation to update any forward looking statements as a result of developments occurring after the date of this communication.

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P-SIRI

Contact for SiriusXM Radio:

Samantha Bowman

SiriusXM Radio

212 901 6644

samantha.bowman@siriusxm.com

Current/Recurrent Gold Ratios on Alternative Rock Radio Stations on October 19, 2011

SXM Channels

Channel	Location	Frequency	Current/Recurrent	Gold
Octane	SiriusXM	N/A	65.2%	34.8%
AltNation	SiriusXM	N/A	66.4%	33.6%
		Average:	65.8%	34.2%

Terrestrial Radio Channels

Channel	Location	Frequency	Current/Recurrent	Gold
WFNX-FM	Boston, MA	101.7 FM	59.9%	40.1%
KROQ-FM	Los Angeles, CA	106.7 FM	46.8%	53.2%
KTBZ-FM	Houston, TX	94.5 FM	43.3%	56.7%
KITS-FM	San Francisco, CA	105.3 FM	41.9%	58.1%
WWDC-FM	Washington, DC	101.1 FM	36.6%	63.4%
WKLS-FM	Atlanta, GA	96.1 FM	35.4%	64.6%
WRRF-FM	Philadelphia, PA	104.5 FM	32.6%	67.4%
WMMR-FM	Philadelphia, PA	93.3 FM	31.5%	68.5%
KDGE-FM	Dallas, TX	102.1 FM	30.5%	69.5%
WAAF-FM	Boston, MA	107.3 FM	25.2%	74.8%
WBOS-FM	Boston, MA	92.9 FM	21.4%	78.6%
KEGL-FM	Dallas, TX	97.1 FM	16.1%	83.9%
		Average:	35.1%	64.9%

Jump to a Station:

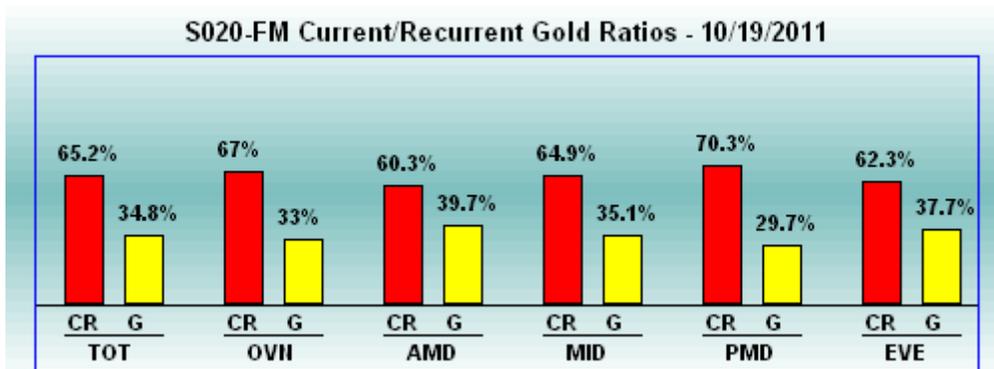


Octane >SiriusXM -

Monitored: Wednesday, October 19, 2011
(Active Rock) *

* Indicates Present Format

Other >SiriusXM Stations: (Select a Station) [Previous Day](#) | [Next Day](#)



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Jump to a Station:



Alt Nation

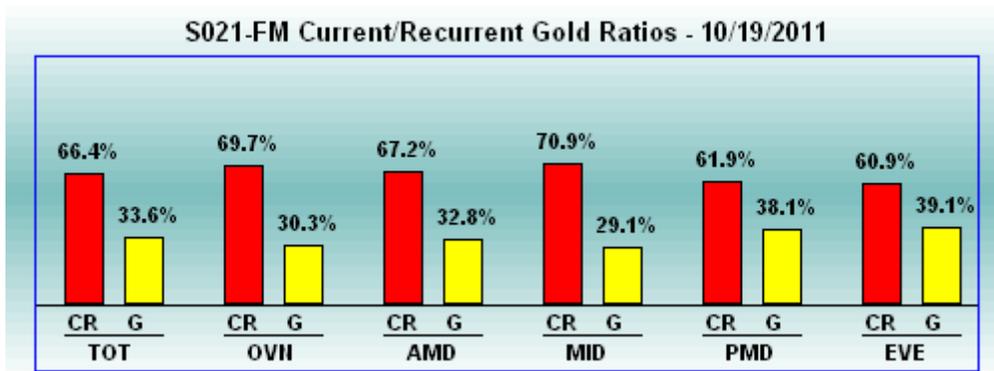
>SiriusXM -

Monitored: Wednesday, October 19, 2011
(Alternative Rock) *

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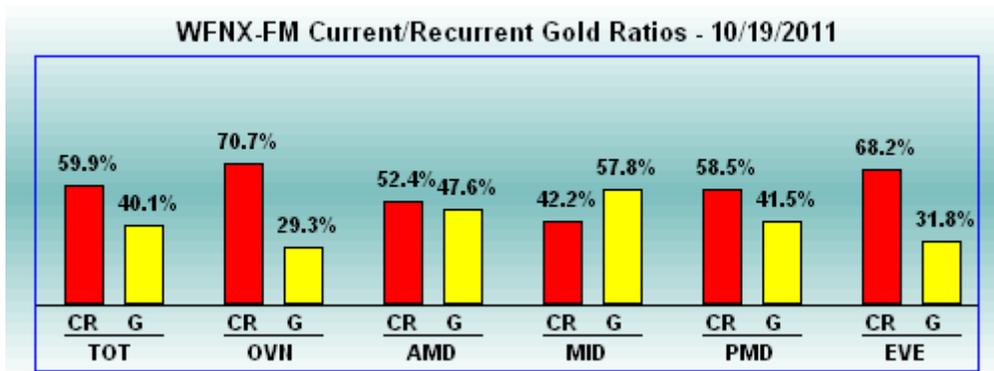
Jump to a Station:



WFNX-FM
Boston - 101.7 FM
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 (Alternative Rock) *

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Other Boston Stations: Other WFNX-FM Reports: Other Dates: [Previous Day](#) | [Next Day](#)



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Jump to a Station:

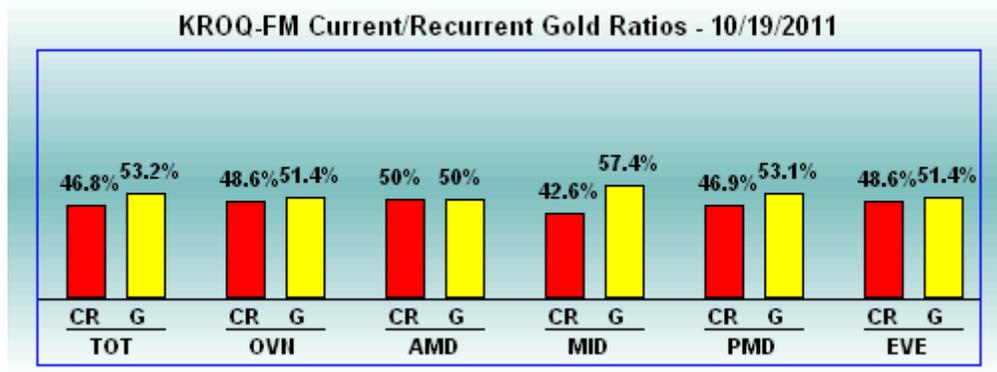


KROQ-FM
Los Angeles - 106.7 FM
 Monitored: Wednesday, October 19, 2011
 (Alternative Rock) *

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Other Los Angeles Stations: (Select a Station)
 Other KROQ-FM Reports: (Select a Report)
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Jump to a Station:



Daily Reports
Clear Channel Communications
PD: Don Jantzen
MD: Karah Leigh

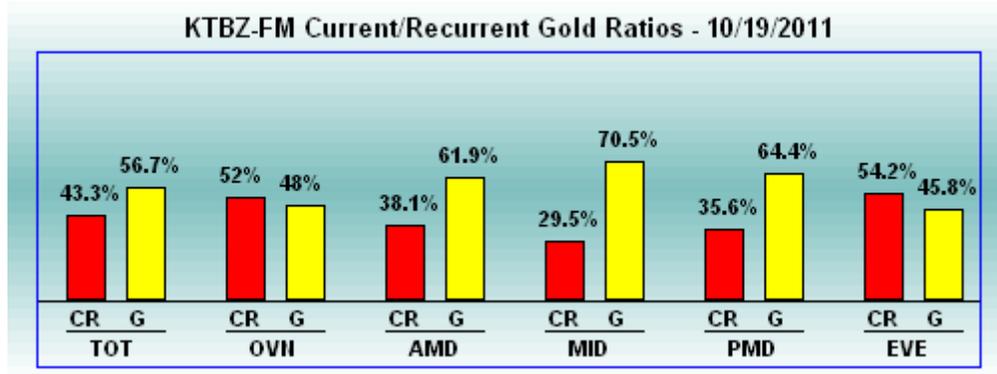
KTBZ-FM Houston - 94.5 FM

Monitored: Wednesday, October 19, 2011
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Other Houston Stations: (Select a Station)
Other KTBZ-FM Reports: (Select a Report)
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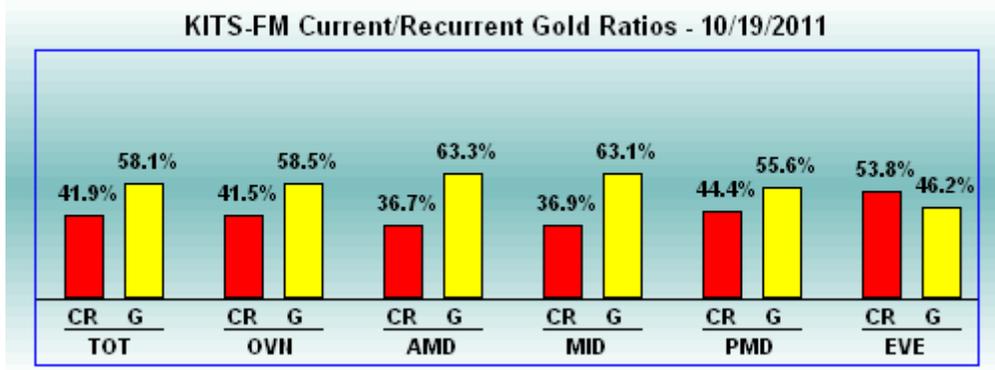
Jump to a Station:



KITS-FM
San Francisco - 105.3 FM
 Monitored: Wednesday, October 19, 2011
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Other San Francisco Stations: (Select a Station) Other KITS-FM Reports: (Select a Report) Other Dates: 10/19/2011 Wed [Previous Day](#) | [Next Day](#)



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Jump to a Station:



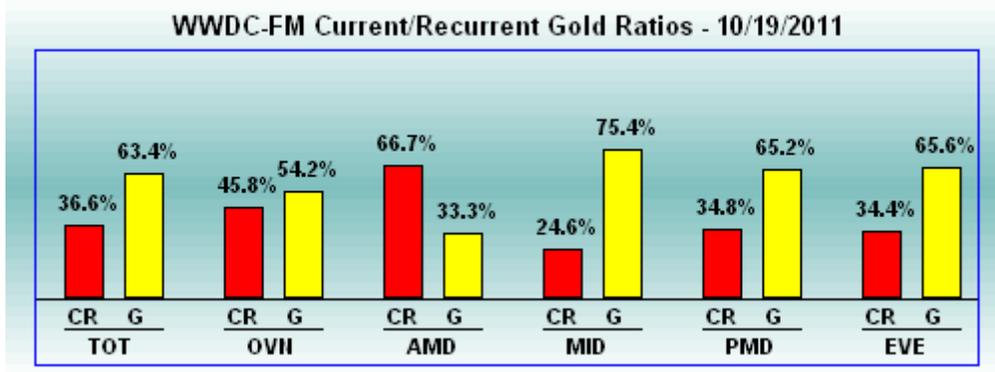
Daily Reports
 Clear Channel Communications
 PD: James Howard
 MD: Greg Roche

WWDC-FM
Washington, DC - 101.1 FM
 Monitored: Wednesday, October 19, 2011
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Other Washington, DC Stations: (Select a Station)
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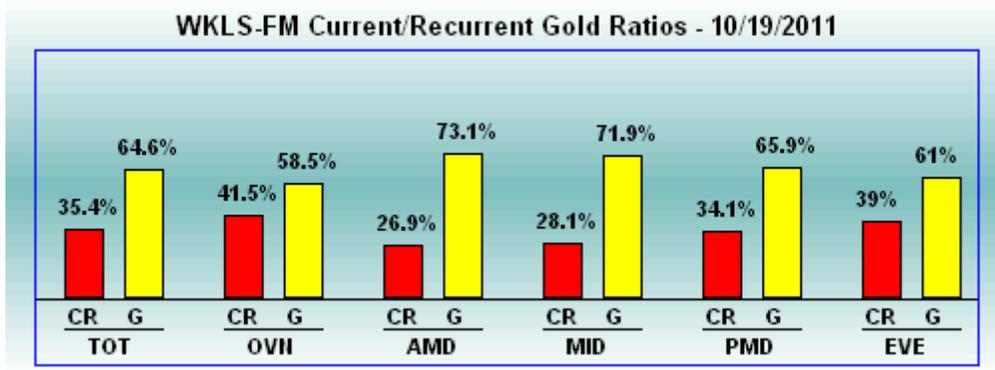
Jump to a Station:



WKLS-FM
Atlanta - 96.1 FM
 Monitored: Wednesday, October 19, 2011
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Other Atlanta Stations: (Select a Station) Other WKLS-FM Reports: (Select a Report) Other Dates: 10/19/2011 Wed [Previous Day](#) | [Next Day](#)



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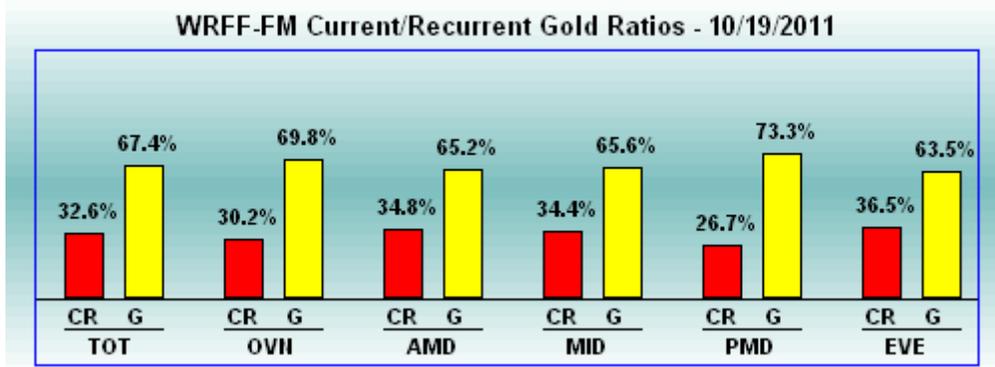
Daily Reports
 Clear Channel Communications
 PD: John Allers
 MD: Wendy Rollins

WFFF-FM
Philadelphia - 104.5 FM
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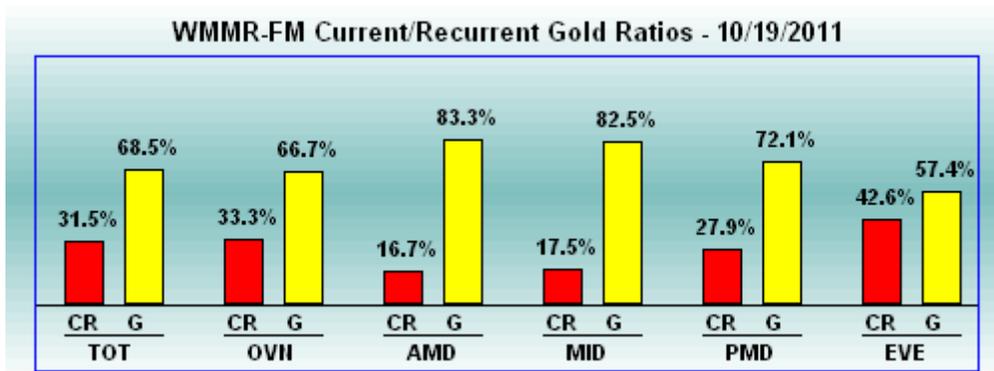
Daily Reports
Greater Media
PD: Bill Weston
MD: Sean "The Rabbi" Tyszler

WMMR-FM
Philadelphia - 93.3 FM
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Daily Reports
Clear Channel Communications
PD:Josh Venable
MD:

KDGE-FM

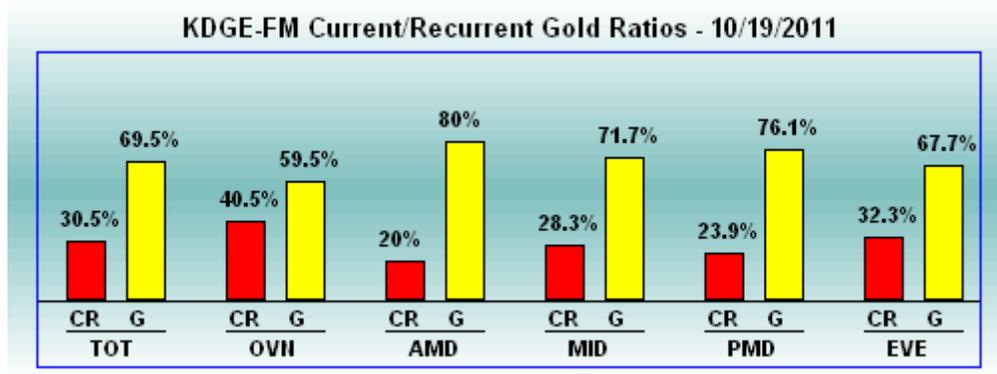
Dallas - 102.1 FM

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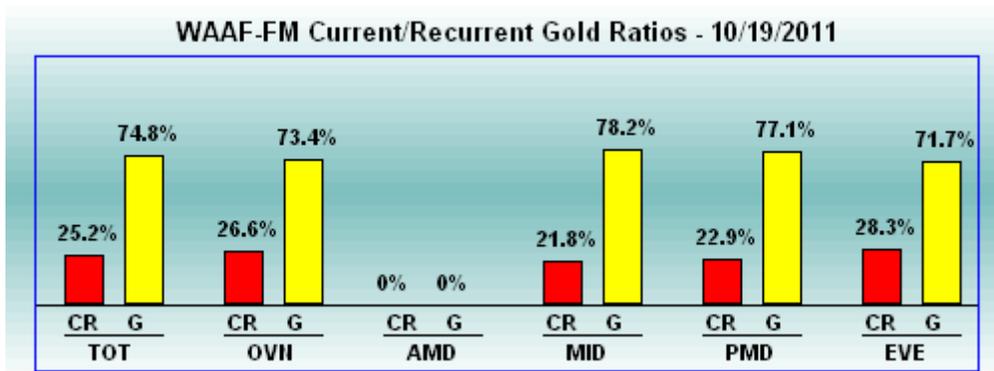


WAAF-FM
Boston - 107.3 FM
 Monitored: Wednesday, October 19, 2011
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Jump to a Station:



WBOS-FM

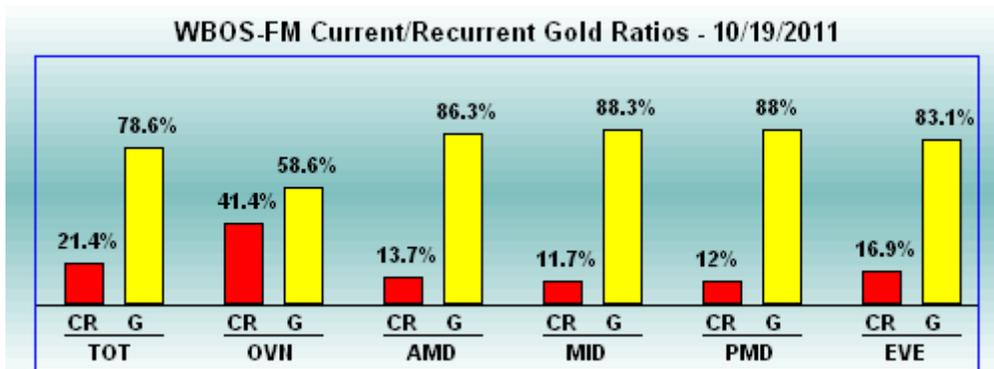
Boston - 92.9 FM

Monitored: **Wednesday, October 19, 2011**
(Alternative Rock) *

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Other Boston Stations: (Select a Station)
 Other WBOS-FM Reports: (Select a Report)
 Other Dates: 10/19/2011 Wed

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Jump to a Station:



Daily Reports
 Clear Channel Communications
 PD:Chris Ryan
 MD:Chris Ryan

KEGL-FM

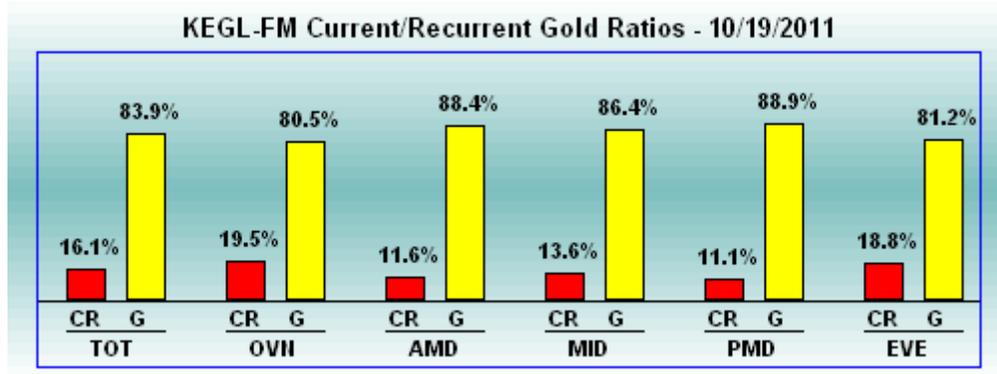
Dallas - 97.1 FM

Monitored: Wednesday, October 19, 2011
 (Rock) *

* Indicates Present Format

Other Dallas Stations: (Select a Station)
 Other KEGF-FM Reports: (Select a Report)
 Other Dates: 10/19/2011 Wed

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MTV Newsroom

House Legend Robbie Rivera On The State Of Dance Music, Deadmau5 And 'Jersey Shore'

Posted 4/7/10 11:50 am ET by [MTV News](#) in [Music](#)

By Adam Stewart

Legendary dance DJ and producer Robbie Rivera has been pumping out club hits in the past decade, mixing old and new to generate an unmistakable big room sound. He has a prolific back catalog (including remixes of Tiesto, Nelly Furtado, Kaskadee and Benassi) along with original smashes like his new release "Let Me Sip My Drink" (featuring Fast Eddie) and "Jersey Shore" club anthem "Vertigo," the Miami mix master of slowing down.

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"I remember playing ["Vertigo"] in New Jersey like eight years ago at this club," Rivera told MTV News. "That was a great party man!" Rivera embraces the hit MTV show because it upped his exposure but because it was good for dance music. "When I was on the show, I was like this is awesome. They're wearing shirts that say 'I Love House Music' and Pauly D plays house music. It's good for all of us!"

AROUND MTV

MTV Buzzworthy

Star Spotting: Gwen Stefani's Halloween Costume Is WAY Cooler Than Yours

Buzz Bites (10/31/11): Jay-Z And Kanye West Launch 'Watch The Throne' Tour In Atlanta

MTV PUSH Artist Of The Week: Wales

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MTV Rapfix

DMC And Shake Remember Run DMC's Jam Master Jay

DJ Khaled, Meek Mill Say Rick Ross Is Resting, Doing 'Great'

Meek Mill, Chris Brown Rock Powerhouse Show In Philly

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MTV Movies Blog

'Anonymous' Star Rhys Ifans On Playing the Man Behind Shakespeare's Works

'Harry Potter' DVDs Returning Late 2012, Early 2013

Justin Timberlake's 'In Time' & 10 Other Extremely Confusing Movie Premises

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MTV Act

#EndOfPolio Concert Featuring John Legend a Smash Hit

Three Ways To Avoid Being That Guy (Or Girl) On Halloween

Coca-Cola's New Campaign

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Rivera holds true to his genre and is always looking for the betterment and e house music. As the owner of his own record label, Juicy Records, Rivera ha guide dance music for years, but is also very aware of how technology has ri way we ingest and discover music.

"I think the most important thing that's happening in America that has really t music into the mainstream is probably the satellite radio shows," he explaine all those DJs playing their mix shows on Sirius XM. I have a mix show there, listen to dance music all the time. I think that helped a lot because they put d over the place, all over America." He also cites the string of big events and s you hear Tiesto playing to 30,000 people, when you see David Guetta's succ over the place, and I guess that the young generation just loves electronic m

In the past, Rivera has helped launch the careers of newbies like deadmau5 he have his eye on this year? Up-and-coming [Italian DJ and producer Riva S](#) a highly-anticipated set at River's annual Juicy Beach bash at WMC in Miam been turning heads with his smash single "I Was Drunk."

Check out more of Rivera's music on the Beatport Player below or on his we Radio broadcast "The Juicy Show," which airs each Friday from Midnight to : BPM 81.

The screenshot shows the Beatport Player interface with a track list. The player has a green header with the Beatport logo and two buttons: "Get these tracks" and "Get this player". Below the header is a playback control bar with a play button and a progress slider. The main area displays a table of tracks:

	Track Title (Mix Title)	Artist	Label
01	Who Wants To Be Alone [Robbie Ri...	Tiesto, Nelly Furtado	Musical Freedom (PIAS)
02	Juicy Beach Anthem [Robbie Ri...	Robbie Rivera, Mixin Marc	Juicy Music
03	Let Me Sip My Drink feat. Fast Eddi	Robbie Rivera	S2 Records
04	Aye Aye Aye feat. C&C Music Facto	Robbie Rivera	Juicy Music
05	One Eye Shut	Robbie Rivera	You Records
06	Which Way You're Going [Club Mix]	Robbie Rivera	You Records
07	Vertigo [Main Mix]	Robbie Rivera	Juicy Music
08	Hum Melody	Robbie Rivera	Juicy Music
09	Funk-A-Tron [Main Mix]	Robbie Riveras Grooves	Subliminal Records

Tags [Robbie Rivera](#)

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Artist-specific Promotional Programming on SXM:
Artist Confidential, Town Hall, and Guest DJ

ARTIST CONFIDENTIAL

3 DOORS DOWN
AARON NEVILLE
AIR SUPPLY
AL JARREAU
ALAN PARSONS
AMERICA
AMY GRANT
ANDREA BOCELLI
ANI DIFRANCO
ANN WILSON & HEART
ARIF MARDIN
ARLO GUTHRIE
ART GARFUNKEL
ASIA
B.B. KING
BANGLES
BILLY RAY CYRUS
BLUE MAN GROUP
BOB WEIR
BONNIE RAITT
BRIAN WILSON
BRUCE HORNSBY
BRYAN ADAMS
BUSTA RHYMES
CHEAP TRICK
CHICAGO
CLINT BLACK
COLDPLAY
CYNDI LAUPER
DADDY YANKEE
DAVID GILMOUR
DAVID GRAY
DEF LEPPARD
DIAMOND RIO
DIXIE CHICKS
DON HENLEY
DONNA SUMMER
DOOBIE BROTHERS
DURAN DURAN
EDDIE MONEY
EMMYLOU HARRIS

ARTIST CONFIDENTIAL

FAITH HILL
FALL OUT BOY
FOREIGNER
GAMBLE & HUFF
GEORGE THOROGOOD
GEORGE WINSTON
GLORIA ESTEFAN
GRAHAM NASH
HALL & OATES
HANK WILLIAMS JR
HARRY CONNICK, JR.
HERB ALPERT & LANI HALL
HERBIE HANCOCK
INDIGO GIRLS
INXS
JACK JOHNSON
JAMES TAYLOR
JEWEL
JOAN BAEZ
JOHN FOGERTY
JOHN MAYER
JOSH GROBAN
JOSS STONE
JUDY COLLINS
KATY PERRY
KENNY LOGGINS
KENNY WAYNE SHEPHERD
KOOL & THE GANG
KORN
KT TUNSTALL
LAMONT DOZIER
LEANN RIMES
LENNY KRAVITZ
LINDSEY BUCKINGHAM
LOGGINS & MESSINA
LUDACRIS
LYLE LOVETT
LYNYRD SKYNYRD
MANDY MOORE
MANNHEIM STEAMROLLER
MARTY STUART
MARY J BLIGE
MEGADETH
MOODY BLUES

ARTIST CONFIDENTIAL

NATALIE COLE
NEIL SEDAKA
NIGHT RANGER
NOELIA
OAK RIDGE BOYS
ODETTA
PAUL MCCARTNEY
PERRY FARRELL
PETE SEEGER
PHIL COLLINS
PHIL VASSAR
PINK
PRETENDERS
QUEEN LATIFAH
RAMSEY LEWIS
RANDY NEWMAN
RANDY TRAVIS
REBA MCENTIRE
REO SPEEDWAGON
RICHARD MARX
ROBERT PLANT
RONNIE MILSAP
ROSANNE CASH
RUSH
SALT N PEPA
SANTANA
SARAH MCLACHLAN
SMASHING PUMPKINS
SMOKEY ROBINSON
SNOW PATROL
STEPHEN STILLS
STEVE WARINER
STING
TESTAMENT
THE FRAY
TORI AMOS
TRACE ADKINS
TRACY CHAPMAN
TREY ANASTASIO
TRISHA YEARWOOD
VINCE GILL
WEEZER
WEIRD AL YANKOVIC
WILLIE NELSON

ARTIST CONFIDENTIAL

WYNONNA
WYNTON MARSALIS
ZIGGY MARLEY

TOWN HALL

BRUCE SPRINGSTEIN
TOM PETTY
NIRVANA
COLDPLAY

GUEST DJ

2 CHAINZ
3 DOORS DOWN
ACACIA STRAIN
ADAM GUSSOW
ADELE
AGAINST ME
AIR SUPPLY
AIRBOURNE
ALAN & MARILYN BERGMAN
ALBERT CASTIGLIA
ALEJANDRO ESCOVEDO
ALEXIS Y FIDO
ALICASTRO
ALICIA KEYS
ALKALINE TRIO
ALL THAT REMAINS
ANDERS & JORGEN
ANDREW WK
ANDY WILLIAMS
ANGELS AND AIRWAVES
ANGIE STONE
ANTHONY HAMILTON
ANTHRAX
ANTONIO BANDERAS
ARCADE FIRE
ARETHA FRANKLIN
ASHFORD & SIMPSON
ATREYU
AVENGED SEVENFOLD
B REAL FROM CYPRESS HILL
B SOULS
B.J. THOMAS
B.O.B
BAD RELIGION
BAND OF HORSES
BASIA
BEBE WINANS
BECK
BEENIE MAN
BEN VEREEN
BIG HEAD TODD
BIG K.R.I.T.
BIG SEAN
BILL ANDERSON
BILL HOWL-N-MADD PERRY
BILLY DEAN

GUEST DJ

BILLY J KRAMER
BILLY RAY CYRUS
BLACK STONE CHERRY
BLAKE SHELTON
BOBBY BARE SR. & JR.
BOBBY WOMACK
BOOK OF MORMON CAST
BOOTS Y
BOSTICH Y FUSSIBLE
BOUNCING SOULS
BOYZ II MEN
BRETT DENNEN
BRIAN BROMBERG
BRIAN CULBERTSON
BRIAN MCKNIGHT
BRIAN WILSON
BROOKS & DUNN
BRUCE SPRINGSTEEN
BRYAN LEE
BRYAN WHITE
BTO
BUCKCHERRY
BUDDY GUY
BUDDY MILLER AND MAJESTIC SILVER STRINGS
BUJU BANTON
BULLET FOR MY VALENTINE
BUTTHOLE SURFERS
CALLE 13
CANDYE KANE
CANNIBAL CORPSE
CARLY SIMON
CARRIE NEWCOMER
CAST OF MILLION DOLLAR QUARTET
CAT COORE (THIRD WORLD)
CEDRIC BURNSIDE AND LIGHTNIN' MALCOLM
CELTIC WOMEN
CHARLIE MUSSELWHITE
CHARLIE WILSON
CHARRED WALLS OF THE DAMNED (RICHARD CHRISTY)
CHELY WRIGHT
CHRIS BOTTI
CHRIS BROWN
CHRIS ISAAK
CHRISTINE EBERSOLE
CHRISTOPHER CROSS
CHUCK D

GUEST DJ

CHUCK LOEB
CKY
CLARENCE CLEMONS
CLAY AIKEN
COLIN LINDEN
COLLIN RAYE
CONNIE SMITH
COREY TAYLOR (SLIPKNOT/STONE SOUR)
CORY CHISEL
CRO MAGS
CROWBAR
CYPRESS HILL
D.M.C.
DANNY BROOKS
DANZIG
DARIUS RUCKER
DARLENE LOVE
DAVE KOZ
DAVID BANNER
DAVID BENOIT
DAVID FOSTER
DAVID GRAY
DAVID HINDS (STEEL PULSE)
DAVID SANCIOUS
DAWES
DEAD KENNEDYS
DEANA MARTIN
DEATH ANGEL
DEATH CAB FOR CUTIE
DEBBY BOONE
DEFTONES
DEICIDE
DENNIS DIKEN
DEVILDRIVER
DIANNE REEVES
DILLINGER ESCAPE PLAN
DIONNE WARWICK
DISTURBED
DIZZY REID (GUNS AND ROSES)
DJ FONTANA
DOUG MACLEOD
DRIVE BY TRUCKERS
DROPKICK MURPHYS
DUFF MCKAGAN (GUNS AND ROSES)
DYING FETUS
EARL KLUGH
EARTH, WIND & FIRE

GUEST DJ

EDDIE CLENDENING
EDDY HERRERA
EGYPT CENTRAL
ELAINE PAIGE
ELLIOT MURPHY
ELLIS PAUL
ELVIS COSTELLO
ELVIS MARTINEZ
EMMYLOU HARRIS
ERIC CHURCH
ERIC MARIENTHAL
EUGE GROOVE
EVANS BLUE
EVERY TIME I DIE
EXODUS
FACE TO FACE
FEAR FACTORY
FIREBALL MINISTRY
FITZ & THE TANTRUMS
FIVE FINGER DEATH PUNCH
FLOGGING MOLLY
FONSECA
FOO FIGHTERS
FORT MINOR
FOUR FRESHMEN
FOURPLAY
FRANK BRUNO
FRANK REYES
FRANKIE VALLI
FRED HAMMOND
FREDDIE JACKSON
FREDDY COLE
GAME
GARTH BROOKS
GARY US BONDS
GAYE ADEGBALOLA
GENE HOGLAN (DEATH, STRAPPING YOUNG LAD, FEAR FACTORY, DETHKLOK)
GENE WATSON
GEORGE BENSON
GEORGE CLINTON
GEORGE THOROGOOD
GERALD ALBRIGHT
GERMAN MONTERO
GILBERTO SANTA ROSA
GINA SICILIA
GLORIA ESTEFAN

GUEST DJ

GLORIA TREVI
GOMEZ
GOOD CHARLOTTE
GORDON STOKER
GREG NICE
GREGG ALLMAN
GREGG KARUKAS
GUSTER
GUTHRIE FAMILY (ARLO, SARAH LEE, ANNIE, JOHNNY IRION)
GWAR
HAIR CAST
HALESTORM
HANDSOME DICK MANITOBA
HARRY CONNICK, JR.
HEATHER HEADLEY
HECTOR ACOSTA
HED PE
HELMET
HENRY ROLLINS
HERB ALBERT & LANI HALL
HERMANOS ROSARIOS
HILARY HAHN (HALF PERF CHAT / HALF DJ
HINDER
HIVES
HOLD STEADY
HOLMES BROTHERS
ILL NINO
IN THIS MOMENT
JACK JONES
JACK OSBOURNE
JACKIEM JOYNER
JADAKISS
JAHEIM
JAMES BURTON
JAMES COTTON
JAMES DARREN
JAMEY JASTA (HATEBREED, KINGDOM OF SORROW)
JAMIE CULLUM
JAMIE FOXX
JANET JACKSON
JANIVA MAGNESS
JARABE DE PALO
JARED LETO FROM 30 SECONDS TO MARS
JASON ALDEAN
JASON FEDERICI
JASON HEATH & THE GREEDY SOULS

GUEST DJ

JASON MILES
JAY ROCK
JAY WEINBERG
JEFF BRIDGES
JEFF GOLUB
JEFF LORBER
JENNIFER HUDSON
JENNIFER LOPEZ
JERRY LEIBER & MIKE STOLLER
JERRY RIVERA
JERRY SCHILLING
JESSE MALIN
JESSI COLTER
JESSY J
JEWEL
JILL HENNESSY
JIM ED BROWN
JOANN FALLETTA
JOE BONAMASSA
JOE GRUSCHECKY
JOE LOUIS WALKER
JOEY MOLLAND
JOHN BENJAMIN HICKEY
JOHN BERRY
JOHN CAFERTY OF THE BEAVER BROWN BAND
JOHN EDDIE
JOHN HAMMOND
JOHN LEGEND
JOHN MCEUEN (NITTY GRITTY DIRT BAND)
JOHN NEMETH
JOHN OATES
JOHN PIZZARELLI
JOHN RUTTER
JOHN TARTAGLIA
JOHNNY WINTER
JON SECADA
JONATHAN BUTLER
JOSH TURNER
JUANITA BYNUM
JUDAS PRIEST
JUDY COLLINS
JULIE BUDD
JULIENNE HOUGH
JULIUS LA ROSA
JUSTIN MOORE

GUEST DJ

KAT DELUNA
KATHY MATTEA
KEITH URBAN
KELLY ROWLAND
KENNY CHESNEY
KENNY G
KENNY GAMBLE & LEON HUFF
KERI HILSON
KETCH SECOR/OLD CROW MEDICINE SHOW (EASTER SPECIAL)
KEVON EDMONDS
KIKO RODRIGUEZ
KILLSWITCH ENGAGE
KIM WILSON
KIRK FRANKLIN
KIRK WHALUM
KITTIE
KOOL KEITH
KORN
KOTTON MOUTH KINGS
LACUNA COIL
LADY ANTEBELLUM
LAGWAGON
LAINIE KAZAN
LANG LANG
LARRY GATLIN
LCD SOUNDSYSTEM
LEA SALONGA
LEE "SCRATCH" PERRY
LEE ANN WOMACK
LEE GREENWOOD
LEE RITENOUR
LEON RUSSELL
LESLEY GORE
LESLIE UGGAMS
LIEBER & STOLLER
LINDA EDER
LINDA RONSTADT
LIONEL RICHIE
LISA LOWELL
LITTLE ANTHONY
LIZA MINNELLI
LLOYD
LONESTAR
LORRIE MORGAN
LOS AMIGOS INVISIBLES
LOU CHRISTIE

GUEST DJ

LUIS FONSI
LUIS MIGUEL DEL AMARGUE
LUIS VARGAS
LUKA BLOOM
LUKE BRYAN
LYNN ANDERSON
M SHADOWS – AVENGED SEVENFOLD
MACHINE HEAD
MADBALL
MANDY BARNETT
MERAH
MARC ANTHONY THOMPSON
MARC ANTOINE
MARIA MULDAUR
MARIAH CAREY
MARILYN MCCOO & BILLY DAVIS, JR.
MARION MEADOWS
MARK CHESNUTT
MARK HOPPUS
MARK SHAPIRO (MUSIC DIRECTOR OF CANTORI)
MARK WILLS
MARY FLOWER
MARY J. BLIGE
MARY MARY
MASTODON
MATISYAHU
MAUREEN MCGOVERN
MAX CAVALERA (SEPULTURA / SOULFLY)
MAXWELL
MAYSA
MC LYTE
MC SERCH
MEEK MILL
MELISSA ETHERIDGE
MELVINS
METALLICA
MICHAEL BUBLE
MICHAEL FEINSTEIN
MICHAEL FRANTI
MICHAEL ROSE (BLACK UHURU)
MIKE MORAN
MIKE PHILLIPS
MILK CARTON KIDS
MINDI ABAIR
MINDY MCREADY
MINT CONDITION

GUEST DJ

MISFITS
MITCH RYDER
MOJO NIXON
MONTY ALEXANDER
MT DESOLATION (TIM FROM KEANE)
MUDVAYNE
MUMFORD & SONS
MUSE
MXPX
NAJEE
NAPALM DEATH
NAUGHTY BY NATURE
NEAL MCCOY
NEIL SEDAKA
NELLY FURTADO
NILS LOFGREN
NOFX
OPETH
OTIS WILLIAMS
OVERKILL
OZOMATLI
OZZY OSBOURNE
PANTERA
PASTOR RUDY
PAT BOONE
PATRICK SWEANY
PATTY LARKIN
PATTY LOVELESS
PATY CANTU
PAUL TAYLOR
PEEPING TOM
PENNYWISE
PEPPER
PETE ANDERSON
PETE YORN
PETER LEMONGELLO
PETER WHITE
PETULA CLARK
PHARCYDE
PHIFE/RAPPAPORT
PITBULL
PONCHO SANCHEZ
POP EVIL
POWERMAN 5000
PUDDLE OF MUDD
Q-TIP
RANCID

GUEST DJ

RANDY HOUSER
RAPHAEL SAADIQ
RASCAL FLATTS
RAY LAMONTAGNE
RAY STEVENS
REBA MCENTIRE
REV. PEYTON
REYLI BARBA
RHONDA VINCENT
RICH DELGROSSO
RICHARD CARPENTER
RICHARD ELLIOT
RICHARD SHINDELL
RICHARD STERBAN
RICHARD THOMPSON
RICK ESTRIN
RICK ROSS
RISE AGAINST
RIVERS CUOMO OF WEEZER
ROBBIN THOMPSON
ROD MCKUEN
RODNEY ATKINS
ROGER WILLIAMS
RON ISLEY
RONNIE MILSAP
RONNIE SPECTOR
ROSANNE CASH
ROY BITTAN
RUBEN STUDDARD
RUSS FREEMAN
RYAN ADAMS
SAM MOORE
SAMMY KERSHAW
SARA EVANS
SCOTT KEMPNER
SEAL
SEAN PAUL
SEBASTIAN BACH
SEETHER
SENSES FAIL
SERGIO MENDES
SEVENDUST
SHADOWS FALL
SHAGGY
SHAKIRA
SHAKURA S'ADIA

GUEST DJ

SHA-ROCK
SHAWN MULLINS
SHELBY LYNNE & ALLISON MOORER
SHEMEKIA COPELAND
SHINEDOWN
SHIRLEY JONES
SICK OF IT ALL
SICK PUPPIES
SLASH
SLAYER
SLIPKNOT
SOCIAL DISTORTION
SOILWORK
SONIC YOUTH
SOUTHSIDE JOHNNY
SPECIAL ED
SPENCER BOHREN
STAIN'D
STEVE EARLE
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STEVE TYRELL
STEVE WARINER
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SUPER CHIKAN
SUZI QUATRO
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TD JAKES
TEENA MARIE
TEENAGE BOTTLE ROCKET
TENACIOUS D
TERESA JAMES
TERRI WHITE
TERRY HANCK
TERRY MIKE JEFFREY
TESTAMENT
THE JUDDS
THE NATIONAL
THE USED
THE-DREAM

GUEST DJ

THEORY OF A DEADMAN
THRICE
TIM HAUSER
TIM MCGRAW
TITO NIEVES
TOBY KEITH
TODD SNIDER
TOM HAMBRIDGE
TOM JONES
TOM MORELLO
TOM WOPAT
TONI BRAXTON
TONY HADLEY
TONY ORLANDO
TOOTS HIBBERT (TOOTS & THE MAYTALS)
TRACE ADKINS
TRACY LAWRENCE
TRACY NELSON
TRAPT
TRAVIS PORTER
TRAVIS RICE
TREASA LAVASSEUR
TREY SONGZ
TRIN-I-TEE 5:7
TRISHA YEARWOOD
TUCK & PATTI
TY HERNDON
UNDEROATH
UNWRITTEN LAW
USHER
VANESSA WILLIAMS
VIC DAMONE
VICTOR MANUELLE
VINCE GILL
VINI LOPEZ
VINNIE PAUL
VISION OF DISORDER
WAKA FLOCKA FLAME
WALTER MOSLEY
WALTER TROUT
WAYNE COYNE (FLAMING LIPS)
WILCO
WILLIE NILE
WOLFMOTHER
WYCLEF JEAN
WYNONNA

GUEST DJ

WYNONNA JUDD
ZAKK WYLDE
ZIGGY MARLEY

MAROON 5

CHRISTINA AGUILERA
MOVES LIKE JAGGER

#1 DIGITAL SINGLE (#5 TW) (3 MILLION TD)

1* POP (6 WEEKS)

1* HOT AC (4 WEEKS)

#1 Z100 NEW YORK 111X, #1 WXRK NEW YORK 112X, #1 KIIS LA 101X,
#1 KAMP LA 116X, #1 WKSC CHICAGO 127X, #1 KMQV SAN FRAN 126X,
#1 SIRIUSXMHITS 110X, #1 WIOQ PHIL 99X, #1 WIHT WASH DC 105X

#1 RESCH EVERY DEMO RTM ▲ #1 BILLBOARD HOT 100
43 MILL (LYRIC VIDEO) + 42 MILL (REG VIDEO) YOUTUBE /VEVO VIEWS
SNL (NBC) 11/5 ▲ VICTORIA'S SECRET SHOW (CBS) 11/29

TOP 40 BEST-SELLING ALBUM (700,000 TD)

NICOLE

SCHERZINGER
DON'T HOLD YOUR BREATH

34* POP

SIRIUS XM HITS 145X, WDTW DETROIT 45X,
WNOU INDY 50X, KLIF DALLAS 21X, KAMP LOS ANGELES 14X,
KZZP PHOENIX 21X, WNKS CHARL 21X, KDHT DEN 21X,
KMXV KC 21X, WPRO PRV 28X, WPLW RAL 40X,
KRBE HOUSTON 14X, WKSE BUFFALO 35X, WVHT NORFOLK 30X
NEW: KHKS DALLAS, WKQI DETROIT, KRQQ TUCSON

#1 UK SINGLE 26 MILLION YOUTUBE/VEVO VIEWS

X-FACTOR JUDGE (FOX) SEPT 21ST
12+ MILLION VIEWERS PER NIGHT (WED, THUR)

CONAN (TBS) SEPT 19TH PIERS MORGAN (CNN) SEPT 20TH
ELLEN (NBC) SEPT 28TH
GOOD MORNING AMERICA (ABC) OCT 12TH

JOJO

DISASTER

30 TOP 40S 1ST WEEK

KZZP PHOENIX, KHTS SAN DIEGO,
KDND SACRAMENTO, KFRH LAS VEGAS,
WKSE BUFFALO, WHBQ MEMPHIS

ON TOUR W/ JOE JONAS, JAY SEAN SEPT-OCT

HEADLINE TOUR
HARD ROCK CAFÉ BREAST CANCER OCTOBER

LADY GAGA

YOU AND I

7* POP 7* HOT AC #4 AUDIENCE GAINER

#1 SIRIUSXMHITS 120X, Z100 NEW YORK 65X,
WXRK NEW YRK 50X, WKTU NEW YRK 35X, KIIS LOS ANGES 40X,
KHKS DALLAS 65X, KLIF DALLAS 70X, KRBE HOUSTON 55X,
Q100 ATLANTA 55X, WIOQ PHILLY 60X, WXKS BOSTON 65X,
KDWB MINNEAP 80X, KBKS SEATTLE 50X, KMVA PHOENIX 70X,
KHTS SAN DIEGO 50X, WFLZ TAMPA 77X, KKRZ PORTLAND 70X,
#1 WDTW DETROT 70X, #1 WKST PITTS 90X, #1 KDND SAC 121X

#5 HITPREDICTOR 35 MILLION YOUTUBE /VEVO VIEWS

#15 ITUNES SINGLE (1.5 MILLION TD)

#1 ALBUM (#26 TW) 2 MILLION BIGGEST SELLER IN LAST 6 YRS

#1 TWITTER (11+ MILLION) #1 FACEBOOK (36+ MILLION)
#1 YOUTUBE (1+ BILLION VIEWS)

#1 DIGITAL SELLING ARTIST (20+ MILLION DOWNLOADS SOLD)

LMFAO

SEXY AND I KNOW IT

#1 MOST STREAMED

#1 ITUNES SINGLE (#2 TW) (1.1 MILLION TD)

9* +1130X POP #2 AUDIENCE GAINER

#1 WXRK NEW YORK 105X, #1 KIIS LOS ANGELES 110X,
#1 KAMP LOS ANGELES 130X, #1 KHKS DALLAS 107X,
#1 WFLZ TAMPA 100X, #1 WHQC CHARLOTTE 105X,
#1 KDND SACRAMENTO 126X, #1 KMXV KANSAS CITY 105X,
#1 KHFI AUSTIN 105X, #1 WEZB NEW ORLEANS 100X

#1 REQUESTS O.H.P.

TOP 25 BEST-SELLING ALBUM UP AGAIN THIS WEEK

63 MILLION YOUTUBE /VEVO VIEWS

COMING SOON

TIMBALAND FEAT PITBULL "PASS AT ME"

GOING FOR ADDS NOVEMBER 8TH

WKSC CHICAGO ADD 30X

5 MILLION YOUTUBE /VEVO VIEWS

FREESOL FEAT JUSTIN TIMBERLAKE
& TIMBALAND "FASCINATED"

GOING FOR ADDS NOVEMBER 22ND

WHBQ MEMPHIS 30X

DOMINO”

PERFORMING TONIGHT!!!



“DOMINO”...IN THE LAST 48 HOURS!

➤ NEW AT TOP 40 THIS WEEK INCLUDES!

WKTU/NYC WXKS/Boston

Y100/Miami KKRZ/Portland

NOW 100+ TOP 40 STATIONS NOW SPINNING!

➤ “DOMINO” IS RESEARCHING!

SIRIUS HITS 1 MOVES TO SUBPOWER @ 9x/DAY!

KUDD/SALT LAKE CITY MOVES TO POWER ROTATION!

"Currently in power rotation, with top research in all demos... 'Domino' is clearly a hit and is showing signs of a number one record."

-Brian Michel, PD, KUDD/Salt Lake City (T40)

KDWB/MINNEAPOLIS MOVES TO 45x/WEEK!

WXXL/ORLANDO MOVES TO 7x/day!

WKSS/HARTFORD MOVES TO SUBPOWER @ 9x/DAY!

➤ DIGITAL “DOMINO” SALES (+25% THIS WEEK!)

iTUNES CURRENT SALES TREND +37%!

6 Weeks In A Row Of Explosive Sales Growth!

➤ MEDIABASE TOP 40 30*-25* +325x

4-DAY MEDIABASE BUILDER 25*-24* +172x!

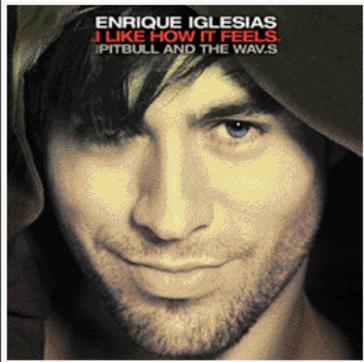
WE BREAK NEW ARTISTS!



UNIVERSAL REPUBLIC TOP 40... We Break New Artists!

ENRIQUE IGLESIAS

"I Like How It Feels" ft. Pitbull



50+ T40's Spinning!!

CLICK HERE TO LISTEN OR DOWNLOAD

Click Here For The Video!!

Published MB T40: Debut 38* +291x

THESE T40 STATIONS "LIKE HOW IT FEELS"



WKTU/NY



WKSC/Chicago



KMVQ/SF



WKST/Pittsburgh



KHKS/Dallas



WDTW/Detroit



Y100/Miami



WKQI/Detroit



KDHT/Denver



KUDD/Salt Lake



WKSE/Bufalo



WNCI/Columbus

JESSIE J "DOMINO"

Click To Listen / Download



80 T40 Stations Now Spinning!!
Sales Explosion!!
7-Day iTunes
16,750 +62%!!

MEDIABASE T40: 34* 8 NEW TW!!
BREAKTHROUGH WEEK IN THE MAKING!

Breaking at Top 40:



Sirius/XM Hits 1



WKSC/Chicago



KHKS/Dallas



KBKS/Seattle



KDWB/Minneapolis



WNKS/Charlotte



KQMV/Seattle



WXXL/Orlando



KZHT/Salt Lake

Dominoes Stacking Up!!



SIRUIS/XM HITS 1

The screenshot shows a radio station website with a dark theme. At the top, there is a banner for "Rolling Blackout" with the text "Affected Stations Include SIRUIS/XM HITS 1" and a list of stations: KDWB, WKSC, WKQI, KUDD, KMVQ, KDND, WKSE, WNKS & more!. To the left of the banner are logos for "ALL ACCESS MUSIC GROUP" and "MEDIABASE". Below the banner is a navigation menu with links: Home, Formats, Net News, Mediabase, Ratings, Jobs, Forums, Industry Dir, Voiceover, Music, People, Columns, Charts, Account. A notification says "You have 65 unread Net News stories." Below the menu is a "Net News" section with a red header "WORLDWIDE RADIO" and a news article titled "Brian Lakamp Named President Of Clear Channel Digital". The article includes a photo of Brian Lakamp and text stating that Clear Channel Radio has promoted him to President of Clear Channel Digital. To the right of the news section is an advertisement for "Icecast Streaming" with the text "Ditch your streaming bill", "Unlimited 128k Streaming", and "No Plug-In Required".

Rolling Blackout
Affected Stations Include **SIRUIS/XM HITS 1**
KDWB, WKSC, WKQI, KUDD, KMVQ, KDND, WKSE, WNKS & more!

Home | Formats | Net News | Mediabase | Ratings | Jobs | Forums | Industry Dir | Voiceover | Music | People | Columns | Charts | Account

★ You have **65** unread Net News stories.

search by keyword

Net News

WORLDWIDE RADIO

Brian Lakamp Named President Of Clear Channel Digital

CLEAR CHANNEL RADIO has promoted BRIAN LAKAMP to President of CLEAR CHANNEL DIGITAL, a new position. LAKAMP, previously EVP/Digital Media, will report to CLEAR CHANNEL RADIO Pres./CEO JOHN HOGAN. His appointment is effective immediately. LAKAMP In ... [more »](#)

Brian Lakamp

Ditch your streaming bill

Unlimited 128k Icecast Streaming No Plug-In Required



Thursday, October 13, 2011

BREATHE CAROLINA BLACKOUT

IN FULL ROTATION AT
65 STATIONS INCLUDING:

KDWB, WKSC, WKQI, KUDD, KMQQ, KDND,
WKSE, WNKS, **SIRIUS XM HITS** AND MORE!



FEARLESS

[HOME](#) [QB CONTENT](#) [COVER STORY](#) [FORMATS](#) [MUSIC NEWS](#) [MEDIABASE 24/7](#) [RESOURCES](#) [QB SOCIAL NET](#)

[RSS](#) [XML](#)

SIRIUS XM HITS 1

Radio's Best & Worst

This week's dial scan salutes a longtime small-market Hot AC that's climbing the "Stairway To Heaven" (and not the Led Zeppelin version), a Memphis rock PPM success story with a Top 40 feel, the CHR station that brought back both R.E.M. and the Bloodhound Gang, and the song that today's high-schoolers consider an "oh wow" oldie. It's "Radio's Best & Worst."



**BREATHE
CAROLINA**

"Blackout"

In Full Rotation at 65 stations including:

KDWB, WKSC, WKQI, KUDD, KMVG, KDND, WKSE, WNKS, **Sirius XM Hits 1** & more!

FEARLESS

Sirius XM Hits 1

LMFAO

SEXY AND I KNOW IT

#1 MOST STREAMED

#1 ITUNES SINGLE (#2 TW) (1.5 MILLION TD)

7* +1400X POP #1 GAINER

#1 WXRK NEW YORK 115X, #1 KIIS LOS ANGELES 110X,
#1 KAMP LOS ANGELES 130X, #1 KHKS DALLAS 108X,
#1 WFLZ TAMPA 100X, #1 WHQC CHARLOTTE 95X,
#1 KDND SACRAMENTO 128X, #1 KMXV KANSAS CITY 95X,
#1 KHFI AUSTIN 95X, #1 WEZB NEW ORLEANS 90X

#1 REQUESTS O.H.P.

#10 BEST-SELLING ALBUM UP ANOTHER 24% THIS WEEK

AMERICAN MUSIC AWARDS (ABC) NOV 20TH

70 MILLION YOUTUBE /VEVO VIEWS

NICOLE

SCHERZINGER
DON'T HOLD YOUR BREATH

33* POP

SIRIUS XM HITS 1 50X (270X TD), WDTW DETROIT 45X,
WNOU INDY 50X, KLIF DALLAS 21X, KAMP LOS ANGELES 14X,
KZZP PHOENIX 21X, WNKS CHARL 21X, KDHT DEN 21X,
KMXV KC 21X, WPRO PRV 30X, WPLW RAL 40X, KHKS DAL 14X
KRBE HOUSTON 14X, WKSE BUFFALO 35X, WVHT NORFOLK 30X

#1 UK SINGLE 26 MILLION YOUTUBE/VEVO VIEWS

SINGLE DEBUT ITUNES UP ANOTHER 21% THIS WEEK

X-FACTOR JUDGE (FOX) SEPT 21ST
12+ MILLION VIEWERS PER NIGHT (WED, THUR)

ELLEN (NBC) SEPT 27TH
GOOD MORNING AMERICA (ABC) OCT 12TH

TIMBALAND

FEAT PITBULL

PASS AT ME

GOING FOR ADDS NOVEMBER 8TH

WKSC CHICAGO 35X

SIRIUSXM2020 35X

6 MILLION YOUTUBE /VEVO VIEWS

LADY GAGA

MARRY THE NIGHT

GOING FOR ADDS NOVEMBER 15TH

Z100 NEW YORK ADD 30X
KIIS LOS ANGELES ADD 35X
WIHT WASH DC ADD 30X
WKST PITTSBURGH ADD 35X

#1 ALBUM 2 MILLION BIGGEST SELLER IN LAST 6 YRS

#1 TWITTER (11+ MILLION) #1 FACEBOOK (36+ MILLION)
#1 YOUTUBE (1+ BILLION VIEWS)

#1 DIGITAL SELLING ARTIST (20+ MILLION DOWNLOADS SOLD)

JOJO

DISASTER

40 TOP 40S

KZZP PHOENIX, KHTS SAN DIEGO,
KDND SACRAMENTO, KFRH LAS VEGAS,
WNOU INDIANAPOLIS, WPLW RALEIGH,
WKSE BUFFALO, WHBQ MEMPHIS

VERY ACTIVE AND RAPIDLY GROWING SOCIAL MEDIA
VIA TWITTER FOLLOWERS AND FACEBOOK FRIENDS

HEADLINE TOUR

HARD ROCK CAFÉ BREAST CANCER PINKTOBER

FRESOL

FEAT JUSTIN TIMBERLAKE
& TIMBALAND
FASCINATED

GOING FOR ADDS NOVEMBER 22ND

WHBQ MEMPHIS 30X, WKSE BUFFALO 35X,
KWNW MEMPHIS ADD

FAR EAST MOVEMENT

FEAT RYE RYE
JELLO

KAMP LOS ANGELES ADD

MAROON 5

**CHRISTINA AGUILERA
MOVES LIKE JAGGER**

#1 DIGITAL SINGLE (#6 TW) (2.8 MILLION TD)

1* POP (5 WEEKS) 1* HOT AC (4 WEEKS)

#1 Z100 NEW YORK 111x, #1 WXRK NEW YORK 112x, #1 KIIS LA 101x,
#1 KAMP LA 116x, #1 WKSC CHICAGO 127x, #1 KMVQ SAN FRAN 126x,
#1 SIRIUSXMHITS 110x, #1 WIOQ PHIL 99x, #1 WIHT WASH DC 105x

#1 RESCH EVERY DEMO RTM ▲ #1 BILLBOARD HOT 100
40 MILL (LYRIC VIDEO) + 38 MILL (REG VIDEO) YOUTUBE /VEVO VIEWS
SNL (NBC) 11/5 ▲ VICTORIA'S SECRET SHOW (CBS) 11/29
TOP 40 BEST-SELLING ALBUM (700,000 TD)

LLOYD

**FEAT ANDRE 3000
DEDICATION TO MY EX**

31* +150x POP

KAMP LOS ANGELES 30x (560x TD)

SIRIUSXMHITS 145x, KKHH HOUSTON 30x, WKQI DETROIT 21x,
KMVA PHOENIX 30x, WFLZ TAMPA 40x, WZFT BALTIMORE 25x,
KKRZ PORTLAND 35x, KDHT DENVER 30x, #1 KVLV MCALLEN 101x,
WHQC CHARLOTTE 21x, WXSS MILWAUKEE 25x, WPLW RALEIGH 40x,
WEZB NEW ORLEANS 30x, WVHT NORFOLK 21x, WKSE BUFFALO 35x

NEW: WNOU INDIANAPOLIS

34* RHYTHMIC 21* URBAN

800,000 (LYRIC VIDEO) + 600,000 (REG VIDEO) YOUTUBE /VEVO VIEWS
LENO (NBC) 11/30

NICOLE

**SCHERZINGER
DON'T HOLD YOUR BREATH**

37* POP

SIRIUS XM HITS 150x, WNOU INDY 50x, KLIF DALLAS 21x,
KAMP LOS ANGELES 14x, KZZP PHOENIX 21x, WNKS CHARL 21x,
KDHT DEN 28x, KMXV KC 21x, WPRO PRV 28x, WPLW RAL 40x,
KRBE HOUSTON 14x, WKSE BUFFALO 50x, WVHT NORFOLK 30x

NEW: WKQI DETROIT, WNFN NASHVILLE, WMKS GREENVILLE
KJYO OKLAHOMA CITY, WNRW LOUISVILLE

#1 UK SINGLE **25 MILLION** YOUTUBE /VEVO VIEWS

X-FACTOR JUDGE (FOX) SEPT 21ST
12+ MILLION VIEWERS PER NIGHT (WED, THUR)

CONAN (TBS) SEPT 19TH PIERS MORGAN (CNN) SEPT 20TH
ELLEN (NBC) SEPT 28TH
GOOD MORNING AMERICA (ABC) OCT 12TH

LADY GAGA

YOU AND I

7* +225x 8* HOT AC #3 AUDIENCE GAINER

#1 SIRIUSXMHITS 120x, Z100 NEW YORK 65x,
WXRK NEW YRK 50x, WKTU NEW YRK 35x, KIIS LOS ANGES 40x,
KHKS DALLAS 65x, KLIF DALLAS 70x, KRBE HOUSTON 55x,
Q100 ATLANTA 55x, WIOQ PHILLY 60x, WXKS BOSTON 65x,
KDWB MINNEAP 80x, KBKS SEATTLE 50x, KMVA PHOENIX 70x,
KHTS SAN DIEGO 50x, WFLZ TAMPA 77x, KKRZ PORTLAND 70x,
#1 WDTW DETROIT 70x, #1 WKST PITTS 90x, #1 KDND SAC 121x

#5 HIT PREDICTOR 34 MILLION YOUTUBE /VEVO VIEWS

#10 iTUNES SINGLE (1.2 MILLION TD)

#1 ALBUM (#33 TW) 2 MILLION BIGGEST SELLER IN LAST 6 YRS

#1 TWITTER (11+ MILLION) #1 FACEBOOK (36+ MILLION)
#1 YOUTUBE (1+ BILLION VIEWS)

#1 DIGITAL SELLING ARTIST (20+ MILLION DOWNLOADS SOLD)

LMFAO

SEXY AND I KNOW IT

#1 iTUNES SINGLE (900,000 TD)

11* +1060x POP #2 AUDIENCE GAINER

#1 KIIS LOS ANGELES 110x, #1 KHKS DALLAS 105x,
#1 KKHH HOUSTON 100x, #1 WEZB NEW ORLEANS 80x,
#1 KAMP LOS ANGEL 110x, WXRK NEW YORK 50x, KMVQ SAN FRN 80x,
WKSC CHICAGO 50x, WIOQ PHILLY 40x, WIHT WASH DC 45x,
WXKS BOSTON 50x, WKQI DETROIT 40x, Y100 MIAMI 55x,
KQMV SEATTLE 90x, KZZP PHOENIX 70x, KDWB MINNEAPOLIS 60x

#1 REQUESTS O.H.P. #1 MTV

TOP 20 BEST-SELLING ALBUM

45 MILLION YOUTUBE /VEVO VIEWS

COMING SOON

JOJO "DISASTER"

GOING FOR ADDS THIS WEEK OCTOBER 25TH

ON TOUR W/ JOE JONAS, JAY SEAN SEPT-OCT

HEADLINE TOUR HARD ROCK CAFÉ BREAST CANCER OCT
EARLY ACTION @ WNOU INDIANAPOLIS

FRESOL FEAT JUSTIN TIMBERLAKE

& TIMBALAND "FASCINATED"

GOING FOR ADDS NOVEMBER 8TH

TIMBALAND FEAT PITBULL "PASS AT ME"

5 MILLION YOUTUBE /VEVO VIEWS

MAROON 5

**CHRISTINA AGUILERA
MOVES LIKE JAGGER**

#1 DIGITAL SINGLE (#2 TW) (2.6 MILLION TD)

1* POP (4 WEEKS) 1* HOT AC (4 WEEKS)

#1 Z100 NEW YORK 111x, #1 WXRK NEW YORK 112x, #1 KIIS LA 101x,
#1 KAMP LA 116x, #1 WKSC CHICAGO 127x, #1 KMVQ SAN FRAN 126x,
#1 SIRIUSXMHITS 110x, #1 WIOQ PHIL 99x, #1 WIHT WASH DC 105x

#1 RESCH EVERY DEMO RTM ▲ #1 BILLBOARD HOT 100
35 MILL (LYRIC VIDEO) + 3 MILL (REG VIDEO) YOUTUBE/VEVO VIEWS
SNL (NBC) 11/5 ▲ VICTORIA'S SECRET SHOW (CBS) 11/29

TOP 40 BEST-SELLING ALBUM (700,000 TD)

LLOYD

**FEAT ANDRE 3000
DEDICATION TO MY EX**

29* +260X POP

KAMP LOS ANGELES 30X (560X TD)

SIRIUSXMHITS 145x, KKHH HOUSTON 30x, WKQI DETROIT 21x,
KMVA PHOENIX 30x, WFLZ TAMPA 40x, WZFT BALTIMORE 25x,
KKRZ PORTLAND 35x, KDHT DENVER 30x, #1 KVLV MCALLEN 101x,
WHQC CHARLOTTE 21x, WXSS MILWAUKEE 25x, WPLW RALEIGH 40x,
WEZB NEW ORLEANS 30x, WVHT NORFOLK 21x, WKSE BUFFALO 35x

NEW: WKFS CINCINNATI, WRNW MILWAUKEE

36* RHYTHMIC 21* URBAN

DIGITAL SINGLE SALES UP ANOTHER 20%
800,000 (LYRIC VIDEO) + 600,000 (REG VIDEO) YOUTUBE/VEVO VIEWS

NICOLE

**SCHERZINGER
DON'T HOLD YOUR BREATH**

DEBUT 36* +360X POP

SIRIUS XM HITS 1 50x, WNKS CHARLOTTE 21x, KMXV KC 21x,
WNOU INDY 30x, KZZP PHOENIX 21x, WPRO PROV 21x,
WPLW RALEIGH 40x, WDTW DETROIT 14x, WNKS CHARLOT 21x,
KRBE HOUSTON 14x, WKSE BUFFALO 30x, WVHT NORFOLK 28x

14 NEW: KAMP LOS ANGELES, KLIF DALLAS,
Q100 ATLANTA, WAKS CLEVELAND, KHFI AUSTIN

#1 UK SINGLE 25 MILLION YOUTUBE/VEVO VIEWS

**X-FACTOR JUDGE (FOX) SEPT 21ST
12+ MILLION VIEWERS PER NIGHT (WED, THUR)**

CONAN (TBS) SEPT 19TH PIERS MORGAN (CNN) SEPT 20TH
ELLEN (NBC) SEPT 28TH
GOOD MORNING AMERICA (ABC) OCT 12TH

LADY GAGA

YOU AND I

8* +300X 9* HOT AC

#1 SIRIUSXMHITS 1 120x, Z100 NEW YORK 65x,
WXRK NEW YRK 50x, WKTU NEW YRK 35x, KIIS LOS ANGES 40x,
KHKS DALLAS 65x, KLIF DALLAS 70x, KRBE HOUSTON 55x,
Q100 ATLANTA 55x, WIOQ PHILLY 60x, WXKS BOSTON 65x,
KDWB MINNEAP 80x, KBKS SEATTLE 50x, KMVA PHOENIX 70x,
KHTS SAN DIEGO 50x, WFLZ TAMPA 77x, KKRZ PORTLAND 70x,
#1 WDTW DETROT 70x, #1 WKST PITTS 90x, #1 KDND SAC 121x

#5 HitPREDICTOR 32 MILLION YOUTUBE/VEVO VIEWS

#9 iTUNES SINGLE (1.1 MILLION TD)

#1 ALBUM (#25 TW) 2 MILLION BIGGEST SELLER IN LAST 6 YRS

#1 TWITTER (11+ MILLION) #1 FACEBOOK (36+ MILLION)

#1 YOUTUBE (1+ BILLION VIEWS)

#1 DIGITAL SELLING ARTIST (20+ MILLION DOWNLOADS SOLD)

LMFAO

SEXY AND I KNOW IT

FOLLOW-UP TO THE SUMMER'S #1 SONG "PARTY ROCK ANTHEM"

#3 iTUNES SINGLE (700,000 TD)

16* +1130X POP TOP 3 GAINER

#1 KIIS LOS ANGELES 110x, #1 KHKS DALLAS 105x,
#1 KKHH HOUSTON 110x, #1 WEZB NEW ORLEANS 90x
KAMP LOS ANGELES 70x, KMVQ SAN FRAN 85x, WKSC CHICAGO 50x,
WIOQ PHILLY 40x, WIHT WASH DC 40x, WXKS BOSTON 40x,
WKQI DETROIT 50x, Y100 MIAMI 50x, QGMV SEATTLE 90x,
KZZP PHOENIX 60x, KDWB MINNEAPOLIS 50x

#1 REQUESTS O.H.P.

TOP 20 BEST-SELLING ALBUM

30 MILLION YOUTUBE/VEVO VIEWS

COMING SOON

JOJO "DISASTER"

GOING FOR ADDS NOVEMBER 1

ON TOUR W/ JOE JONAS, JAY SEAN SEPT-OCT
EARLY ACTION @ WNOU INDY 14x, KDWB MINNEAPOLIS,
KZZP PHOENIX, KDHT DENVER, KUDD SLG, WEZB NEW ORLEANS

TIMBALAND FEAT PITBULL "PASS AT ME"

4 MILLION YOUTUBE/VEVO VIEWS

MINDLESS BEHAVIOR "MRS. RIGHT"

9* URBAN

34* RHYTHMIC

12 MILLION YOUTUBE/VEVO VIEWS

TOP 40 BEST-SELLING ALBUM SOUNDSCAN "#1 GIRL"

LMFAO

SEXY AND I KNOW IT

#1 MOST STREAMED

#1 ITUNES SINGLE (#2 TW) (2 MILLION TD)

7* +620X POP **7*** RHYTHM **37*** HOT AC

#1 WXRK NEW YORK 115X, #1 KIIS LOS ANGELES 110X,
#1 KAMP LOS ANGELES 130X, #1 KMVQ SAN FRAN 125X,
#1 KHKS DALLAS 108X, #1 KRBE HOUSTON 90X,
#1 KKHH HOUSTON 116X, #1 WDZH DETROIT 113X,
#1 KHTS SAN DIEGO 110X, #1 KDHT DENVER 115X,
#1 WFLZ TAMPA 100X, #1 WHQC CHARLOTTE 95X

#1 REQUESTS O.H.P.

AMERICAN MUSIC AWARDS (ABC) NOV 20TH

105 MILLION YOUTUBE /VEVO VIEWS

TIMBALAND

FEAT PITBULL

PASS AT ME

45 TOP 40s

WKSC CHICAGO 40X, KDWB MINNEAPOLIS 40X,
KSLZ ST LOUIS 21X, SIRIUSXM2020 35X,
KMVQ SAN FRANCISCO, KDHT DENVER,
WHQC CHARLOTTE 30X, KTFM SAN ANTONIO,
KFRH VEGAS, WPLW RALEIGH, WNFN NASHV

10 NEW: KIIS LOS ANGELES, KQMV SEATTLE, WVHT NORFOLK

7 MILLION YOUTUBE /VEVO VIEWS

NICOLE

SCHERZINGER

DON'T HOLD YOUR BREATH

30* POP

SIRIUS XM HITS1 50X (360X TD), WNOU INDY 50X,
KLIF DALLAS 21X, KAMP LOS ANGELES 14X, KZZP PHOENIX 21X,
WNKS CHARLOTTE 21X, KDHT DENVER 21X, KMXV KC 21X,
WPRO PROVIDENCE 30X, WPLW RAL 40X, KHKS DALLAS 14X
KRBE HOUSTON 14X, WKSE BUFFALO 35X, WVHT NORFOLK 30X

#1 UK SINGLE **27 MILLION YOUTUBE/VEVO VIEWS**
#2 BILLBOARD CLUB PLAY CHART

X-FACTOR (FOX) 12+ MILLION VIEWERS/NIGHT (WED, THUR)
LENO (NBC) NOV 11TH GOOD MORNING AMERICA (ABC) OCT 12TH

LADY GAGA

MARRY THE NIGHT

#1 MOST ADDED

29* POP AUDIENCE +1000X #5 AUDIENCE GAINER

#10 Z100 NEW YORK 50X, #10 KIIS LOS ANGELES 40X,
WKTU NEW YORK 30X, WIOQ PHIL 40X, KLIF DALLAS,
KRBE HOUSTON, Q100 ATLANTA, WIHT WASH DC 30X,
WXS Boston 35X, WZFT BALT 30X, WKST PITTS 35X,
KXXM SAN ANT, KCHZ KC, WPRO PROV 35X

60 NEW: WIOQ PHIL 40X, KZZP PHOENIX, KDWB MINN,
KHTS SAN DIEGO, KDND SAC, KUDD SLC, KMXV KC,
KFRH VEGAS, KPLV VEGAS, WXSS MILWA, WNOU INDY

"A VERY GAGA THANKSGIVING" (ABC) NOV 24TH

90 MINUTE PRIMETIME BROADCAST

8 SONG PERFORMANCE AND KATIE COURIC INTERVIEW

GRAMMY NOMINATIONS CONCERT (CBS) NOV 30TH

ROCKIN NEW YEAR'S EVE (ABC) DEC 31ST

"BORN THIS WAY" ALBUM 2 MILLION SOLD TD

#1 TWITTER (16+ MILLION) #1 FACEBOOK (46+ MILLION)

#1 YOUTUBE (1+ BILLION VIEWS)

#1 DIGITAL SELLING ARTIST (20+ MILLION DOWNLOADS SOLD)

JOJO

DISASTER

50 TOP 40s

KZZP PHOENIX 21X, KHTS SAN DIEGO,
KDND SACRAMENTO, KFRH LAS VEGAS,
WNOU INDIANAPOLIS 30X, WPLW RALEIGH,
WKSE BUFFALO, WHBQ MEMPHIS

10 NEW: KMXV KAN CITY, WNFN NASHVILLE

SUPER ACTIVE FANBASE TWITTER AND FACEBOOK

3 MILLION YOUTUBE /VEVO VIEWS IN LESS THAN A WEEK

FREESOL

FEAT JUSTIN TIMBERLAKE
FASCINATED

GOING FOR ADDS THIS WEEK NOVEMBER 22ND

WHBQ MEMPHIS 30X, WKSE BUFFALO 35X,
KWNW MEMPHIS 30X, WNFN NASH ADD

FAR EAST MOVEMENT

FEAT RYE RYE
JELLO

KAMP LOS ANGELES 21X



PLUG IN STEREO
"OH DARLING" (Feat. Cady Groves)
[DOWNLOAD OR STREAM HERE!](#)

**Single has already sold over 100,000
singles after 600 plays at Sirius Hits-1!!!**

Already getting huge reaction from:

20 On 20 67x a week

WRVW/Nashville 30x a week and #9 selling single

WIXX/Green Bay 37x a week and #19 selling single

ON TOUR NOW

Nov 20 Moodswing Wilmington, DE

Nov 21 Toads Place New Haven, CT

Nov 23 Northern Lights Clifton Park, NY

Nov 25 Water Street Music Hall Rochester, NY

Nov 26 The Chameleon Club Lancaster, PA

Nov 27 Lost Horizon Syracuse, NY

Nov 29 The Opera House Toronto, ON

Nov 30 The Intersection Grand Rapids, MI

Dec 2 The Auricle Canton, OH

Dec 3 Madison Theatre Covington, KY

Dec 4 The Firebird St. Louis, MO

Dec 7 Bourbon Theatre Lincoln, NE

Dec 9 Diamond Ballroom Oklahoma City, OK

Dec 10 Fair Park Centennial Hall Dallas, TX

Dec 13 Trip Rock Minneapolis, MN

Dec 14 Vaudevill Mews Des Moines, IA

Dec 15 Reggies Chicago, IL

Dec 16 Emerson Theatre Indianapolis, IN

Dec 17 House Caf Dekalb, IL

Dec 18 THMV The Venue Terre Haute, IN

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a place for friends

facebook tumblr. twitter



**Radio Airplay and the Record Industry:
An Economic Analysis**

By

James N. Dertouzos, Ph.D.

For the
National Association of Broadcasters

Released June 2008

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About the Author and Acknowledgements

About the Author

Dr. James N. Dertouzos has more than 25 years of economic research and consulting experience. Over the course of his career, Dr. Dertouzos has conducted more than 100 major research projects. His Ph.D. is in economics from Stanford University. Dr. Dertouzos has served as a consultant to a wide variety of private and public sector organizations including radio and television broadcasters, cable television, newspapers, industry associations and law firms in matters related to regulation, anti-trust and other legal issues. His research and publications cover a wide range of public policy issues including the industrial organization of mass media, public sector management and military manpower. Dr. Dertouzos has worked for the National Bureau of Economic Research, the Bureau of Labor Statistics, the University of Santa Clara, Stanford University, the University of California at Los Angeles, the Annenberg School of Communications at the University of Southern California and the RAND Corporation.

Acknowledgements

The author wishes to thank Arbitron for providing local radio music listening/ratings data for all radio stations in the United States and for connecting him with Act 1 Systems, Inc. Thanks go to BIA Financial Network for providing radio financial data, Nielsen BDS and Mediaguide for providing spins data (volume of music played) and Nielsen SoundScan for providing music sales data. The author also wishes to thank the people at these organizations for taking the time to review and comment on the study reported here. This complex project would not have been possible without the data and assistance each provided.

Radio Airplay and the Record Industry: An Economic Analysis

Executive Summary

By James N. Dertouzos, Ph.D.

For decades, radio has provided programming to listeners free of charge, introducing its audiences to new types of music entertainment and new recording artists. It is widely believed that radio stations, record labels and recording artists enjoy a symbiotic relationship, meaning, the record industry utilizes radio to promote its artists and music to hundreds of millions of radio listeners¹, while radio attracts listeners and advertisers by airing this recorded music.

Generally, radio's music promotion is understood to stimulate the purchase of recordings, merchandise and concert tickets by the listening audience. However, while this benefit is widely acknowledged, until this study was conducted its subsequent value had not been adequately quantified using rigorously applied econometric research methods. The primary question this study addresses is whether the symbiotic relationship between radio and the record industry provides promotional value to music record labels and recording artists. And, if so, what level of promotional value do artists and record labels receive from radio stations airing their music?

To answer these questions, this study examines the relationship between radio airplay of music and sales of albums and digital tracks from 2004 to 2006 in the 99 largest designated market areas (DMAs). Econometric models were developed to address the relationship between music sales and variations in music exposures, while controlling for a variety of local market factors that may affect music sales and radio listening,

¹ Radio reaches 233 million listeners every week, including 82 percent of all people 12 and older, according to Arbitron's RADAR 95 report, December, 2007.

including audience demographic and economic characteristics. The most appropriate measure for music exposures is used in these models -- the number of listeners multiplied by the number of “spins” or plays of a music track. Five versions of the model were tested, allowing for a variety of methodologies and underlying assumptions. The empirical results for all versions were quite similar, demonstrating that the findings and their policy implications are robust and highly reliable.

This study clearly demonstrates that radio airplay increases music sales and that performing artists and record labels profit from exposure provided by radio airplay. Findings demonstrate that a significant portion of music industry sales of albums and digital tracks can be attributed to radio airplay – at minimum 14 percent and as high as 23 percent. These results show that radio is providing the record industry with significant, incremental sales revenues or promotional sales benefit that ranges from \$1.5 to \$2.4 billion annually. The study shows that music played on the radio affects music sales more than other factors, including local demographics such as age, race, geographical location and income. Further, the impact estimated from exposure to music on the radio is shown to be positive and significant for all music genres and radio formats.

The range of promotional value identified is a conservative estimate. While this study focuses on albums and tracks as a first step in analyzing the promotional value of radio airplay, it does not take into account concert ticket and merchandise sales or licensing revenue. Future studies might attempt to include these additional factors given their high monetary contribution to record industry revenues. Billboard, for example, reported more than \$2.8 billion in concert ticket and attendance revenues for 2006.² If these concert ticket revenues had been part of the current study’s econometric modeling, the promotional value from radio play of music would likely have been higher.

As the record industry advocates for direct payment from radio stations to music labels and artists through a new performance fee, it should be noted that disturbing the current symbiotic relationship that is found to exist between radio and the record industry

² Billboard.biz, “Touring Biz Soars in 2006, Ray Waddell, Nashville ONLINE, 13 December 2006.

could actually harm, not help, all parties. If a new performance fee were enacted, stations could reduce the amount of music airplay, change formats and even cease to operate, resulting in the loss of much of this promotional benefit.

1. Introduction and Study Overview

Does radio airplay provide the music industry with free promotional or advertising value? Conventional wisdom, the way the marketplace functions, and previous evidence, in the form of survey research and the persistence of standard music industry practices to promote radio airplay, all suggest that radio airplay stimulates the sale of recordings as well as box office and merchandise revenues earned from concert tours. However, until now, little high quality, empirical research has been conducted to address this question.

Recent research conducted on this issue has been flawed because of poor methodology, failure to include important data, and interpretation of results using an inappropriate market context. The study presented here is designed to address these methodological challenges by using an appropriate measure of radio exposure, correcting data deficiencies found in former studies and by utilizing an appropriate study design that precluded finding spurious correlations.

The following rigorous, econometric analysis utilizes models that account for demographic and economic market characteristics that can affect the relationship between radio airplay and the purchase of music. The models indicate that radio airplay does, indeed, provide the recording industry with free promotion or advertising of its music. These results are especially noteworthy because of their magnitude, their high statistical significance and because they are remarkably insensitive to a variety of econometric methods, assumptions, and measurement techniques.

The Media Marketplace

For decades, a symbiotic relationship has existed between the radio and recording industries. More than 70 percent of the nation's radio stations compete in the media marketplace by providing free, over-the-air music entertainment to listeners. Although composers and publishers receive royalties for the performance of such music, record labels and performing artists do not receive direct payment for use of their sound recordings. Instead, performers and record labels profit indirectly from the exposure provided by radio airplay, through the reproduction, distribution, and sale of music

recordings. Under this arrangement, both the radio and recording industries expect to profit. The recording industry receives indirect revenues when audiences like and purchase the music they hear. Local radio stations receive revenues from advertisers that pay for access to listeners who are potential customers for the goods and services they offer. Here we see the results of a mutually beneficial relationship between local radio broadcasters and the recording industry: a stimulation of music consumption and the generation of value for local radio and its advertisers.

Other media platforms similarly function without direct compensation. For example, daily newspapers are sold at prices that fail to compensate publishers for the cost of the paper on which they are printed. Instead, revenues come not only from subscriptions and single copy sales but also from advertising sales, with advertising accounting for 80 percent of total revenues. Recently, some recording artists have begun to offer Internet listeners downloads of their music tracks without charge. The motivation is to stimulate interest in their live concerts, which typically bring in more revenue than the sale of their recordings.

The Evolving Media Landscape

Although it is widely believed that free advertising in the form of radio airplay stimulates the sale of recordings, as well as box office and merchandise revenues earned from concert tours, new technologies are changing the media landscape, and old questions are being asked anew about this symbiotic relationship between radio and the recording industry. In particular, the question of whether local radio should pay direct compensation in the form of performance fees to performers and record labels is being resurrected. This ongoing debate is being stimulated by changing market conditions, including significant declines in the sales of CDs, proliferation of new digital technologies (MP3 players, broadband access, Internet radio, etc.) and perceived future risks associated with new patterns of media use observed in younger demographic groups.

The last decade has been a turbulent one for the recording industry. Beginning with Napster and the associated onslaught of unauthorized downloading, there has been a steady erosion of industry revenues. Although legal and regulatory mechanisms have

emerged to slow the losses, the industry still faces significant risks. Digital technologies, alternative distribution channels, changes in consumer behavior and a reduction in market entry barriers all threaten the dominance of the major record labels. In this increasingly competitive environment, record labels seek new revenue streams to make up for revenue lost from CD sales. This has resulted in a recent seismic industry shift towards so-called “360 deals” between record labels and performers,³ as well as a renewed interest in exacting monetary payment from local radio stations.

However, these recent changes in production, distribution, and consumer behavior patterns also hold promise for the future of the recording industry. The explosion of digital sales, the proliferation of MP3 players, Internet activity, and the comfort of younger generations with new technologies, suggest that new opportunities for profit abound. Although the two billion dollar decline in CD sales from 2004 to 2006 is not yet offset by the \$878 million in digital download revenues in 2006,⁴ these figures are somewhat misleading, since the profit margins generated by digital sales are larger than those associated with physical CD sales, and digital sales are increasing exponentially. Further, there are no longer physical constraints on inventory. Thus, independent artists are no longer restricted by a store’s ability to carry expanded inventories that may or may not include their recordings. Combining these new opportunities for artists and record labels to succeed in the competitive marketplace with cost savings due to digital distribution, it is easy to conclude that potential revenue from paid digital downloading bodes well for the future of the recording industry.

Related Economic Theory and Earlier Research

Given this changing media landscape, what promotional value does radio provide to performers and record labels by playing their recordings to wide audiences at no cost? While the answer to this question might seem intuitively clear, the renewed debate about this question suffers from an absence of rigorous research.

³ A 360 deal is a contract that allows a record label to receive a percentage of the earnings from all of a band’s activities (concert revenue, merchandise sales, endorsement deals, etc.) instead of just record sales. http://www.economist.com/business/PrinterFriendly.cfm?story_id=9443082

⁴ Recording Industry Association of America, Music Industry Sales, Digital Downloads, 2004-2006

The goal of this study is to begin to fill this research void by providing answers to fundamental questions, such as whether radio airplay provides a promotional benefit or value to the recording industry, and if so, whether this value would be reduced by the adoption of performance fees.

Of course, the impact of performance fees depends on their structure. Thus, as a first step to answering these questions, various performance fee schemes were explored. The possible schemes addressed included flat fees based on station size, fees based on the quantity of music played, fees based on music exposures (spins times audience), and fees based on revenues. Based on economic principles, one can conclude that all of the possible schemes would reduce the profits of radio stations as well as the welfare of their listeners. However, the impact on artists, consumers of recorded music, and even the major record labels would depend on market factors that are not well understood, including whether and how much radio airplay impacts music sales.

One of these schemes, a fee based on the annual revenues of a radio station – essentially a revenue-based tax – would probably not cause stations to alter the quantity of music aired in order to reduce their financial burden. Such a scheme can be viewed as a pure transfer of revenues from radio stations to the music industry. Relative to other options, this type of revenue-based fee is likely to be favored by the music industry if its goal is to gather the most fees possible while at the same time maintain the same level of music exposures. Ironically, however, by endorsing such a revenue-based fee, the music industry is implicitly acknowledging that radio airplay has a positive effect on music sales.

Another scheme, which is currently used for determining performance fees for streaming of music played on digital platforms, is based on total music exposure (number of played tracks or spins times the number of listeners). This option is the equivalent of a progressive tax, because the magnitude of the fee increases with the volume of music played. As music increases ratings, the payment per track increasingly becomes a function of the quantity of music played. Thus, when radio airplay has a positive promotional effect, this approach is likely to be very ineffective because the revenue transfer is achieved at very high cost to all industry participants, including the record labels and artists. This approach also penalizes music stations that invest in high-quality

news, talk, or other non-music programming because such programming would increase ratings and thereby increase the fee levied on music played. This diminishes a station's incentive to invest in quality programming of all types. Not only would music play decrease, but quality non-music content would decrease as well. Ratings would diminish and listeners would suffer. Indeed, when music played on the radio has a positive impact on music sales, then the record industry will be damaged as well.⁵

Related Empirical Studies

Although the foregoing economic schemes demonstrate the potential impact of performance fees, they do not provide hard evidence that airplay of music affects music sales. Therefore, we reviewed relevant performance fee research studies. Again, conventional wisdom is that radio airplay stimulates record sales.⁶ This belief is consistent with the anecdotal evidence, including the fact that record labels pay large sums to promote their releases and garner radio airplay. Unfortunately, there has been precious little scholarly research on this topic,⁷ and the two most recent contributions to the literature have contrasting conclusions. A study by Montgomery and Moe (2002) examines the empirical relationships between weekly sales volumes for a sample of new album releases and radio airplay of those tracks. The results of this study are consistent with conventional wisdom, survey data and industry practices. In particular, it finds that sales of individual albums are promoted by radio airplay. A second more recent study, by Liebowitz (2007), examines aggregate sales of albums in the top 100 designated

⁵ In earlier research, Dertouzos and Wildman (1979) developed a simple but general model of radio program choice. They considered a scheme based on the volume of radio airplay time. They formally demonstrated the obvious, that such fees could motivate broadcasters to reduce the amount of music played. Such reductions would harm broadcasters, their listeners, copyright owners, and likely consumers of recorded music.

⁶ As Bard and Kurlantzick (1974), p. 95 noted: "It is an accepted fact that radio play stimulates record sales by exposing new releases to potential buyers; in other words, radio play advertises records."

⁷ As Sidak and Kronemyer (1987) observe "There appears to be no published study confirming this complementary demand relationship, let alone estimating its empirical magnitude." On the other hand, there exists a larger base of research examining the impact of file sharing and illegal downloading on record sales. These efforts face the same technical challenges that burden studies of the impact of radio play. However, they are also hampered by the absence of reliable data on file sharing or illegal downloading. One of the more creative attempts to estimate the impact of digital downloading can be found in Robb and Waldfogel (2006). Their analysis utilizes data on individual college students and takes advantage of contrasting university Internet access policies that provide exogenous variation in the volume of downloading. Still, despite these best efforts, the resulting evidence is very mixed and sensitive to alternative approaches and assumptions.

market areas (DMAs). He examines changes between 1998 and 2003 in album sales and estimates the impact of changes in Arbitron ratings for stations with music formats. In contrast to the Montgomery and Moe findings, Liebowitz finds a large *negative* effect at an industry level.

Although both studies suffer from certain flaws, the Montgomery and Moe study is the more reliable of the two. The data errors and methodological choices made in the Liebowitz study are problematic. He does not adequately account for population and/or audience distributions across DMAs or station coverage areas. Further, the Liebowitz approach is inferior under the wide range of conditions likely to prevail, with the results dubious because of some unfounded assumptions about the pattern of regression errors. But, comparing the two studies provides a list of methodological challenges that need addressing in order to answer the key empirical question, namely whether radio airplay provides promotion value to performers and record labels.

Radio Airplay Economic Analysis

The specific objective of this study is to quantify the relationship between radio airplay and the sale of albums and digital tracks from 2004 to 2006 in the 99 largest DMAs in the United States.⁸ An econometric approach was used to link sales of albums and digital tracks with variations in music exposures, while controlling for a variety of local market factors that might indirectly affect music purchases.⁹

Five econometric models were tested to determine the relationship between the sale of albums and digital tracks and exposure to music on local radio. Each of these five models indicated that music exposures had a positive and statistically significant impact

⁸ Using all 100 DMAs available from Nielsen SoundScan is not a correct approach because one of those DMAs is an “all other” DMA market that is not contiguous and is geographically dispersed across the entire United States. Therefore, this study appropriately uses only the top 99 DMAs.

⁹ These local market factors included demographic and economic characteristics such as gender, age, race/ethnicity, employment status, wages earned, industry employed in (retail, construction, etc.), market size, market location (East North Central region, Middle Atlantic region, etc.), Internet usage, and commuting time. Also included in the analysis were station characteristics such as class of license, signal power, and format. The measure shown in previous research to be the most appropriate measure for music exposure was used to calculate economic impact, that is, the number of listeners multiplied by the number of “spins” or plays of a music track. Music listening data were provided by Arbitron. Data on music album sales and digital downloads of tracks were provided by Nielsen SoundScan. Music spin data came from Nielsen BDS and Mediaguide. Demographic and economic data came from the Bureau of Labor Statistics and U.S. Census Bureau. Radio station characteristics and coverage data were provided by BIA Financial Network.

on retail music sales. Across all models, results were especially noteworthy because of their magnitude, their high statistical significance, and because they were remarkably insensitive to a variety of econometric methods, assumptions, and measurement techniques. Regression coefficient estimates across all categories of music sales (by music format) compared against music exposure from radio airplay were significant at the 99 percent level.

Results across the five models clearly demonstrated that performing artists and the record labels that represent them indirectly profit from radio airplay through the distribution and sale of sound recordings. Findings demonstrate that a significant portion of industry sales of albums and digital tracks can be attributed to radio airplay – at minimum 14 percent and as high as 23 percent. These results show that radio is providing the record industry with significant, incremental sales revenues or promotional sales benefit that ranges from \$1.5 to \$2.4 billion annually. Further, the impact estimated from exposure to music on local radio is positive and significant for all audiences and all markets.

Using simulations, the study also shows that music played on local radio affects music sales more than the individual impact of demographic characteristics such as age, race, geographical location, or income. The simulations show the impact on music sales due to one-standard deviation increase in music exposures. Using simulations is a standard technique for delving into the detailed findings that regression analyses provide. For album sales, simulations show that one-standard deviation increase in exposure to music played on local radio (equivalent to about ten additional tracks of music per day) result in a two percent increase in album sales. For digital tracks, one-standard deviation increase in exposure to music played on local radio results in a 2.4 percent increase in music sales. In addition, data show that the relationship between album and track sales and exposure to music on local radio varies by genre. Country music sales appear to be the most responsive, with radio airplay resulting in a 3.2 percent increase in music sales.

The simulations also showed that market demographic and economic factors clearly played a large role in the relationship between exposure to music on local radio and music sales. Coefficient estimates from the regression models were, for the most part, unsurprising in that they demonstrated support for intuitive assumptions about the

relationship between demographics, economic factors and radio airplay on music sales. For example, higher income people were more likely to purchase all types of music, and sales of tracks expanded the most when those with higher incomes were exposed to music on local radio. As might be expected, music sales were negatively related to unemployment. That is, the employed were more likely to purchase music after hearing music on the radio than the unemployed. With the exception of the Country format, sales of music were highest when retail wages were highest.

This study clearly demonstrates that radio airplay increases music sales. Economic theory indicates that new performance fees imposed on radio stations may induce stations to change program formats and the amount of music played. Some smaller stations could find a new fee too burdensome and go out of business. And, ultimately much of the promotional benefit determined through this study would be lost. As the recording industry advocates for direct payment from radio stations to music labels and artists through a new performance fee, it should be noted that disturbing the current symbiotic relationship that exists between radio and the record industry could actually harm, not help, all parties. If a new performance fee were enacted, stations could reduce the amount of music airplay, change formats and even cease to operate, resulting in the loss of much of the promotional benefit demonstrated in this study.

2. Overview of the Music, Radio and Related Media Industries

The mass media represent a number of interrelated industries that compete in multiple market settings for entertainment and advertising dollars. This section provides a summary overview of these industries for the purpose of providing context to the analysis of performance fees for radio play of recorded music. The section begins with a discussion of entertainment and advertising overall, identifies specific technology trends and concludes with a more detailed discussion of some of the important elements of the radio and music industries.

Media Overview

The average person spent about 10 hours a day consuming a variety of media products in 2006. Overall, consumption has increased by about five percent since 2000. Television, including broadcast and cable television, remains the dominant medium, with over 40 percent of the total time spent with television. Time spent listening to the radio has increased over this time period. Dramatic increases are evident for home video and consumer Internet (not employment related). Over the same period, time spent listening to recorded music has fallen significantly. In 2000, the average consumer spent 258 hours a year, or just over 40 minutes daily, listening to recorded music. This number has fallen by nearly one-third since 2000.¹⁰

Table 2.1 presents average time spent on media per day (in hours) broken down by age. These data indicate higher levels of activity, primarily because they include business Internet uses. Music listening does not appear to be negatively correlated with radio play across demographic groups. For example, young persons between the ages of 15 and 17 are the most avid music listeners, whether the medium is radio or recorded music. Older demographics prefer television and are less likely to be music listeners, especially recorded music.

¹⁰ Veronis Suhler Stevenson, N.Y., *Communications Industry Forecast & Report*, 2007, cited in Statistical Abstract of the United States 2007.

Table 2.1
Average Time Spent on Media Per Day (in hours), by Age

	TV	Online	IM/E-Mail	Radio	Video Games	MP3/CD Music	Total
Total Adults	3.7	3.6	1.7	1.8	.9	.8	12.5
Age: 13-14	3.1	3.2	2.3	1.9	1.3	2.1	13.9
Age: 15-17	3.2	3.2	2.4	2.3	1.3	2.3	14.7
Age 18-24	3.4	3.5	2.0	1.7	1.2	1.6	13.4
Age 25-54	3.6	3.6	1.7	1.9	.9	.8	12.5
Age 55-64	4.1	3.5	1.6	1.4	.8	.3	11.7

Source: “Time Spent with TV, Online, E-Mail & IM, Radio, Gaming and MP3/CD,” Data drawn from “The Myers Survey Defining the Emotional Connections of Media to Their Audiences,”
<http://www.mediavillage.com/jmr/2005/10/26/jmr-10-26-05>

Information on consumer expenditures is presented in Table 2.2. Total per capita expenditures were over \$888 in 2006. This represents nearly a 50 percent increase since 2000. It is interesting to note that the consumer price index rose by just over 17 percent over the same time period. Thus, real expenditures on media increased by over 35 percent. Recall that time spent on media rose by five percent in comparison. This disparity is difficult to interpret, because of the rather dramatic technology improvements and changes in the distribution of spending. Recorded music and daily newspapers were the only media that exhibited declines in nominal spending. For recorded music, we will see that this partially reflects changes in the composition of spending, with substitution of less expensive digital downloads for CDs. The most dramatic increases were in Internet, subscription television, and home video. In particular, consumer Internet fees doubled over this seven-year period.

These expenditure patterns do not reflect the time-use patterns observed earlier. This is because some of the media rely more heavily on advertising dollars.¹¹ Consumer expenditures either reflect regulatory limits on pricing or the relative merit of maximizing audiences vis-à-vis generating subscription revenues, or both.

As shown in Table 2.3, broadcast television relies exclusively on advertising and generates over \$46 billion in revenues annually. Daily newspapers earn about the same, with advertising accounting for about 80 percent of their total revenues. Internet advertising fell dramatically in the recession years following 9/11, but has increased since 2002.

Table 2.2
Per Capita Expenditures on Entertainment Media 2000-2006

	2000	2002	2004	2006*	Change
Total	\$608.31	\$712.64	\$794.78	\$888.06	\$279.75
Cable and Sat TV	\$189.45	\$224.30	\$255.36	\$282.92	\$93.47
Broadcast and Sat Radio	\$0.00	\$0.07	\$1.15	\$4.68	\$4.68
Box office	\$32.64	\$39.59	\$38.76	\$39.11	\$6.47
Home video	\$81.49	\$108.22	\$125.31	\$151.09	\$69.60
Recorded Music	\$61.04	\$52.47	\$49.39	\$45.77	-\$15.27
Videogames	\$27.89	\$32.34	\$32.94	\$36.13	\$8.24
Consumer Internet	\$49.49	\$85.84	\$113.48	\$138.83	\$89.34
Daily Newspapers	\$51.93	\$53.00	\$51.62	\$48.97	-\$2.96
Consumer Magazines	\$47.54	\$46.86	\$46.88	\$47.59	\$0.05

*Estimated

Source: Veronis Suhler Stevenson, N. Y., *Communications Industry Forecast & Report*, 2007, cited in *Statistical Abstract of the United States 2007*.

¹¹ Of course, television programmers and, to a lesser extent, radio programmers, have the option of distributing products through subscription-based media channels instead of offering them free over the air. Thus, for certain types of general interest programming, the potential for advertising revenue exceeds the potential for charging subscription prices, and it is made available to consumers at no cost so that audiences are maximized. This situation is analogous to the case of music programming being offered to radio stations at no cost.

Table 2.3
Advertising Revenues by Medium, 2000-2006
(\$ Millions)

	2000	2001	2002	2003	2004	2005	2006
Newspapers	49,050	44,255	44,031	44,843	46,614	47,335	46,555
Magazines	12,370	11,095	10,995	11,435	12,247	12,847	13,168
Broadcast TV	44,802	38,881	42,068	41,932	46,264	44,293	46,880
Cable	15,455	15,736	16,297	18,814	21,527	23,654	25,025
Radio	19,295	17,861	18,877	19,100	19,581	19,640	19,643
Yellow Pages	13,228	13,592	13,776	13,896	14,002	14,229	14,393
Direct Mail	44,591	44,725	46,067	48,370	52,191	55,218	58,642
Business Papers	4,915	4,468	3,976	4,004	4,072	4,170	4,195
Internet	6,507	5,645	4,883	5,650	6,853	7,764	9,100

Source: McCann Erickson Worldwide

Table 2.4 converts radio revenues to real dollars, but adjusts for inflation over the 2000-2006 periods. It is worth noting that the radio industry has lost about 14 percent of its advertising revenue, in real terms.

Table 2.4
Radio Industry Advertising Revenues
(\$ Billions)

Year	Revenue (current \$)	Consumer Price Index	Revenue (2000 \$)
2000	19.85	172.2	19.85
2006	20.08	201.6	17.15
change	1.2%	17.1%	-13.6%

Source: Consumer Price Index, Bureau of Labor Statistics
Advertising revenues, McCann Erickson Worldwide

Emergence of New Technologies

Tables 2.5-2.8 describe prevailing patterns in the use of technologies having implications for both the music and radio industries.¹² Table 2.6 compares Internet use of 18-26 year olds with those of all adults. The younger “Generation Y” cohort is more

¹² These data were taken from *The Infinite Dial 2007: Radio's Digital Platforms*, Arbitron/Edison Media Research, 2007.

likely to go online, listen to Internet radio or download music. In 2006, about 14 percent of persons surveyed reported that they downloaded music. Combined with information on total digital track downloads, this suggests that the average number of tracks (per person who downloaded) was 21. This is almost two albums worth of music per person. Since the average person purchases about two albums on an annual basis, this increase in Internet purchases could account for a large share of the music recording business.

Table 2.5
Internet Use by Age and Total Adults, 2006

Activity	Age 18-26	All Adults
Go online	87%	72%
Use e-mail	98%	97%
Listen to Internet Radio	40%	26%
Download Music for fee	22%	12%
Download Music at no cost	32%	11%

Source: "Generation Y Adults Lead Internet Use, Lag in Television Use," *Research Alert*, EPM Communications, March 16, 2007.
<http://rdsweb2.rdsinc.com/taxis/rds/suite2>

Table 2.6
Music Downloads, by Demographic

Age Group:	12-17	18-24	25-34	35-44	45-54	55-64	65+
% Report Downloads	24%	21%	20%	16%	10%	3%	1%

Source: *Internet and Multimedia 2006: On-Demand Media Explode*, Arbitron/Edison Media Research

Table 2.7
Growth in Online Radio, 2000-2007

Date	Percent Listening to Online Radio
January 2000	2 %
January 2001	5%
January 2002	6%
January 2003	8%
January 2004	8%
January 2005	8%
January 2006	12%
January 2007	11%

Source: The Infinite Dial 2007: Radio's Digital Platforms, Arbitron/Edison Media Research, 2007

Table 2.8
Ownership of Portable MP3 Players, by Age, 2005-2007

Age Group	January 2005	January 2006	January 2007
12-17	27%	42%	54%
18-24	18%	31%	39%
25-34	20%	30%	38%
35-44	16%	30%	38%
45-54	10%	16%	24%
55-64	6%	7%	14%
65+	2%	2%	6%

Source: The Infinite Dial 2007: Radio's Digital Platforms, Arbitron/Edison Media Research, 2007

Currently, about 12 percent of the population is listening to online radio. About one in three persons owns at least one portable MP3 player. This number has doubled in two years. In addition, there are significant differences by demographic group. Over half of all persons aged 12-17 have MP3 players. These percentages drop with the age of the group, falling to six percent for those aged 65 or older.

These surveys provide mixed evidence about the degree to which these technologies are complements or substitutes with each other.¹³ While 16 percent of the respondents report purchasing music online, those who listen to Internet radio are twice as likely to do so.

Radio Industry Facts

Table 2.9 provides detailed information on radio industry operations for 2004. Two elements of these data are particularly germane to the issue of performance fees. Broadcast rights and license fees amounted to about \$869 million, representing about five percent of total industry revenues. Most of this total is from fees collected by

¹³ The scholarly research on this topic is rather limited, though one study, Oberholzer and Strumpf (2004), present econometric evidence that downloading does not displace physical record sales.

performing rights organizations¹⁴ on behalf of the music composers they represent.

Table 2.9
Radio Industry Operations, 2004

Radio Industry Operations, 2004	Industry Totals, \$ Millions
Operating Revenue	\$16,494
Station time sales	\$12,803
Network compensation	\$93
National/Regional Ads	\$2,879
Local ad revenue	\$9,830
Network time sales	\$1,401
Program rights	\$258
Operating expenses	\$13,077
Annual payroll	\$5,100
Employee benefits	\$636
Contract labor	\$162
Materials and supplies	\$283
Purchased services	\$2,979
Data processing and computer	\$19
Communications services	\$175
Advertising and promotion	\$1,089
Electricity	\$135
Professional services	\$344
Lease and rental	\$408
Broadcast rights and license fees	\$869
Depreciation	\$1,010
Taxes and license fees	\$408
Other	\$1,630

Source: U.S. Census Bureau, "2004 Service Annual Survey, Information Sector Services"

Radio stations provide a variety of content formats, including music, news, talk, sports and other forms of entertainment (Table 2.10). Although stations can use a blend of programming, there are benefits to providing a consistent format. This practice promotes listener loyalty and audience demographics that are attractive to advertisers that wish to target specific market segments. Table 2.11 provides industry-wide, average quarter hour shares¹⁵ for major format categories.¹⁶ In 2006, nearly 80 percent of

¹⁴ The bulk of domestic royalties are collected by two performing rights organizations, the American Society of Composers, Authors, and Publishers (ASCAP) and Broadcast Music, Inc. (BMI).

¹⁵ Quarter-hour audience represents the numbers of persons aged 12 years or older who are listening for at least 5 minutes during a 15 minute period. The shares represent the percentages of the total audience.

listeners were tuned in to music format stations. News, talk, and sports formats were 17.6 percent. Some portion of the Spanish stations, about 25 percent, also had non-music formats.

Table 2.10
Primary Radio Music Formats, BIA Financial Network and Arbitron

Adult Contemporary

80s Hits
Adult Contemporary (AC)
Hot AC
Modern AC

Album Oriented Rock/Classic Rock

Active Rock
Album Adult Alternative (AAA)
Album Oriented Rock (AOR)
Classic Rock

Contemporary Hit Radio/Top 40

Rhythmic Contemporary Hit Radio
Pop Contemporary Hit Radio

Country

Classic Country
Country
New Country

Jazz/New Age

Jazz
New AC (NAC)/Smooth Jazz

Oldies

Adult Hits
Oldies
Rock
Alternative
Classic Hits

Spanish

Latino Urban
Mexican Regional
Spanish Adult Hits
Spanish Contemporary
Spanish Oldies
Spanish Tropical
Spanish Variety
Tejano

Urban

¹⁶ Major format categories as defined by BIA Financial Network are listed in Table 2-11. The subcategories listed are the corresponding Arbitron definitions.

Rhythmic
 Rhythmic AC
 Rhythmic Oldies
 Urban AC
 Urban Contemporary
 Urban Oldies

Of the music formats, Adult Contemporary had the most listeners, followed by Contemporary Hit Radio (also referred to as Top 40 or Pop), and the Urban format. Urban music includes Rap as well as Rhythm and Blues (R&B).

Table 2.11
 Share of Radio Audiences, by Format

Format	1998	2002	2006	1998-2006
News/Talk/Sports	16.4	16.5	17.6	1.2
Adult Contemporary	15.7	14.7	14.8	-0.9
Spanish	6.7	8.4	11.2	4.5
Contemporary Hit Radio	10.7	12.1	10.7	0
Urban	8.2	9.1	10.1	1.9
Country	9.5	8.2	9.2	-0.3
Classic Rock	9.6	8.7	7.3	-2.3
Oldies	7.3	7.7	5.4	-1.9
Rock	4.9	5.0	3.4	-1.5
Religious	2.1	2.7	2.9	0.8
Jazz	3.0	3.1	2.6	-0.4
Classical	1.7	1.5	1.1	-0.6

Source: Arbitron, Fall Audience Surveys

Audience shares have changed over time, reflecting changing demographics as well as the impact of the technology changes described earlier. Of particular note are the increases in Urban and Spanish format audiences, as well as the declines in the Rock, Classic Rock and Oldies formats.

Age distributions are provided in Table 2.12. Nearly 40 percent of the youngest cohort of 12-17 year olds listen to Top 40 or Contemporary Hit Radio. Very few of these younger audiences listen to non-music formats. Slightly older audiences shift towards Adult Contemporary. Baby boomers listen to Adult Contemporary but there is also a pronounced shift to Classic Rock and Oldies. Country music also has an older demographic. For the oldest demographics, stations with non-music formats are the most popular.

Table 2.12
Radio Format Share of Audience By Age

Format	Age 12 -17	Age 18 - 24	Age 25 - 34	Age 35 - 44	Age 45 - 54	Age 55 - 64	Age 65 +
News/Talk/Sports	3.9%	5.3%	10.4%	17.4%	22.5%	29.1%	32.7%
Country	10.7%	13.7%	13.7%	14.1%	15.0%	18.2%	22.5%
Adult Cont./Hot Adult/Adult Hits	8.3%	10.8%	15.3%	18.2%	17.0%	14.9%	12.5%
Pop/Rhythmic Contemporary	39.8%	25.9%	16.4%	8.5%	4.2%	2.2%	1.4%
Classic/Album Oriented Rock	5.1%	8.4%	9.1%	11.8%	10.8%	4.3%	1.2%
Oldies/Classic Hits	2.1%	3.2%	3.1%	5.2%	10.5%	12.1%	7.3%
Urban Contemporary	12.9%	9.7%	7.2%	4.1%	2.4%	1.6%	1.3%
Alternative/Active Rock	7.8%	10.5%	8.6%	5.0%	2.2%	0.7%	0.4%
Urban Adult Contemporary	2.4%	2.6%	3.8%	5.1%	5.2%	4.7%	3.2%
Mexican Regional Contemporary	2.7%	6.8%	7.4%	3.7%	2.0%	1.7%	1.4%
Christian	3.5%	2.0%	3.3%	3.9%	3.3%	2.1%	1.4%
Classical	0.5%	0.5%	0.9%	1.2%	2.0%	4.5%	10.4%
Jazz/Smooth Jazz	0.5%	0.5%	0.9%	2.0%	2.9%	4.0%	4.2%

Source: Arbitron, 2006

Table 2.13 provides additional information about the 2006 playlists of a sample of radio stations. Frequency of play was compiled from a sample of stations and includes the total number of spins by track.¹⁷ All tracks that had at least five spins were included. The table provides the average number of total spins for the complete sample of tracks. The average number of spins per track is also computed. The same numbers were computed for the top 10 tracks during that year. For an average Top 40 station, over 90,000 spins were recorded for a total of 273 tracks. This represents about 342 spins per track. In other words, a track would be played an average of nearly one time daily over

¹⁷ Data were provided by MediaBase, an organization that monitors playlists. Stations located in New York, Los Angeles, and Chicago were included in the analysis.

the full calendar year. This number understates, to some degree, the frequency with which a Top 40 track is played over a shorter period of time. This is because some tracks get play time at the end or beginning of a calendar year and their total exposure is not included in the 2006 summary. In addition, the “life” of most hits is considerably shorter than a year. For all but the “hottest” of the Top 40 hits, their appearance on playlists lasts only a few months.

In contrast, the top 10 hits of the year average more than five times the exposure of the “average” hit. These mega hits received an average of 1,761 spins during 2006. That amounts to about five plays per average day. If most of these are concentrated during a six-month period, it is possible that a song is played every other hour in at least one station in the market. Recall that an average person may spend two hours listening to the radio on a daily basis. This suggests that a person might well hear a particular track virtually every day.

Table 2.13
Distribution of Playtime for Top Radio Tracks, 2006

	Total Spins	Total Tracks	Spins/Track	Top 10 Tracks	Spins/Track
Top 40	93,423	273	342	17,613	1,761
Rock	47,448	324	146	9,986	999
Classic Rock	60,515	1,900	32	1,884	188
Hot AC	53,680	126	426	13,302	1,330
Alternative	39,057	488	80	5,050	505

Source: MediaBase playlist data for leading stations in Los Angeles, New York, and Chicago. Lists include all tracks with at least 5 spins.

For the format called Hot Adult Contemporary, the pattern is similar. However, for other music formats, such as Rock, Classic Rock, and Alternative, the playlists are more diverse and the intensity of play for any one track is much more modest. Classic Rock stations averaged 1,900 tracks with at least five spins during the year. These tracks were aired about one time per month. Even the most popular tracks would be aired only once every other day.

With the changes in FCC ownership restrictions, multiple-ownership in the radio industry increased over this time period. Although some observers believe that consolidation reduces media diversity, there exist theoretical reasons to suspect that this may not be the case.¹⁸ The intuition for this is straightforward. If a single owner owns two stations in the same market, it has an incentive to maximize *total* audience rather than the audience of individual stations. Thus, it will not program in ways that promote competition for the same audience. Indeed, an examination of the playlists for the same kinds of stations described in Table 2.13 indicated virtually identical patterns of play time in earlier years. Although this sample was small,¹⁹ there was no evidence of changes in the variety of music made available by this group of stations.

Trends in the Music Recording Industry

As has been well-documented elsewhere,²⁰ the last decade has been a turbulent period for the music industry. Beginning with Napster and the associated onslaught of unauthorized downloading,²¹ there has been a steady erosion of industry revenues. Although legal and regulatory mechanisms have emerged to slow the losses, the industry still faces significant risks. Digital technologies, alternative distribution channels, changes in consumer behavior and a reduction in market entry barriers all threaten the dominance of the major record labels.²²

Industry sales trends for physical unit formats are presented in Table 2.14. From 2000 through 2003, sales of CDs fell by an average rate of about six percent annually. On the surface, it seems likely that these declines were a direct result of illegal

¹⁸ Using modeling approaches first introduced by Steiner (1952), Owen and Wildman (1992) demonstrate that, under plausible conditions, local consolidation could result in more, not less diversity. Sweeting (2006) develops a sophisticated measure of programming diversity (measured as vector differences between radio playlists) and finds that local concentration increases variety of programming.

¹⁹ The sample analyzed consisted primarily of stations acquired by large radio groups during the last 6 years.

²⁰ For a thorough overview of the music industry, see Krasilovsky and Shemel (2007).

²¹ Mortimer and Sorenson (2005) cite data indicating that Napster had 20 million accounts at the peak and over half a million connections at any given time.

²² According to sales data compiled by Nielsen SoundScan and reported in Krasilovsky and Schemel (2007), the four dominant labels, Universal, Warner, Sony BMG, and EMI, controlled 31, 15, 25, and 10 percent of the market respectively during the first three quarters of 2005, for a total of 81 percent. This is in stark contrast to Census of Manufacturers data referenced in Dertouzos and Wildman (1979) indicating that the four largest companies controlled 48 percent of industry sales.

downloading.²³ Despite experiencing a modest recovery in 2004, the downward trend continued in 2005 with a drop in unit sales of eight percent, and in 2006 with a drop of 13 percent.

Table 2.14
Music Industry Sales, Physical Units 2000-2006

Physical Units:	2000	2001	2002	2003	2004	2005	2006
CDs	942.5	881.9	803.3	746.0	767.0	705.4	614.9
Music Video	18.2	17.7	14.7	19.9	32.8	33.8	23.1
Other (albums)	78.2	47.6	33.3	20.5	7.7	4.4	1.7
Other (singles)	40.3	21.3	8.4	12.1	6.6	5.0	2.9
Dollar Value:	\$12,705	\$12,389	\$11,549	\$11,053	\$11,423	\$10,478	\$9,053

Source: Recording Industry Association of America

The distribution of 2006 album sales for the Los Angeles market is presented in Figure 2.1 and Table 2.15. The top seller in the Los Angeles market area, Gnarl's Barkley's *Crazy*, sold over 120,000 copies. However, the individual unit sales fall dramatically as one moves down the rank order. The top 10 albums averaged about 93,000 sales each, accounting for almost eight percent of total sales. The top 100 sold over 4.5 million copies, an average of just over 45,000 copies. These titles, representing 10 percent of the 1,000 albums considered, accounted for nearly 37 percent of market sales. These distributions roughly correspond with those based on radio play time. Even the most popular music represents only a small share of either music exposure or retail album sales.

²³ It is noteworthy, however, that most academic studies of this issue are inconclusive. See, for example, Rob and Waldfogel (2006)

Figure 2.1
2006 Distribution of Album Sales, Los Angeles DMA

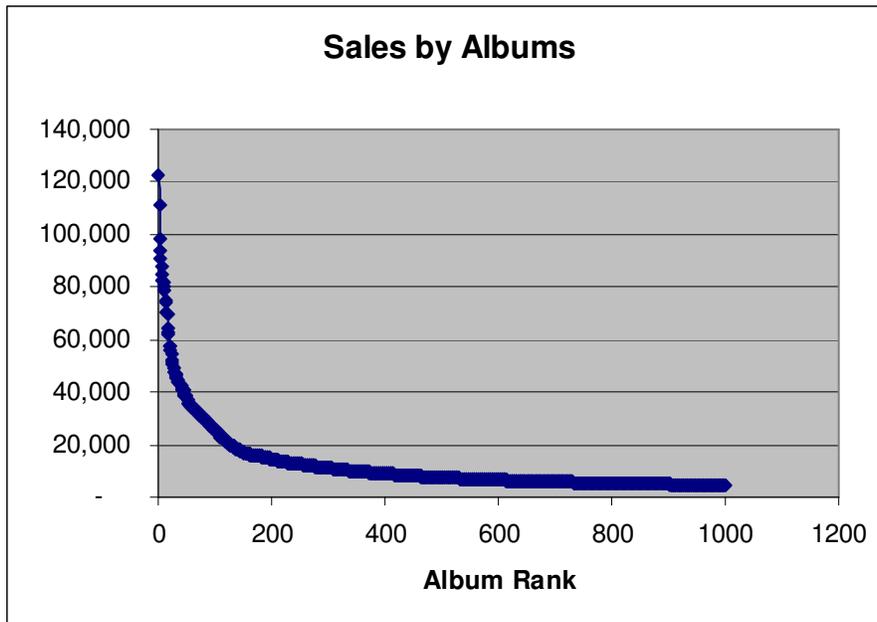


Table 2.15
Concentration of Album Sales, Los Angeles DMA, 2006

	Total Unit Sales	Percent of Top 1000
Top 1000 Album Sales	12,307,924	100%
Top 100 Album Sales	4,536,607	36.8%
Top 10 Album Sales	934,481	7.6%

Source: Nielsen SoundScan

It is revealing that, over the same time period, digital downloads increased dramatically. These data are displayed in Table 2.16. As a legal method of distribution, this market was virtually nonexistent in 2003, but sales rose rapidly over the three-year period, and unit sales of singles approached 600 million by 2006. In comparison to the decline in CD sales, the revenue implications of digital downloads are modest. The two billion dollar decline in CD sales is not offset by the \$878 million in digital track revenues in 2006.

Table 2.16
Music Industry Sales, Digital Downloads, 2004-2006

Digital Units:	2004	2005	2006
Download single	139.4	366.9	586.4
Download album	4.6	13.6	27.6
Mobile (master ring tunes, etc.)		170.0	315.3
Subscription		1.3	1.7
Dollar Value:	\$183	\$504	\$878

Source: Recording Industry Association of America

However, this is misleading because the profit margins generated by digital sales are larger than those associated with physical CD sales.²⁴ Digital distribution is relatively inexpensive, amounting to about 17 cents per track. In contrast, CDs involve a 75 cent packaging and \$2 distribution cost. Further, retail mark-ups are about \$5. On a per track basis, these costs add up to about 65 cents. CDs generate about \$1.25 in revenue per track, and about 25 cents in profit. With cost savings of about 50 cents per track, it is easy to conclude that potential revenue from paid digital downloading bodes well for the future of the recording industry.

The distribution of music sales by age group is provided in Table 2.17. The changes reflect demographic trends, namely the aging of the baby boom cohort, resulting in larger populations aged 45 and above. In addition, the reduced and delayed fertility of that generation have resulted in smaller numbers representing the younger ages.

Table 2.17
Distribution of Music Sales by Demographic

Age:	1990	1995	2000	2005
10 to 14 yrs.	7.6%	8.0%	8.9%	8.6%
15 to 19 yrs.	18.3%	17.1%	12.9%	11.9%
20 to 24 yrs.	16.5%	15.3%	12.5%	12.7%
25 to 29 yrs.	14.6%	12.3%	10.6%	12.1%
30 to 34 yrs.	13.2%	12.1%	9.8%	11.3%
35 to 39 yrs.	10.2%	10.8%	10.6%	8.8%
40 to 44 yrs.	7.8%	7.5%	9.6%	9.2%
45 yrs. +	11.1%	16.1%	23.8%	25.5%

Source: Recording Industry Association of America

²⁴ Cost data are reported in Anderson (2004)

That said, it remains the case that the younger cohorts purchase more than a proportionate share of music sold. For example, the population aged 45 years or older represents 36 percent of the population but 25.5 percent of sales. The 15 to 34 year-old group represents 32 percent of the population, but 48 percent of sales. This suggests that per capita music sales are more than double for the younger groups. This difference is similar to the age-specific accounting of the time spent listening to music either on the radio or recorded music. These patterns have held up over time, suggesting that new technologies appear to supplement rather than substitute for consumption of traditional media.

In addition to the increase in digital track downloads, other changes have occurred in the distribution of recorded music. Table 2.18 summarizes sales revenues by retail outlet. In 1990, specialty record stores dominated distribution, with 70 percent of all sales. In the decade that followed, sales shifted away from record stores, with the largest increase occurring in “Big Box” retail chains such as Wal-Mart. While such outlets could have as many as 40,000 titles in stock, inventory restrictions created barriers to entry for small independent labels or artists who were not well established. With the expanding role of the Internet, there are no longer physical constraints on inventory. Indeed, the largest online service, Rhapsody claims to have over 4 million available titles.²⁵ This creates new opportunities for innovative artists and smaller independent labels to succeed in the competitive marketplace.

Table 2.18
Distribution of Music Industry Revenues by Retail Outlet

Outlet:	1990	1995	2000	2005
Record store	69.8%	52.0%	42.4%	39.4%
Other store	18.5%	28.2%	40.8%	32.0%
Tape/record club	8.9%	14.3%	7.6%	8.5%
Ad or 800 number	2.5%	0.4%	2.4%	2.4%
Internet			3.2%	8.2%
Digital download				6.0%

Source: Recording Industry Association of America

²⁵ This statistic is found at www.rhapsody-signup.com.

3. Previous Evidence on the Sales Impact of Radio Exposure

The conventional wisdom is that radio play stimulates record sales.²⁶ This belief is certainly consistent with the anecdotal evidence, including the fact that record companies pay large sums to promote their releases. In addition, surveys of consumers indicate that the exposure to radio is a primary method of learning about music. Unfortunately, there has been little scholarly research on this topic.²⁷ In this section, we begin with a brief discussion of available survey evidence and review some of the more recent contributions to the literature.

The Anecdotal and Survey Evidence

Judging from the behavior of record companies, radio play is essential to the success of a new album. It is believed that radio campaigns through independent record promoters cost from \$500 to \$2,000 each time a station adds a song to a playlist for a single week.²⁸ Taking the average of \$1,250 and applying it to the typical Top 40 station in an average market, this comes out to nearly one-fifth of a penny per exposure (an exposure is equal to one listener listening one time).²⁹

Consumer surveys suggest that these dollars are well spent. For example, a survey of rock music buyers found that over 80 percent of albums were purchased

²⁶ As Bard and Kurlantzick (1974), p. 95 noted: "It is an accepted fact that radio play stimulates record sales by exposing new releases to potential buyers; in other words, radio play advertises records."

²⁷ As Sidak and Kronemyer (1987) observe "There appears to be no published study confirming this complementary demand relationship, let alone estimating its empirical magnitude." On the other hand, there exists a larger base of research examining the impact of file sharing and illegal downloading on record sales. These efforts face the same technical challenges that burden studies of the impact of radio play. However, they are also hampered by the absence of reliable data on file sharing or illegal downloading. One of the more creative attempts to estimate the impact of digital downloading can be found in Robb and Waldfogel (2006). Their analysis utilizes data on individual college students and takes advantage of contrasting university Internet access policies that provide exogenous variation in the volume of downloading. Still, despite these best efforts, the resulting evidence is very mixed and sensitive to alternative approaches and assumptions.

²⁸ See the discussions in Krasilovsky and Shemel (2007) and Bryan Farrish Radio Promotion, December 11, 2005 (<http://www.radio-media.com/>).

²⁹ With average quarter hour ratings of .7 percent and an average audience of 16,100 listeners (.007*2.3 million), the typical Top 40 track gets no more than 42 spins in a week, which equals about 676,000 exposures (or gross rating points). Per exposure, this amounts to \$1,250/676,000 or .0018 dollars per exposure, or nearly one-fifth of a penny. These calculations can not be viewed as precise but they certainly suggest that the promotional value is significant.

because a particular track was first heard over the radio.³⁰ Today, about half of those surveyed claim to be influenced by radio in making their music purchase choices.³¹

Table 3.1
Percent of Respondents Relying on Media Sources for Information about New Music

Year	Internet	Newspapers	Radio	Television
2002	9%	2%	63%	14%
2007	25%	4%	48%	12%

Source: Arbitron Inc./Edison Media Research Survey of 12+ Population, 2007.

Recent Econometric Contributions

There have been two recent contributions to the literature on the relationship between radio airplay and album sales. The first, by Montgomery and Moe (2002), examines the empirical relationships between weekly sales volumes for a sample of new album releases and radio airplay of those tracks. The results of this study are consistent with conventional wisdom, survey data and industry practices. In particular, they find that sales of individual albums are promoted by radio play. A second, more recent study, by Liebowitz (2007), examines aggregate sales of albums in the top 100 designated market areas (DMAs). He examines the changes between 1998 and 2003 in album sales and estimates the impact of changes in Arbitron ratings for stations with music formats. In contrast to the Montgomery and Moe findings, Liebowitz finds a large *negative* effect on an industry level.

Econometric Challenges to Establishing a Relationship between Radio Play and Sales

In establishing the empirical relationship of interest, several technical obstacles must be overcome. These include measuring radio exposure, filling in data that are not available, allocating data to a common geographic unit, eliminating spurious correlations, and choosing the correct functional form.

³⁰ Rein (1972).

³¹ The fact that fewer individuals claim that they are influenced by radio does not necessarily imply that recording companies or artist would value airplay any less. As noted in the advertising literature, audience fragmentation might require higher expenditures in order to achieve the requisite frequency and reach. This is the logic that explains the increase in television advertising rates that have occurred even as prime time audiences have decreased. For a discussion, see Dertouzos and Garber (2003)

1. Measuring Radio Exposure

The first challenge is to construct an appropriate measure of exposure to music. Traditionally, the degree to which a radio advertisement penetrates a market is represented by reach (the number of listeners hearing a given ad) times frequency (the number of times the ad is heard). Analogously, the average exposure to music can be expressed as ratings times the number of spins. One spin is a single airing of a music track or song. Thus, data must be gathered on radio audiences, as well the amount of music to which these audiences are exposed. The Montgomery and Moe analysis utilizes information on both ratings and spins, whereas Liebowitz does not. Therefore, the information used by Montgomery and Moe is superior to the information used by Liebowitz.

2. Filling in Unavailable Data

Station audience ratings are available through Arbitron, and the volume of music played is measured by a number of organizations including Nielsen BDS, Mediaguide and Mediabase. Ratings are available for radio stations that meet Arbitron's minimum reporting standards, although not all of these are monitored for airplay, and a study's estimation methodology should account for this. Both the Montgomery and Moe and the Liebowitz studies are flawed in that they do not adjust for this issue. Since Montgomery and Moe are examining aggregate ratings over shorter time intervals, the extent to which data are unavailable is unlikely to change and is therefore less problematic. For the Liebowitz study, which looks at DMA-level changes over a five-year period, the data errors are more problematic.

3. Data Allocation to a Common Geographic Unit

Any analysis must rely on data gathered from multiple organizations that have different data perspectives, primarily because of whom they serve. For example, Nielsen data, including the Nielsen SoundScan music sales data and Nielsen BDS play data, were only available for DMA areas, which is how television markets are defined. Arbitron data initially is defined at the metro market level, and BIA Financial Network information for radio stations can be acquired at the metro market level. Metro markets do not correspond to DMAs, but Arbitron does make its data available at the DMA level. Much of the relevant U.S. Census and Bureau of Labor Statistics data are provided for

geographic units that are consistent with the levels of public sector governance, namely counties, Metropolitan Statistical Areas (MSAs) and states. These areas do not always correspond with the metro markets or DMAs. Thus, a major challenge is to organize data into relevant geographic units in a manner that reflects true levels of both the outcome variables of interest and factors thought to explain them.

Since the Montgomery and Moe piece utilizes national data, such allocation issues are not relevant. For Liebowitz, who constructed his DMA-level information based on examining Nielsen DMA maps (rather than using Arbitron's data at the DMA level, for example) and in this way matched metropolitan areas that do not correspond with the same geographic boundaries, this presents a significant problem. This issue is even more problematic given the changes in the relative growth and/or significance of this discrepancy over the five-year period. For example, if there is more population growth in the non-MSA portion of a DMA over this time period, then trying to link music sale *changes* in a DMA with those in a subset of the larger market is unlikely to yield reliable estimates.

In fact, the Liebowitz allocation method seems ad hoc and is not described sufficiently. For example, it is not clear that he dealt with the problem of audience overflow, that is, the fact that nearly half of the radio stations have audiences in multiple DMAs. It seems, although this is not clear from the descriptions, that ratings information for a station was allocated in its entirety to a single DMA based on eyeballing coverage areas as they appeared on a map. Also, Liebowitz does not account for population and/or audience distributions across DMAs or station coverage areas.³²

4. Distinguishing Causation from Spurious Correlation

The goal of these analyses is to establish a causal relationship between radio music exposure and sales of recorded music. This requires a well-specified and

³² It is also impossible to tell which Arbitron ratings Liebowitz relied on. It is described simply as "Time Spent Listening." This measure seems similar in value to the one obtained by converting average quarter hour ratings (which actually only reflect a five-minute block of listening within quarter hour segments) to total time. However, the variable published by Arbitron and labeled TSL (time spent listening) relates to the average time spent in a day by an average listener. To the extent that stations (even when they have the same ratings) have different numbers of unique or cumulative listeners, it is not clear how one would add these up across stations to get a reliable measure of audience exposure. For the work reported below, we identified audience numbers in a particular quarter hour, allocated them to the appropriate DMA (or group of DMAs) and then summed them.

comprehensive econometric model that accounts for both observed and unobserved factors that can simultaneously affect both music exposure and retail sales. If this is not accomplished, there is the danger that an artificial correlation having nothing to do with causation may exist.

The Montgomery and Moe research faces a challenge in this regard because the week-to-week relationship between sales and radio airplay for individual albums is likely to be confounded by a simultaneous determination process. The authors recognize that causation may go in two directions and therefore use vector autoregressive models (VARMA) designed to isolate cause and effect.

Although reverse causality is somewhat less of an issue at the aggregate DMA level, there remains a concern that unobserved factors could well affect the levels of sales and radio airplay simultaneously. Under the assumption that such factors are constant over time, Liebowitz argues that differencing (that is, examining changes instead of levels between the two time periods) will net out any unobserved influences that are DMA-specific and fixed over time. However, this is a very strong assumption and is likely not to hold true over a five-year period. The problem is likely to be compounded by other issues created by audience measurement challenges such as unavailable station data and the need to reallocate data to different geographic areas.

Further, the differencing approach he utilizes nets out many of the variables of interest and further reduces efficiency of the estimation process. In Appendix A, we explore the relative merits of alternative econometric approaches and conclude that differencing is an inferior approach under the wide range of conditions likely to prevail in these circumstances.

5. Specifying the Correct Functional Form

In most econometric studies, findings can be quite sensitive to alternative assumptions about the relationships between variables of interest. For example, is the impact of music performance linear with increases in radio play? Does the relationship have a traditional promotional “S-Curve shape,” whereby exposure to music needs to pass a minimum threshold of exposures to have an effect?

The Montgomery and Moe formulation is flexible enough to allow for non-linear relationships and finds that, on average, the impact of an increase in radio play is greater

than the impact of reducing radio play. Consistent with the existence of an S-Curve, this suggests that radio play is more effective once one gets beyond a certain threshold of exposure.

The Leibowitz results are dubious because of some unfounded assumptions about the pattern of regression errors. In particular, he assumes that regression errors are larger for the small DMAs based on the observation that radio markets and DMAs are a better match for large markets. While this is often true, it is not uniformly the case. And, more importantly, there are other sources of error that could have quite different patterns, especially since he is examining changes, not levels, in the variables. It would have been more appropriate to analyze the actual patterns of regression error and once identified, take appropriate steps to overcome them.³³ This is not a minor issue, because the weighting scheme utilized places virtually all the emphasis on the few largest DMAs. Thus, they end up driving the estimated relationships. This would not be so much a problem except for the fact that the key result of interest – the estimated effect of radio play on sales – is not significant otherwise. In fact, a number of reasonable – even preferred – approaches reported by Liebowitz fail to provide significant results. Unweighted regressions, using levels rather than differences, and using an instrumental variable approach (to deal with possible simultaneity problems) are all reported. None of these approaches yields a significant effect. Indeed, even in cases where the coefficient is negative, the imprecision as reflected in large standard errors makes it impossible to reject the distinct possibility that the true effect is actually positive. Simply put, you cannot draw sufficient conclusions from these regressions. This is because the estimated coefficients in some specifications are not significantly different from any value within a full range of theoretically plausible effects.

In addition, the time period being analyzed was one of rapid change and was also quite unique in that music purchases were plummeting at the same time that illegal downloading was rampant. Although Liebowitz includes a variable (the level of Internet penetration) as a proxy for this activity, it is unlikely that it represents an accurate control. Indeed, in earlier research, Liebowitz highlights this problem and argues that the

³³ For example, in the econometric analysis reported below, simple heteroscedasticity tests (regressing the size of the residual on a set of covariates) indicates that no weighting of observations is appropriate.

post-Napster period, 2004 and beyond, would be a “better period” for conducting an analysis.³⁴

For these reasons, the Montgomery and Moe paper must be considered more reliable. Its findings for 13 album releases by Capitol Records during the mid-1990s indicate that airplay can have a significant promotional effect. The results suggest that a 30 percent decline in air time would result in a 16 percent decline in record sales, implying an elasticity of over .50. Put another way, even if record labels were willing to pay the full advertising spot rate for the time used to play their music, the promotional value would be far in excess of the cost.

That said, the Montgomery and Moe paper cannot be considered definitive. The period of time (early to mid-1990s) was quite different than it is today. We have argued that the implications of subsequent changes for the value of radio play are not all that obvious. Still, the issue should be analyzed using more current information. Perhaps more importantly, the study examined only 13 album releases, representing only top 40 music and a small share of the genre at that. Although we have argued that the promotional effects for individual albums (or at most groups of albums) is the relevant information for estimating values to reflect real market outcomes, the effects for this small subgroup may not reflect music recordings more generally. Thus, additional evidence would be valuable. To this new research we now turn.

³⁴ See Liebowitz (2005).

4. An Econometric Analysis of Radio Airplay and Recording Sales

This section describes our empirical study of the relationship between radio play and sales of recorded music. The objective of this study was to quantify the relationship between radio airplay and the sales of albums and digital tracks from 2004 to 2006 in the 99 largest designated market areas (DMAs).³⁵ An econometric approach was used to link sales with variations in music exposures, while controlling for a variety of other local market factors, including demographic and economic characteristics. The measure shown in previous research to be the most appropriate measure for music exposure was used to calculate economic impact, that is, the number of listeners multiplied by the number of “spins” or plays of a music track.

Results showed the estimated impact of radio exposure was positive and significant for all audience measures. In addition, the results were remarkably insensitive to alternative assumptions about functional relationships and econometric methods.

Methodological Challenges

As mentioned in Section 3, two methodological challenges faced by researchers who have conducted previous studies were addressed in this study. First, music exposure data are not available for all radio stations. Second, observed sales as well as radio exposure could be influenced by factors that cannot be adequately accounted for by looking at just sales and radio exposures. Thus, additional market and consumer information should be considered.

For a subset of small stations, information on spins is not available. In other instances, ratings data do not meet Arbitron standards for statistical reliability. Since information is typically unavailable only for the smaller stations in a market, it is possible that the total sum of music exposures provided by the largest stations represents an accurate *relative* index for making market-to-market comparisons. However, it is also possible that markets vary significantly in the degree to which data are available. If this

³⁵ Nielsen SoundScan provides data for the largest 99 DMAs as well as a “blended” DMA based on all others not in the top 99. In this analysis, we excluded the blended DMA since it consists of over 100 separate markets that are geographically dispersed across the entire United States.

is true, the use of incomplete data could confound the observed relationship between music recording sales and radio exposure. This could bias the data, and possibly does bias results reported in previous studies.

To address this potential for bias, estimates of radio music exposures were constructed here using standard data imputation techniques. Based on observed correlations between music exposures and a full set of local market and radio station characteristics, estimates were constructed for the subset of stations for which there was no information. These estimates were then summed and added to the actual DMA-level information for the other stations with complete information.³⁶

The second potential issue could arise due to a spurious correlation between music sales and radio exposure. One cause of this correlation could occur if there are unobserved factors, such as taste for music, that affect both sales and music exposures simultaneously. For example, imagine that residents of the Boston DMA are more likely to be sports fanatics. As a result, they spend less time listening to music, whether on the radio or from purchased recordings. Thus, radio exposures are lower as are music sales. However, these reductions do not imply a cause and effect. Instead, they are both lower due to an unobserved third factor, namely the taste for an alternative form of entertainment--sports.

To address this challenge, there are standard methodologies, called “instrumental variable” or “simultaneous variable” techniques. In a nutshell, these methods involve generating predictions for music exposures based on true relationships between actual exposures and a set of observed factors. Based on these true relationships, predictions were generated for each station. These predictions proved to be accurate. The predictions were not influenced by the aforementioned “unobserved” factors. So, the estimated relationships between predicted radio exposures and music sales had been purged of any spurious correlations.

1. Measuring Radio Exposure

³⁶ The listening audiences of most radio stations are mostly confined to the home DMA. However, radio signals frequently spill over into contiguous markets, resulting in music exposures across multiple DMAs. Although such spillovers represent a small portion of DMA audiences, the most precise DMA exposure measures should account for the actual location of listeners. To account for this, Arbitron audience information was allocated to specific DMAs.

As discussed earlier, the appropriate measure of advertising penetration is given by both reach and frequency. In the case of music exposure, this can be expressed as the listening audience times the number of spins. Information was obtained on ratings as well as airplay time.

2. Filling in Unavailable Station Data

Station audience ratings were available through Arbitron and the volume of music played was provided by Nielsen BDS and Mediaguide.³⁷ Table 4.1 reports the number of station-year combinations listed by BIA Financial Network as having the following music formats during the 2004, 2005 and 2006 calendar years: Adult Contemporary, Classic Rock, Oldies, Country, Jazz/New Age, Top 40, Spanish and Urban. Of the nearly 22,000 observations (over 7,000 stations in the sample for three years each), only about half had audience ratings. Music spins were provided for less than 20 percent of the sample.

Table 4.1
Frequency of Exposure Measures by Station Observations 2004-2006

Number of station observations, BIA Financial Network	21,922
Stations-years with Arbitron ratings	11,150
Music spins, Nielsen BDS	3,077
Music spins, Mediaguide (MG)	4,650

As demonstrated later in this section, the likelihood of being included in the Arbitron, Nielsen BDS or Mediaguide samples increases dramatically with the size of the station. We decided that these larger stations account for a significant portion of total radio audiences. However, we felt that data gaps remained potentially problematic, especially if the extent of unavailable information was correlated with other factors, such as market size. Thus, we decided that it was necessary to implement several empirical strategies, outlined below, to “fill in” or otherwise account for unavailable data. This care had not been taken for previous research on this topic.

³⁷ A subset of radio stations do not meet Arbitron minimum reporting standards. Meeting Arbitron’s minimum reporting standards requires that a station have: (1) at least five minutes of listening within a quarter-hour in 10 Metro diaries and (2) a .495 Metro Cume rating, and (3) a .05 Metro Average Quarter-Hour (AQR) rating.

3. Data Allocation to a Common Geographic Unit

For completeness, this study relied on information gathered from multiple organizations that provide data for incompatible geographic units. Nielsen data, including the Nielsen SoundScan music sales data and Nielsen BDS play data, were available at the DMA level. Arbitron data, as well as the BIA Financial Network information on radio station and local markets, were provided for radio markets as well as DMAs. Market data were gathered from government sources such as U.S. Census and Bureau of Labor Statistics. These data were only provided for counties, Metropolitan Statistical Areas (MSAs) and states.

As indicated, the key outcome measures, albums and digital tracks sold were provided at the DMA level. Since this represents the highest level of geographic aggregation, the DMA is the unit of analysis that makes the most sense. Unfortunately, the mapping of information from radio markets and MSAs into DMAs can not be accomplished in a straightforward manner. To deal with this, two strategies were employed. First, demographic and economic data were gathered primarily at the county level. Although not perfect, the cross-walks between counties and DMAs are quite precise. Lastly, radio station information was allocated on the basis of listening audience distribution across DMAs, which was available for all rated stations (through Arbitron). For stations where such information was not available, alternative assumptions were made and sensitivity tests conducted.³⁸

4. Distinguishing Causation from Spurious Correlation

The goal of this analysis is to establish a causal relationship between radio music exposure and sales of recorded music. The methodology should account for both observed and unobserved factors that will simultaneously affect both music exposure and retail sales. If this is not done, then one observes an artificial correlation having nothing

³⁸ In particular, stations without Arbitron information are much more likely to be stations with smaller, geographically confined audiences. Thus, the assumption that the distribution across DMAs would be the same for the stations with unavailable data probably understates the allocation to the home DMA. An alternative approach was to assume that all of the imputed audience and music exposure is local. Since these alternative methods can be viewed as extreme assumptions, the two sets of results serve to bound the possible error. As we will see, the results were not very sensitive to the approach taken, so this issue is, for all practical purposes, a nonissue.

to do with causation. For example, imagine that individuals in the South like Country music and audiences in the Northeast prefer news or sports formats. Not surprisingly, more stations will play Country music in the South while non-music formats will be more frequent in the Northeast. It would not be surprising to find that album sales will also be higher in the southern markets, not necessarily because of the radio exposure, but because local tastes increase music consumption across the board.

Spurious correlations could be negative as well. For example, imagine that low income levels promote radio listening (which is free) while discouraging the purchase of more expensive audio equipment such as computers, iPods and CDs. Without adequately controlling for such plausible income effects, the raw correlation between radio listening and music purchases could be negative.

A well-specified model that controls for most of the key factors limits the risk of such spurious correlations. Some unobserved factors not accounted for always will be observed. To address this, one can utilize simultaneous equation methods that can purge the data of the influence of these unobserved factors. By estimating a model that links radio play with exogenous factors that are observable, one can then utilize the predictions based on this model. Because the predictions will be based only on factors in the model and not on the factors excluded, the causal relationship will no longer be confounded.

5. Choosing the “Correct” Functional Form

Although the “S-Curve” has some intuitive appeal, the shape of the “true” relationship between music sales and airplay is impossible to establish *ex ante*. In this research, the choices will be guided by the evidence. That is, do the models explain the patterns in the data? Which specifications do a better job? And how sensitive are the key results to alternative assumptions?

Data Sources

Information for this study was derived from a variety of sources. Radio station characteristics and coverage area data were provided by BIA Financial Network. Ratings data for radio metro markets (average quarter hour audiences) were taken from Arbitron MaximiSer for spring and fall for the years 2004, 2005 and 2006. Radio ratings at the

DMA market level were also taken from Act 1 Systems software.³⁹ Digital track downloads and album sales by broad genre categories were obtained from Nielsen SoundScan for the 99 largest DMAs. Annual music playtime, or track spins, for a subset of stations, was obtained from Nielsen BDS. Supplemental spin information was provided by Mediaguide for spring and fall of 2004-2006.

Additional demographic information, describing the demographic and economic characteristics of both the radio metro markets and DMAs, was gathered from the Bureau of the Census, the Current Population Survey, the Bureau of Labor Statistics, BIA Financial Network and Arbitron.

The Radio Station Data Base

Table 4.2 describes the primary radio station sample. All stations identified in the BIA Financial Network database as being educational, low power, “dark,” or non-commercial were excluded. Format categories included Adult Contemporary, Classic Rock, Country, Jazz/New Age, Oldies, Rock, Spanish, Top 40, and Urban.⁴⁰ In the logistic analysis reported below, Ethnic, Religious, Classical and all other music formats were also included. Since the focus of this study is the influence of radio play on music sales, non-music formats were excluded. Accordingly, stations reporting news, sports, or talk formats were not analyzed.

For each station, a dummy variable was constructed for the class of station, A through D. These designations are based on signal strength as well as spectrum location.

³⁹ Act 1 Systems software makes Arbitron summary data sets available at the DMA level and also allows multimarket analyses.

⁴⁰ Format categories were reported by BIA Financial Network as well as by Arbitron. The correlations between these data were quite high, though imperfect. The main advantage to the Arbitron information was the finer distinction between Spanish categories such as Spanish “Talk” and Spanish “Adult Contemporary.” On the other hand, the Arbitron formats were only available for the subset (about 50%) of BIA Financial Network stations. Since a key part of the estimation was to account for the influence of those stations that were not rated, the BIA Financial Network format data were more useful. In cases (< 1%) where there was no BIA Financial Network information, the Arbitron formats were utilized.

Table 4.2
Station Data Set

Variable	Mean	Standard Deviation
Exposure Variables:		
Arbitron audience	4,654	9,216
log(Arbitron audience)	7.5490	1.3482
exposures, Nielsen BDS spins * Arbitron audience	1,086,816,456	1,353,805,426
log (exposures)	20.3723	0.9052
Mediaguide spins, Fall + Spring	45,477	12,785
log(spins)	10.6113	0.7279
Nielsen BDS spins (full year)	97,420	15,439
Explanatory Variables		
log(market population)	11.4011	1.7124
% Asian	1.6749	3.5772
% African American	6.4118	9.8222
% Hispanic	8.3886	17.2927
FM Power < 2	0.0453	0.2079
FM Power 2-5	0.1299	0.3362
FM Power 5-10	0.1154	0.3196
FM Power 10-20	0.0661	0.2485
FM Power 20-30	0.0604	0.2382
FM Power 30-60	0.1195	0.3244
FM Power 60-80	0.0116	0.1072
FM Power 80+	0.1678	0.3737
% Age 12-17	0.1010	0.0117
% Age 35-54	0.3383	0.0279
% Age 55 +	0.2741	0.0405
East North Central	0.1322	0.3387
East South Central	0.0933	0.2909
Middle Atlantic	0.0718	0.2582
Mountain	0.0933	0.2909
Pacific	0.1037	0.3049
South Atlantic	0.1453	0.3524
West North Central	0.1124	0.3158
West South Central	0.1254	0.3311
log(Class A Stations)	0.7290	0.9492
log(Class B Stations)	0.4936	0.9574
log(Class C Stations)	0.8430	1.1950
log(Class D Stations)	0.6791	1.0895
Black*Urban Format	1.0079	5.2703
Hispanic*Spanish Format	3.4277	14.6488
Owner #1 Rank	0.0610	0.2394
Owner #2 Rank	0.0131	0.1139
Owner #3 Rank	0.0096	0.0974
Owner #4 Rank	0.0082	0.0902
Owner #5 Rank	0.0692	0.2539
Owner #6 Rank 6-10	0.0441	0.2052
Owner #7 Rank 10-20	0.0287	0.1671

Table 4.2
Station Data Set
(continued)

Variable	Mean	Standard Deviation
Owner # 8, All other group owners	0.4216	0.4938
Digital signal	0.1059	0.3077
log(DMA households)	7.1308	1.0807
Class A Station	0.2638	0.4407
Class B Station	0.1655	0.3716
Class B1 Station	0.0227	0.1488
Class C Station	0.1349	0.3416
Class C0 Station	0.0197	0.1389
Class C1 Station	0.1089	0.3116
Class C2 Station	0.0839	0.2772
Class C3 Station	0.0789	0.2696
Classic Rock Format	0.0786	0.2692
Country Format	0.2707	0.4443
Jazz/New Age Format	0.0086	0.0925
Oldies Format	0.1052	0.3068
Rock Format	0.0970	0.2959
Spanish Format	0.1172	0.3217
Top 40 Format	0.0619	0.2411
Urban Format	0.0527	0.2235
Year = 2005	0.3329	0.4712
Year = 2006	0.3265	0.4689

For FM stations a series of dummy variables signifying the signal strength were constructed. Signal strength categories, expressed in kilowatts, range from under two to over 80. These class and power designations influence the quality and reach of the radio signal.

Ownership variables were constructed for the largest radio groups, including Clear Channel Communications, Inc., Infinity Broadcasting Corp. (now CBS Radio Inc.), Entercom Communications, Corp., Citadel Broadcasting Corp. and Cox Radio, Inc. Dichotomous variables were set equal to one for ranking group owners 6-10, 10-19 and all other stations owned by smaller groups.

Competition from other stations was indicated by the market's total number of Class A, B, C and D stations. These variables were expressed in logarithmic form. Also, dummies were created for digital stations and for the years 2006 and 2005.

Demographic characteristics included the 12+ population of the radio market area or primary coverage area, the market's population percentage for Asians, African Americans and Hispanics, individuals aged 12-17, 18-34, 35-54 and 55 and older and the population of the home DMA in households. Nine distinct regions of the country were identified. Urban and Spanish formats were interacted with the population percentages for African Americans and Hispanics, respectively.

The Unavailable Data Challenge

As indicated, ratings and music play time information were not available for a large number of stations. If such information is systematically unavailable (that is, if there are characteristics that are correlated with data availability and at the same time with music sales), then this deficiency could bias any effort to link sales with music exposures.

To explore whether this is the case, logistic regressions were used to link the probability of inclusion in the Arbitron, Nielsen BDS spins or Mediaguide spins samples to station and market characteristics. The results of this analysis are presented in Table 4.3. Clearly, results indicate that data availability is quite predictable. In particular, stations in large radio markets and those delivering a strong signal are more likely to meet Arbitron's minimum ratings standards and be covered by music monitoring services. Such stations have larger audiences and higher advertising revenues than stations in smaller radio markets. It is worth noting that the sign of the DMA household coefficient is negative for the Arbitron sample. This is because stations with a coverage population that is smaller than the home DMA are less attractive to regional advertisers trying to penetrate the larger market. In addition, stations face more competition from other media, especially television stations, in large DMAs. Finally, there are significant differences between format types. Stations with ethnic or religious formats are less commercially oriented, and are therefore less likely to have ratings or music play time information.

To make these relationships concrete, several simulations based on the model are provided in Table 4.4. The predictions represent the probability that a station with assumed characteristics will appear in the Arbitron, Nielsen BDS and Mediaguide samples, respectively. The base case represents a typical station with an Adult

Contemporary music format located in an average-sized radio market with a class C0 license (strong signal, favorable spectrum location). Almost 90 percent of such stations will have Arbitron ratings that meet minimum reporting standards, although spins data will be unavailable for most stations (only four percent and 17 percent representation in the Nielsen BDS and Mediaguide samples, respectively). However, for the largest markets within the largest DMAs, there are virtually no unavailable data.

Table 4.3
Probability of Radio Station Having Audience and Spins Data

Dependent Variable (0,1)	In Arbitron Sample:		In Mediaguide		In Nielsen BDS Sample	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-1.7654	0.9124	-20.8147	1.0534	-23.2746	1.3183
log(DMA households)	-0.4501	0.0371	0.1576	0.0430	0.1375	0.0558
log(radio market pop)	0.5507	0.0295	1.0130	0.0420	1.1829	0.0557
% Asian	-0.0173	0.0077	-0.0419	0.0094	-0.0064	0.0089
% African American	-0.0187	0.0034	0.0049	0.0038	0.0206	0.0044
% Hispanic	-0.0038	0.0029	0.0014	0.0029	0.0011	0.0035
Population Growth	-1.3594	0.7820	0.1864	0.8380	-1.9297	1.0156
Class A Station	1.6658	0.1202	2.7685	0.2523	2.6371	0.3421
Class B Station	0.9260	0.1056	1.6833	0.2428	2.0017	0.3268
Class B1 Station	3.1448	0.4353	2.9469	0.3250	2.7435	0.4331
Class C Station	0.9822	0.1175	2.4200	0.2518	2.6290	0.3367
Class C0 Station	3.9822	1.0153	2.5624	0.3214	2.8018	0.3918
Class C1 Station	2.6519	0.2722	2.3831	0.2640	2.3711	0.3491
Class C2 Station	3.0285	0.2821	2.5366	0.2710	2.5316	0.3591
Class C3 Station	2.0803	0.1981	2.7271	0.2888	2.6818	0.3852
Adult Contemporary	0.7320	0.3807	4.3458	0.2181	5.7463	0.3994
Classic Rock Format	0.9765	0.4148	3.9522	0.2365	5.0456	0.4176
Country Format	0.4113	0.3739	4.1807	0.2219	5.6864	0.4044
Jazz/New Age Format	0.8162	0.5991	4.7356	0.4073	6.2319	0.5472
Oldies Format	0.2431	0.3856	4.0847	0.2486	3.8209	0.4648
Religion Format	-1.0014	0.3713	2.7124	0.2373	4.3338	0.4123
Rock Format	0.6149	0.3910	3.2287	0.2280	5.8520	0.4050
Spanish Format	-0.5077	0.3755	3.8492	0.2292	5.0679	0.4068
Top 40 Format	1.2588	0.4318	4.4032	0.2337	6.5109	0.4113
Urban Format	0.8530	0.4091	4.5095	0.2412	6.6242	0.4139

Note that smaller radio markets, especially those located within large DMAs are potentially problematic. Spins data are rarely provided and only about 65 percent of these stations meet Arbitron's minimum reporting standards. Lower power stations, in

particular Class D stations, are much less likely to be included. Data are unavailable for less commercial stations, especially those with lower ratings because of Arbitron's minimal reporting standards. For example, data are seldom available for ethnic formats such as Korean music or religious stations.

Recall that the music sales data provided by Nielsen SoundScan are compiled at the DMA level for only the 99 largest markets. Thus, data being unavailable for all markets may not be as significant a problem, especially if the analysis is restricted to general interest, commercial music genres.

Table 4.4
Simulations of Probability of Stations Having Ratings and Spins Data

Scenario	Arbitron	Nielsen BDS	Mediaguide
Base Case	88	4	17
Largest Market, Largest DMA (10M), Top 40	100	99	98
Large Market, Large DMA (3M)	100	89	93
Small Market (100K), Large DMA	65	1	5
Small Market, Small DMA (200K)	86	1	3
Average Market, Small DMA	100	39	60
Small Market, Small DMA, Class D Station	54	1	3
Small Market, Large DMA, Class D, Religious	17	0	1
Small Market, Large DMA, Class D, Ethnic	5	0	0

Base Case: Average Market (500K), Average DMA (1M), Class C0, Adult Contemporary Format

However, most stations have broadcast audiences that spill into contiguous DMAs. In addition, small radio market stations located under the umbrella of larger DMAs are especially underrepresented. Thus, a method for addressing the unavailable data challenge is necessary if one is to have confidence in final results.

Methods for Data Imputation

Two approaches were utilized to account for unavailable data. The first applied an ordinary least squares regression methodology (OLS), linking ratings and exposure information with known station characteristics. As an alternative, multiple imputation Markov Chain Monte Carlo techniques (MI) were utilized.⁴¹ Table 4.5 outlines the structure and source of the resulting data sets.

The first data set is a mix of actual values for ratings and available exposures (ratings times spins, *rs*) and imputations based on a regression approach.⁴² The second imputation also mixes actual and imputed values, but this time a MI approach is utilized.⁴³ The sample only includes stations for which there are reported Arbitron ratings, that is, stations that meet Arbitron’s minimum reporting requirements. The final imputation also utilizes MI techniques but this time a full sample of values is created for all stations in the BIA Financial Network data set.

Table 4.5

Imputation Approaches

Data Set, Observations	Approach
Imputation m ₁	Series of OLS regressions of ratings and Nielsen BDS exposures, predicted as a function of station and market

⁴¹ The MI method is detailed in Rubin, D.B. (1987), *Multiple Imputation for Nonresponse in Surveys*, New York: John Wiley & Sons, Inc. In each case, five separate imputations were created and combined using PROC MI from the SAS Institute software.

⁴² Average predictions of levels based on a log model will tend to understate the actual values on average (this is because the average of the $\log(x)$ is not equal to the $\log(\text{average } x)$). Thus, a standard transformation was set equal to $\exp(\bar{\epsilon})$, the average of the sample exponentiated residuals. This transformation increased the predictions by an average of about 20 percent across all models.

⁴³ One advantage to the MI approach was that the technique also filled in unavailable values for all the covariates. Thus the data set, used subsequently for generating a full set of predicted values, is slightly more complete. It is noteworthy, however, that the correlation between methods was .95 and in analysis reported below, there was virtually no difference in empirical findings.

	<p>characteristics. Unavailable values code utilized only for Arbitron stations for which station data were unavailable.</p> <p>Step 1: If e (Nielsen BDS exposures) is missing, $m_1 = f(x, r, s)$ where x represents station and market characteristics, r is Arbitron ratings data and s are Mediaguide radio spins, where available.</p> <p>Step 2: If s is also missing, then $m_1 = f(x, r)$.</p> <p>Step 3: If a is also missing, then $m_1 = f(x)$.</p>
Imputation m_2	Multiple imputation techniques. Five imputations utilized and averaged for sample of Arbitron stations only.
Imputation m_3	Multiple imputation techniques. Five imputations utilized and averaged for complete BIA Financial Network sample.

Table 4.6 reports the regressions utilized for the first imputation data set m_1 . These regressions were also used to generate predictions for the complete data set as the first stage in the two-stage analysis of radio plays and the impact on music sales described below. The first model regresses Arbitron audiences at the station level in logarithms as a function of market and station characteristics. Note that the model for stations does well at predicting audiences with an R^2 of about .75. Since we will end up summing these predictions for multiple stations at the DMA-level, the accuracy will be even higher in the aggregate.

Table 4.6
Regressions to Impute Music Exposure

Variable	Log (Arbitron audience)		Log (Nielsen BDS exposures)		Log (Nielsen BDS exposures)		Log (NielsenN BDS exposures)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-1.6215	0.1852	9.5521	0.1407	10.3925	0.1107	11.7749	0.3789
log(Arbitron audience)	-	-	0.9910	0.0062	0.9825	0.0056	-	-
log(Mediaguide spins)	-	-	0.1147	0.0075	-	-	-	-
log(market population)	0.4786	0.0081	-0.0200	0.0055	-0.0140	0.0045	0.3446	0.0139
% Asian	0.0033	0.0019	0.0033	0.0012	0.0005	0.0006	0.0024	0.0020
% African American	-0.0022	0.0011	0.0000	0.0005	-0.0008	0.0004	0.0020	0.0014
% Hispanic	0.0018	0.0008	0.0007	0.0003	0.0004	0.0003	0.0021	0.0009
FM Power < 2	0.4850	0.0404	0.0413	0.0274	0.0565	0.0222	0.0638	0.0762
FM Power 2-5	0.4605	0.0325	0.0320	0.0219	0.0550	0.0193	0.1523	0.0661
FM Power 5-10	0.6188	0.0312	0.0453	0.0212	0.0519	0.0185	0.2070	0.0634
FM Power 10-20	0.8114	0.0354	0.0342	0.0224	0.0492	0.0196	0.2341	0.0672
FM Power 20-30	0.8385	0.0366	0.0429	0.0225	0.0403	0.0199	0.2357	0.0680
FM Power 30-60	0.8624	0.0321	0.0285	0.0218	0.0387	0.0193	0.1814	0.0661
FM Power 60-80	0.9400	0.0645	0.0212	0.0262	0.0373	0.0237	0.1502	0.0813
FM Power 80+	0.9988	0.0381	0.0237	0.0237	0.0383	0.0212	0.1523	0.0728
% Age 12-17	1.4951	0.9103	1.1325	0.5172	0.8816	0.4510	-5.2413	1.5424
% Age 35-55	0.7458	0.2828	0.1009	0.0797	0.0693	0.0762	-0.0628	0.2613
% Age 55 +	1.0028	0.2134	-0.0762	0.1197	0.0511	0.1008	-1.2902	0.3446
East North Central	-0.2186	0.0352	-0.0291	0.0147	-0.0151	0.0131	-0.1452	0.0447
East South Central	-0.1969	0.0431	-0.0240	0.0191	0.0021	0.0170	-0.2858	0.0582
Middle Atlantic	-0.0534	0.0371	-0.0107	0.0158	-0.0054	0.0136	0.0266	0.0467
Mountain	-0.3703	0.0453	-0.0447	0.0193	-0.0097	0.0174	-0.3473	0.0591
Pacific	-0.2779	0.0414	-0.0619	0.0181	-0.0339	0.0153	-0.3983	0.0519
South Atlantic	-0.2441	0.0386	-0.0375	0.0170	-0.0052	0.0149	-0.2383	0.0510
West North Central	-0.3042	0.0411	-0.0469	0.0194	-0.0096	0.0174	-0.1455	0.0597
West South Central	-0.2356	0.0432	-0.0390	0.0192	-0.0112	0.0170	-0.1886	0.0581

Table 4.6
 Regressions to Impute Music Exposure
 (continued)

Variable	Log (Arbitron audience)		Log (Nielsen BDS exposures)		Log (Nielsen BDS exposures)		Log (Nielsen BDS exposures)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
log(Class A Stations)	0.0990	0.0097	-0.0004	0.0039	0.0033	0.0036	0.0574	0.0124
log(Class B Stations)	0.1328	0.0148	0.0037	0.0075	0.0178	0.0067	0.1384	0.0228
log(Class C Stations)	0.1094	0.0122	0.0031	0.0076	0.0056	0.0069	-0.0116	0.0235
log(Class D Stations)	0.1160	0.0104	-0.0199	0.0045	-0.0193	0.0041	0.0397	0.0141
Black*Urban Format	0.0061	0.0021	-0.0028	0.0007	-0.0025	0.0006	0.0098	0.0021
Hispanic*Spanish Format	0.0007	0.0012	0.0028	0.0005	0.0029	0.0005	0.0073	0.0016
Owner #1 Rank	0.3759	0.0404	0.0745	0.0174	0.0682	0.0171	-0.1618	0.0583
Owner #2 Rank	0.5293	0.0563	0.0534	0.0191	0.0435	0.0187	-0.1055	0.0640
Owner #3 Rank	0.2743	0.0619	0.0546	0.0206	0.0567	0.0199	-0.2279	0.0680
Owner #4 Rank	0.3106	0.0649	0.1144	0.0237	0.1134	0.0224	-0.1555	0.0766
Owner #5 Rank	0.3348	0.0388	0.0343	0.0179	0.0346	0.0174	-0.3005	0.0593
Owner #6 Rank	0.4592	0.0431	0.0479	0.0184	0.0445	0.0179	-0.1562	0.0613
Owner #7 Rank	0.3180	0.0449	0.0106	0.0179	0.0072	0.0174	-0.1726	0.0595
Owner #8 Rank	0.2092	0.0345	0.0560	0.0176	0.0500	0.0171	-0.2614	0.0585
Digital signal	0.1940	0.0233	0.0017	0.0072	-0.0052	0.0066	0.0788	0.0227
log(DMA households)	0.1144	0.0082	-0.0011	0.0056	0.0059	0.0048	0.3001	0.0153
Class A Station	0.6124	0.0492	0.9224	0.0599	1.2238	0.0554	2.0096	0.1895
Class B Station	0.3993	0.0481	0.8956	0.0597	1.1906	0.0553	2.0200	0.1891
Class B1 Station	0.6104	0.0599	0.9203	0.0621	1.2503	0.0575	1.9658	0.1966
Class C Station	0.3263	0.0538	0.9220	0.0613	1.2315	0.0568	2.4808	0.1934
Class C0 Station	0.3712	0.0655	0.9024	0.0617	1.2111	0.0573	2.3558	0.1953
Class C1 Station	0.2326	0.0563	0.9302	0.0612	1.2428	0.0567	2.2889	0.1934
Class C2 Station	0.3663	0.0535	0.9140	0.0607	1.2345	0.0562	2.2569	0.1917

Table 4.6
Regressions to Impute Music Exposure
(continued)

Variable	Log (Arbitron audience)		Log (Nielsen BDS exposures)		Log (Nielsen BDS exposures)		Log (Nielsen BDS exposures)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Class C3 Station	0.4949	0.0550	0.8831	0.0622	1.2158	0.0572	2.1595	0.1954
Classic Rock Format	0.0643	0.0262	-0.1886	0.0123	-0.1997	0.0108	-0.1903	0.0371
Country Format	0.2439	0.0217	0.0433	0.0084	0.0521	0.0083	0.3187	0.0280
Jazz/New Age Format	0.1479	0.0606	-0.2365	0.0174	-0.2384	0.0175	-0.0498	0.0598
Oldies Format	0.0777	0.0285	0.1206	0.0197	0.1066	0.0190	0.2232	0.0653
Rock Format	-0.0093	0.0248	-0.1256	0.0122	-0.0981	0.0086	-0.1771	0.0293
Spanish Format	0.1047	0.0460	-0.2861	0.0209	-0.2867	0.0193	-0.3285	0.0661
Top 40 Format	0.1869	0.0266	0.0237	0.0084	0.0312	0.0083	0.1444	0.0283
Urban Format	0.4694	0.0518	-0.0471	0.0162	-0.0574	0.0152	0.2161	0.0517
Year = 2005	-0.0300	0.0167	0.0421	0.0064	0.0460	0.0059	0.0229	0.0204
Year = 2006	-0.0485	0.0169	0.0542	0.0064	0.0521	0.0059	-0.0038	0.0202
	R ²	0.7449	R ²	0.9818	R ²	0.9806	R ²	0.7723

The next three regressions link the log of music exposures, as provided by Nielsen BDS, with the same set of exogenous covariates. The first set utilizes the playtime information provided by Mediaguide. Not surprisingly, this model does an excellent job of predicting Nielsen BDS-provided exposures. Indeed, both organizations purport to measure the same outcome, so it would be disappointing if they did deviate significantly.⁴⁴ Since about 25 percent of the stations not covered by Nielsen BDS have Mediaguide information, this was an excellent source of additional information.

The next model utilizes ratings information to impute exposures in cases where both Nielsen BDS and Mediaguide spin data were unavailable. This model performs nearly as well as the previous model, suggesting that much of the variation in music exposure can be accounted for by ratings differences and exogenous market and station characteristics. The results suggest that the amount of music played by a station can vary significantly by format, market demographics, and station characteristics. For example, the “left-out” format variable is Adult Contemporary, so all the coefficients related to format can be viewed as comparisons with the Adult Contemporary base case. Thus, one finds that stations with Oldies formats play about 10 percent more music (about one song per hour), while Spanish formats play nearly 30 percent less than Adult Contemporary stations.

The final model links exposures to exogenous market factors, a set of results that will be useful in providing music exposure predictions for the complete sample of stations with or without ratings and/or spins information. Naturally, this model does not perform as well, but with an R^2 of .77, predictions are accurate, especially if aggregated over multiple radio stations located in large geographic areas such as DMAs.

Estimating the Effects of Radio Performance on Music Sales

The next stage of the analysis was to link sales of music recordings to the aforementioned measures of music exposures on radio stations. As indicated, Nielsen SoundScan provided information on album sales and digital downloads of tracks, aggregated by DMA. These data are summarized in Table 4.7. Over the three-year

⁴⁴ The Nielsen BDS and Mediaguide measures would not be exact because of occasional technical failures and the fact that there are sometimes unaccounted for differences in coverage, especially with the inevitable format and ownership changes that can occur. In addition, Mediaguide spins were for two quarters, Fall and Spring, while the Nielsen BDS information covered the whole year. Still, with an R^2 of over .98, the accuracy is outstanding.

period, sales of albums (primarily in the form of compact discs) averaged about 5.5 million in the 99 largest DMAs. Since the largest DMAs represent about 85 percent of the country's population, this suggests that total annual sales were nearly \$650 million annually. Digital track downloads averaged about 3.1 million over this time period. However, as discussed earlier, album sales were declining over this period (by about 13 percent) while digital downloads grew by over 600 percent. Indeed, in 2006 digital track sales exceeded the volume of albums.

Nielsen SoundScan also provided information on broad subcategories of album sales. About 64 percent of the total are considered "Current" or recently released recordings as opposed to older recordings, called "Catalog" albums. Other music genres analyzed were Country, R&B and Rap categories, representing about 12, 22 and 11 percent respectively.⁴⁵

Since the primary outcome variables of interest were only made available at the DMA-level, information on radio stations had to be allocated at the same level. In cases where values were imputed, station outcomes were assigned to the home DMA. If, as is probable, these stations are more likely to be smaller stations with confined audiences, this method is likely to be accurate.⁴⁶ These audience measures are described in Table 4.8.

Actual ratings are expressed on a per capita basis for audiences listening to all music stations during an average quarter hour between 6 a.m. and midnight. Information is also for selected formats, including Urban, Oldies and Classic Rock and Country music. Actual reported exposures are also presented on a per capita basis. The mean value is just over 5,000 for all categories of music.

⁴⁵ Information on "Latin" genre sales was also made available, but these were not analyzed because of problems identifying Spanish music radio stations from other Spanish stations with formats that were primarily news, talk, or sports.

⁴⁶ As discussed, our final results were not sensitive to an alternative assumption, namely, that a station's audience distribution reflects the distribution that is typical of other stations located in the same DMA.

Table 4.7
Nielsen SoundScan Data on Music Recording Sales 2004-2006

Music Sales (1000s)	DMA Mean	Standard Deviation
Albums	5,477	6,531
Tracks	3,132	5,951
Current	3,450	4,004
Top 100	2,103	2,322
Catalog	2,028	2,540
Country	648	424
R&B	1,246	1,576
Rap	616	732
Latin	290	501

Exposure data are also presented for imputed variables (m_2, m_3). Numbers for the first set of imputations provided (m_2), are about 50 percent higher than totals for the actual numbers reported (that is, those not imputed). This is because actual spins data were not available for most stations and adding imputed values increases totals significantly. The second set of imputations (m_3) represents all radio stations in the BIA Financial Network data set, not just those for which the most reliable Arbitron ratings are available (those meeting minimum reporting standards).

Table 4.8
Measures of Music Exposure by DMA

Measures:	Mean	Standard Deviation
Ratings Total	0.0882	0.0167
Ratings Urban	0.0108	0.0104
Ratings Oldies and Classic Rock	0.0137	0.0069
Ratings Country	0.0215	0.0115
Exposures Total	5,086	2,101
Exposures Urban	852	828
Exposures Oldies and Classic Rock	374	449
Exposures Country	1,177	811
Imputed Exposures Total (m_2)	9,246	2,359
Imputed Exposures, Urban (m_2)	1,082	974
Imputed Exposures, Oldies and Classic Rock (m_2)	1,463	869
Imputed Exposures, Country (m_2)	2,286	1,351
Imputed Exposures Total (m_3)	14,348	3,923
Imputed Exposures, Urban (m_3)	1,488	1,513
Imputed Exposures, Oldies and Classic Rock (m_3)	2,322	1,291
Imputed Exposures, Country (m_3)	3,794	2,121

Data were also gathered summarizing the demographics and economy of the DMA coverage area. For the most part, these data were based on county-level information and allocated to DMAs. In most cases every county was allocated to one and only one DMA.⁴⁷ In the eight cases where this was not true, data were allocated using the proportion of DMA listening household counts for each county. The complete set of covariates is provided in Table 4.9.

In addition to the actual ratings and music exposures and three sets of imputations, five sets of predictions (\hat{r} , \hat{e} , \hat{m}_1 , \hat{m}_2 , \hat{m}_3) were also generated at the station level and allocated to DMAs. These predicted values were generated using the models for the Arbitron audience (reported in the first two columns of Table 4.6) and for Nielsen BDS exposures (reported in the last two columns of the same table). Note that these models can be viewed as “reduced form” expressions, because they predict ratings and exposures as a function of variables that can be considered to be exogenous. It is important that the models also contain a set of variables that are unlikely to affect music purchases *directly*, though they will have an indirect effect by influencing the amount of radio listening. These variables are station characteristics such as class of license, signal power and format.

Summing these predictions by DMA provides an additional set of explanatory variables to utilize in explaining album sales and digital track downloads. Since they are predicted rather than actual, the DMA levels are not affected by unobserved factors that are capable of influencing both recording sales *and* radio music airplay

⁴⁷ The FIPS (County) to DMA correspondence algorithm was derived from “U.S. Television Households, September 2005,” Nielsen Media Research. The following information was allocated in this manner:

Retail employment, unemployment, average household earnings and total income were downloaded from the Bureau of Labor statistics (<http://stats.bls.gov>).

Population counts were downloaded from the US Census Bureau Web site, www.census.gov. Population by age was obtained at the FIPS level. Population by age group was originally at the ZIP code level. These counts were aggregated from ZIP code to FIPS using the ZIPList5 Geocode file from CD Light (available on www.zipinfo.com). Population by ethnicity was downloaded at the FIPS level.

Information on Internet usage was taken from the Current Population Survey, October 2003: School Enrollment and Computer Use Supplement. The CPS reports results at several geographic levels. However, estimates formed for geographic areas smaller than states are not considered to be reliable. To obtain estimates for DMA counts, state level data were first allocated to FIPS based on a county’s share of total state population 18 years and over. These FIPS level data were then aggregated to DMAs.

Data on average commuting times were provided by Arbitron.

Table 4.9
DMA-Level Data

Variable	Means	Standard Error
East North Central	0.0909	0.2880
East South Central	0.1111	0.3148
Middle Atlantic	0.0707	0.2568
Mountain	0.0606	0.2390
Pacific	0.0808	0.2730
South Atlantic	0.1919	0.3945
West North Central	0.1010	0.3019
West South Central	0.1313	0.3383
Log(population 12+)	1,975,778	2,265,297
% Asian	0.0216	0.0251
% African American	0.1140	0.0984
% Hispanic	0.0832	0.1060
% Age 18-24	0.1130	0.0166
% Age 25-34	0.1593	0.0164
% Age 35-44	0.1841	0.0104
% Age 45-54	0.1567	0.0080
% Age 55-64	0.1026	0.0097
% Age 65+	0.1506	0.0298
log(population with access to Internet)	468,240	565,272
log(population with DSL connections)	74,021	105,872
log(population with cable connections)	101,347	155,729
log(population downloading entertainment media)	91,605	111,651
log(hourly earnings)	16.02	1.80
log(commute)	23.53	3.13
log(average commuting time)	41,665	6,360
log(unemployment rate)	5.11	1.16
log(retail wage)	448.92	53.26
% Retail employment	0.1191	0.0952
% Construction	0.0567	0.0653
% Food Services	0.0703	0.0621
% Manufacturing	0.1192	0.0771
% Health Care	0.1015	0.0708
log(radio stations)	49.13	18.86
% Class A stations	0.2750	0.1468
% Class B stations	0.2228	0.2131
% Class B1 stations	0.0206	0.0357
% Class C stations	0.1449	0.1410
% Class C0 stations	0.0284	0.0481
% Class C1 stations	0.0790	0.0881
% Class C2 stations	0.0641	0.0709
% Class C3 stations	0.0631	0.0651

simultaneously. By utilizing these predictions rather than actual levels, one can be more confident that any observed correlation reflects a causal relationship.

It is also worth mentioning that these models explain a significant portion of observed ratings and exposures to music with R^2 s of .74 and .77 respectively. Indeed, at the DMA level the explanatory power is even greater, because regression inaccuracies tend to balance out when multiple predictions for individual stations are aggregated. For ratings, the correlation between actual ratings (in logarithms) and the ratings predicted by the model is .951 at the DMA level. For exposures, the correlation is even higher, at .987. This close correspondence suggests that the potential for biases due to the omission of key explanatory variables is at a minimum.

The Impact of Radio Playtime

In Table 4.10, regression results for six categories of DMA music sales are reported. The categories analyzed are total albums, digital tracks, and four subsets of album sales: Catalog, Urban (R&B plus Rap), Country and Current. The dependent variables were expressed as logarithms of total sales. In this set of regressions, predicted values for the full set of imputed measures of music exposures were utilized (\hat{m}_3). These values were expressed as exposures per capita, measured in thousands. Thus, the sample mean of 14,438 took on the value of 14.438 in the regressions. For the first broad categories representing all genre sales, the exposures were measured for the full set of popular music radio formats, including Adult Contemporary, Country, Classic Rock, Oldies, Jazz/New Age, Rock, Spanish, Top 40, and Urban.⁴⁸ For the “Catalog” genre, exposures were compiled for Classic Rock and Oldies stations only. The Urban and Country music album sales were also linked with radio music exposures for those genres only.

⁴⁸ These formats were selected on the basis of comparisons between playlists of radio stations and sales of particular albums. For other formats, such as Classical Music, Big Band or Nostalgic, Inspirational or Christian Music, the tracks typically played could not be found on comprehensive lists of record sales. Thus, the analysis was restricted to the aforementioned music genres and the radio formats that emphasize them.

Table 4.10
Impact of Music Exposures (m_3 Predicted) on Recording Sales

Variable	Log (Albums)		Log (Tracks)		Log (Current)		Log (Catalog)		Log (Urban)		Log (Country)	
	Coeff.	Stand. Error	Coeff.	Stand. Error	Coeff.	Stand. Error	Coeff.	Stand. Error	Coeff.	Stand. Error	Coeff.	Stand. Error
Intercept	-13.1198	1.8308	-36.4887	2.1790	-5.7335	1.7807	-8.1332	2.1569	-9.3350	2.7137	-1.6031	2.3339
Exposures per cap predicted*	0.0097	0.0022	0.0112	0.0026	0.0090	0.0021	0.0236	0.0074	0.0217	0.0130	0.0399	0.0058
year = 2006	-0.1624	0.0180	1.9312	0.0214	-0.1988	0.0175	-0.1051	0.0212	-0.4336	0.0259	-0.0806	0.0222
year = 2005	-0.1028	0.0153	1.4047	0.0182	-0.1230	0.0148	-0.0700	0.0181	-0.1719	0.0224	-0.0538	0.0193
East North Central	0.0139	0.0353	-0.0211	0.0420	0.0330	0.0343	-0.0029	0.0416	0.0243	0.0523	0.1524	0.0465
East South Central	0.0639	0.0379	-0.0437	0.0451	0.0249	0.0369	0.1215	0.0455	0.0170	0.0564	-0.0821	0.0483
Middle Atlantic	0.0695	0.0483	0.1584	0.0574	0.0455	0.0469	0.1187	0.0573	0.2010	0.0717	-0.0585	0.0628
Mountain	0.1740	0.0454	0.1626	0.0540	0.1084	0.0441	0.2732	0.0539	0.1700	0.0678	-0.1482	0.0581
Pacific	0.1433	0.0608	0.2168	0.0724	0.0922	0.0592	0.2005	0.0721	0.1682	0.0911	0.0160	0.0778
South Atlantic	0.0351	0.0403	0.0777	0.0480	0.0540	0.0392	0.0101	0.0478	0.0808	0.0603	0.1707	0.0528
West North Central	-0.0111	0.0289	0.0827	0.0344	-0.0138	0.0281	0.0049	0.0343	-0.0128	0.0432	-0.0115	0.0381
West South Central	-0.0216	0.0371	0.0151	0.0441	-0.0200	0.0360	-0.0307	0.0439	-0.0735	0.0552	0.2060	0.0486
log(population 12+)	0.4292	0.1839	1.1174	0.2189	0.4294	0.1789	0.3961	0.2185	0.5512	0.2747	0.9500	0.2364
% Asian	-0.5917	0.5335	-1.0499	0.6350	-0.6201	0.5189	-0.2016	0.6298	0.2075	0.7924	-3.1888	0.6817
% African American	0.2840	0.1354	-0.2362	0.1611	0.2839	0.1317	0.3715	0.1596	2.0192	0.2624	-1.4325	0.1749
% Hispanic	0.0955	0.1115	0.2448	0.1326	0.1241	0.1084	0.1463	0.1288	0.6332	0.1783	-1.1043	0.1387
% Age 18-24	3.9405	1.5054	12.0067	1.7917	3.0176	1.4641	5.5384	1.7926	5.6269	2.2515	-1.4569	1.9145
% Age 25-34	-1.0633	1.4116	2.0202	1.6801	-0.3178	1.3730	-2.6689	1.6745	-5.7863	2.1062	-0.5291	1.8079
% Age 35-44	3.1282	2.5346	9.9828	3.0166	1.9821	2.4651	4.7352	3.0030	9.5371	3.7788	-9.9548	3.2438
% Age 45-54	2.5563	1.8735	7.5317	2.2298	1.4618	1.8222	4.1464	2.2247	-4.3570	2.9134	4.9719	2.4054

Table 4.10 (continued)
Impact of Music Exposures (m_3 Predicted) on Recording

Variable	Log (Albums)		Log (Tracks)		Log (Current)		Log (Catalog)		Log (Urban)		Log (Country)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
% Age 55-64	5.7517	2.1413	4.2537	2.5485	5.3721	2.0826	6.1623	2.5426	12.1269	3.1877	4.9090	2.7147
% Age 65+	-0.2270	1.0559	5.1618	1.2567	-0.6672	1.0270	0.2393	1.2511	-1.3282	1.5980	-6.1665	1.3608
log(Web)	0.6944	0.2148	-0.0053	0.2557	0.6624	0.2090	0.8474	0.2563	0.6041	0.3215	-0.0844	0.2755
log(DSL)	-0.1910	0.0366	-0.1269	0.0436	-0.1567	0.0356	-0.2486	0.0435	-0.2130	0.0546	0.0209	0.0470
log(Cable)	-0.1026	0.0360	0.0916	0.0429	-0.0887	0.0350	-0.1332	0.0426	-0.0337	0.0536	-0.1304	0.0461
log(Web Media)	0.1583	0.0912	-0.0254	0.1086	0.1363	0.0887	0.1275	0.1084	0.0344	0.1388	0.1620	0.1165
log(hourly earnings)	-0.1677	0.1118	-0.2758	0.1331	-0.1385	0.1088	-0.2200	0.1331	-0.0247	0.1665	-0.2279	0.1446
log(commute)	0.1015	0.1192	0.6300	0.1419	0.0702	0.1160	0.1473	0.1427	0.0428	0.1747	-0.2870	0.1501
log(income)	0.4470	0.1315	1.4764	0.1566	0.4755	0.1279	0.3934	0.1560	0.5574	0.1958	0.5670	0.1696
log(unemployment rate)	-0.1042	0.0451	-0.2289	0.0537	-0.0823	0.0439	-0.1312	0.0537	-0.0555	0.0675	-0.0671	0.0578
log(retail wage)	0.2664	0.1800	0.7817	0.2142	0.1639	0.1751	0.3969	0.2134	0.3827	0.2688	-0.0881	0.2309
% Retail employment	-3.7468	0.9508	-0.9955	1.1316	-3.8427	0.9247	-3.2624	1.1258	-4.9022	1.4164	-2.9887	1.2276
% Construction	1.5016	0.3664	-0.0600	0.4360	1.5428	0.3563	1.4332	0.4345	2.1003	0.5484	0.6450	0.4726
% Food Services	6.7369	1.3738	1.8037	1.6351	6.4083	1.3362	6.8820	1.6312	7.5909	2.0511	5.2367	1.7812
% Manufacturing	-0.7166	0.2047	-0.4557	0.2436	-0.6460	0.1990	-0.9179	0.2414	-0.7664	0.3030	-1.3251	0.2566
% Health Care	-1.2584	0.5651	0.2972	0.6726	-0.9701	0.5496	-1.7944	0.6699	-0.7552	0.8431	0.0493	0.7234
	R ²	0.9841	R ²	0.9919	R ²	0.9848	R ²	0.9783	R ²	0.9712	R ²	0.9509

*Predicted per capita exposures (in 1000s), imputed for full sample of stations (m_3)

The models indicate that music exposures have a positive and statistically significant impact on retail music sales. Coefficient estimates across all categories are significant at the 99 percent level. Table 4.11 presents simulations, indicating the percent impact due to a one-standard deviation increase in exposures as well as increases in a subset of independent variables. For albums, a one-standard deviation increase in exposures (equivalent to about 10 additional tracks of music per day) results in a two percent increase in album sales. For digital tracks, the equivalent number is 2.4 percent. Country music sales appear to be the most responsive, at 3.2 percent, while the increase in R&B and Rap album sales is lowest at one percent.

Significant time trends are apparent, with total album sales falling by over 10 percent from 2004 to 2005 and by 16 percent from 2004 to 2006, holding other factors constant. The declines in R&B and Rap were particularly pronounced, while the declines in Catalog and Country music sales were mild. On the other hand, the regressions highlight the dramatic increases in digital track downloads that have occurred over this three-year period.

Market demographic and economic factors clearly play a large role and coefficient estimates are, for the most part, unsurprising. For example, income is positively related to music sales of all types, with tracks showing the largest expansion at 22 percent. For similar reasons, sales are negatively related to unemployment levels. With the exception of Country music, sales are highest when retail wages are highest. Wage rate was included to better measure wage opportunities for youth and to reflect market by market differences in the nature of retail trade.

Table 4.11
Impact of Independent Variables:
Percent Increase in Sales Due to One Standard Deviation Increase
in Exposure to Music on Over-The-Air Radio

	Albums	Tracks	Current	Catalog	Urban	Country
Exposures per cap	2.0%	2.4%	1.9%	2.0%	1.0%	3.2%
% Asian	-1.5%	-2.6%	-1.6%	-0.5%	0.5%	-8.0%
% African American	2.8%	-2.3%	2.8%	3.7%	19.9%	-14.1%
% Hispanic	1.0%	2.6%	1.3%	1.6%	6.7%	-11.7%
% Age 18-24	6.5%	19.9%	5.0%	9.2%	9.3%	-2.4%
% Age 25-34	-1.7%	3.3%	-0.5%	-4.4%	-9.5%	-0.9%
% Age 35-44	3.3%	10.4%	2.1%	4.9%	9.9%	-10.3%
% Age 45-54	2.0%	6.0%	1.2%	3.3%	-3.5%	4.0%
% Age 55-64	5.6%	4.1%	5.2%	6.0%	11.8%	4.8%
% Age 65+	-0.7%	15.4%	-2.0%	0.7%	-4.0%	-18.4%
log(income)	6.7%	22.0%	7.1%	5.9%	8.3%	8.4%
log(unemployment rate)	-2.2%	-4.9%	-1.8%	-2.8%	-1.2%	-1.4%
log(retail wage)	3.1%	9.0%	1.9%	4.6%	4.4%	-1.0%

The variables describing Internet use are highly significant, but difficult to interpret given their high degree of co-linearity. Further, these data were only available from the 2003 CPS and the cross-sections patterns may not accurately reflect changes that have occurred since that year. Note that these variables were the only ones in the data set that were not available on a county basis, making allocation to DMAs challenging.⁴⁹ In general, access to the Internet appears to be positively related to sales. On the other hand, cable connections to the Internet is negatively related to album sales, and positively related to track download purchases.

Sensitivity of Results to Alternative Audience Measures

⁴⁹ Results were not sensitive to the exclusion of these numbers. In addition, their levels were interacted with the dummy variables signifying different years to allow for the possibility that their relevance could have been evolving over this time period. These interactions were not significant. Finally, many of the sensitivity tests reported below do not indicate that systematic regression error is a problem in these estimates.

This section reports a number of additional estimates designed to test the sensitivity of the previous empirical results to the particular assumptions made. A subset of the regressions was re-run, using many of the alternative music exposure measures described earlier. The following measures were examined with results reported in appendix Tables B.1 through B.6:

1. Actual Arbitron ratings, no imputations (r)
2. Predicted Arbitron ratings, no imputations (\hat{r})
3. Actual exposures, no imputations (e)
4. Predicted exposures, no imputations (\hat{e})
5. Predicted exposures, econometric imputations for Arbitron sample (\hat{m}_1)
6. Predicted exposures, MI imputations for Arbitron sample (\hat{m}_2)

All six measures yielded results that were consistent with those reported for the full sample of predicted imputations. All coefficients were positive and significant.

Interestingly, using the actual Arbitron ratings, without considering the amount of music played by station, filling in values that are unavailable, or accounting for factors that could create spurious correlations *increased* the estimated effect. The coefficient estimate for albums suggests that a one-standard deviation increase in observed ratings (an increase of .0167) yields about a four percent increase in album sales. All the other measures yielded estimates that are remarkably consistent with one another.

Next, alternative assumptions were made about the functional form assumed to characterize the relationship between music sales and radio exposures. These regressions are reported in appendix Tables B.7 and B.8. Next, estimates are provided for additional genre categories, including Latin and “Top 100” albums. These are reported in appendix Table B.9.

Alternative Functional Forms

In the reported regressions, it was assumed that the appropriate model expressed music exposures on a per capita, linear basis. This characterization implicitly assumes a *linear* relationship, i.e., that increases in exposures result in constant percentage increases (or decreases) in music recording sales. If violated in reality, this assumption will affect the interpretation of results significantly under two conditions:

1. The range of exposures observed currently is limited, but policy changes may significantly alter the levels of radio reliance on music (for example, in response to performance fees).

2. The important policy question revolves around the question of what the *total* contribution of radio play is, in contrast to increases on the margin.

Since these conditions may be relevant to the policy debate, alternative assumptions about the relationship were analyzed. The two alternatives considered bound the per capita, linear model presented earlier. The first expresses exposures in logarithms. The upshot of this model is that it assumes a constant percentage relationship between sales and exposures. The second approach assumes a logistic functional form that is consistent with prevailing theories of advertising effectiveness.⁵⁰ The logistic function is shaped like an “S-Curve.” This shape is consistent with an advertising response function in which initial exposures are not very effective. But, once a certain threshold is exceeded, the advertising is effective.

Estimates from the logarithmic model are presented in appendix Table B.7. The logistic, or S-Curve model is presented in Table B.8.⁵¹ The most important point to be made is that the impact of music performance on radio stations is positive and significant, regardless of which assumption is made. For the logarithmic model (using the audience measure \hat{m}_3 , predicted values for the full sample of stations), the estimates indicate that the elasticity of album sales with respect to exposures is about .14. In other words, a 20 percent increase in exposures leads to a 2.8 percent increase in album sales. These results are similar to those obtained using the per capita or linear model. For Tracks and Catalog, Current, Country and Urban genres, the impacts are also positive, consistent and very similar to those obtained with the per capita model.

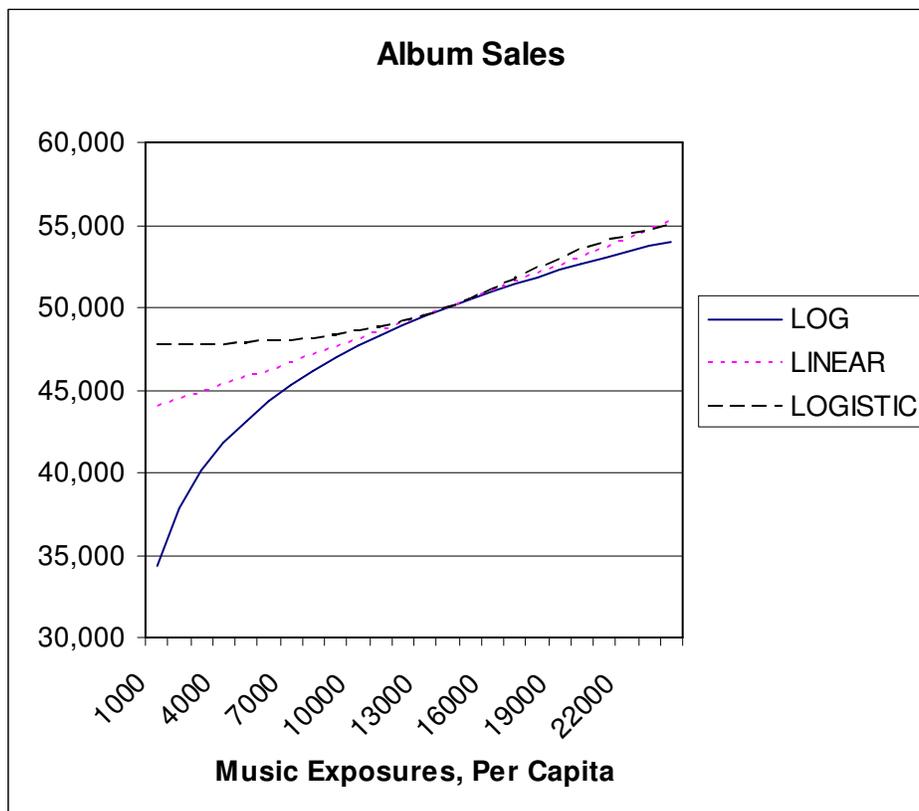
The logistic or S-Curve estimates also yield similar results. These estimates suggest that sales of albums and digital tracks increase up to 15.5 percent and 15.0 percent, respectively. These coefficient estimates are significant at the 99 percent level.

⁵⁰ For example, see Dertouzos and Garber (2006).

⁵¹ Formally, the logistic function specified the promotional effect as: $\kappa/(1 + \exp(\beta - \mu \hat{m}_3))$, where κ represents the percentage increase at which saturation occurs (the maximum increase possible), β is an arbitrary scale parameter (assumed to be five in these estimations). The goodness of fit is largely unchanged with different assumptions concerning β . Finally, μ represents the speed with which the saturation point is achieved.

Although these empirical effects are similar in magnitude, they each have different implications for the value of radio promotion over the whole range of music exposures. In Figure 4.1, music sales are projected based on the empirical estimates of the three alternative models. Note that the linear model is bound by the logistic and logarithmic model. That is, the logistic model estimates a lower value at low levels of exposure, as well as diminishing returns at high levels. The logarithmic estimates indicate diminishing returns over the whole range of exposures. The linear, per capita model assumes a constant effect over the whole range. The upshot of the difference is that if one were to use these estimates to calibrate the total value of radio play for recording music sales, the per capita estimates would be in the middle.

Figure 4.1
Implications of Alternative Functional Forms



In choosing among the three, the best criterion would be how well the models fit the data, or goodness of fit. In terms of explaining variance, the per capita, linear model performs slightly better than either of the other two in terms of R^2 . A more important

point, however, is that estimates of promotional effectiveness of radio airplay are not very dependent on functional form. As in the case of choice of exposure measures, the impact is significant and positive over all options.

Examination of Separate Music Genres

In appendix Table B.9, separate models are estimated for different genres. In comparison to the regressions presented earlier, music exposures are expressed as total exposures to all album genres. This is in contrast to the models presented in Table 4.10, in which exposures were measured for narrow music formats that corresponded closely with the individual album genres. These results are interesting because they indicate that the estimated benefit of radio music performance applies across multiple genres. The only category in which positive and significant impacts are not obtained is for Latin album sales. This is the one category of BIA Financial Network-provided format that does not distinguish between music and other sorts of programming. Thus, there is an element of error not relevant for other genres.

Sensitivity to Econometric Methods

In this section, alternative econometric approaches to the problem are explored. First, estimates were derived using standard two-stage least squares methodologies. These estimates, reported in appendix Table B.10, utilize exposure data (imputed for the subset of Arbitron stations where spins data (m_2) are unavailable). Rather than using predictions for individual stations, predicted values for exposures are derived in a first-stage regression linking DMA-level audience exposures with a full set of exogenous variables, including summary measures measuring the number of local radio stations and their characteristics.⁵² In these models, exposures were expressed in logarithms because the first-stage predictive model was more accurate in this form. The estimated elasticities provide sales responsiveness measures that are quite consistent with the relationships estimated using sums of the predicted measures for individual stations.

Next, several tests for heteroscedasticity were performed. As discussed, there are some data inaccuracies that are likely to vary systematically. For example, variables such as the CPS Internet data are likely to be more accurate for largest DMAs or DMAs that

⁵² Standard endogeneity tests that regress music sales on both the actual level of exposures as well as the prediction of exposures indicate that the endogeneity assumption (and choice of station descriptions as instruments) is appropriate.

correspond to MSA geographic units. Other variables, such as Arbitron and exposure data, are more complete for large DMAs. Finally, some of the variables, such as population numbers from the Census, were taken for years preceding 2004 and were not adjusted for population growth. While these numbers do not change significantly from year to year and the estimation technique relies primarily on cross section rather than time series variation, there remains an element of error introduced.

In appendix Table B.12, the results of this analysis are presented.⁵³ In these exercises, the size of the regression error (the absolute value of the regression residual) was regressed on the MSA coverage percentage, the size of the DMA, the percentage of stations with Arbitron data, and the dummy variables indicating the year. For the eight regressions (analysis for both albums and tracks for four predictors), only one indicated a significant relationship. In the albums model, the regression residual averaged roughly 20 percent higher in 2004 in comparison with the latter two years. To account for this, weighted least squares were performed. Not surprisingly, given the magnitude of the absolute difference in residuals for 2004, the WLS results were virtually identical.

In addition to these tests for heteroscedasticity, alternative approaches to allocating stations to DMAs were examined. In the allocations reported earlier, station audience data were allocated to DMAs based on Arbitron samples of U.S. households. As discussed, a large number of stations do not have audience evidence that meets Arbitron reporting requirements. For these stations, imputed data sets were created, under the assumption that audience levels could be predicted as a function of observable station and market characteristics. However, these models do not produce the distribution of these audiences across DMA boundaries.

For stations not meeting Arbitron's minimum reporting standards, data were imputed and predicted values were allocated based on the identity and location of the primary radio market. For this sample of stations, many more of which are small stations

⁵³ Recall that in analysis provided by Leibowitz, it was assumed that regression errors were a function of DMA size, under the assumption that matching MSA to DMA was less accurate for small DMAs. While the latter is true, Leibowitz conducted no specific tests to see whether, in fact, such heteroscedasticity is prevalent or relevant. This is an important point, because the scheme he used to place considerable weight on the largest DMAs was a key factor that drove his results. Since most of our variables were initially gathered on a county rather than a MSA level, one would not expect that a weighting scheme (using a weighted least squares approach) would improve efficiency. As discussed above, this proved to be the case.

with less powerful signals and more confined market areas, the audiences are probably confined to the home DMA. However, to test the sensitivity of the final results to this assumption, an alternative allocation was made based on assuming that each station for which data were not available had a distribution across DMAs that reflected the average distributions for the other stations in the same home market for which ratings information was available. It is likely that these two alternative approaches bound the range of possibilities and, therefore, utilizing both approaches provides a rigorous sensitivity test.

The results of this test are reported in appendix Table B.13. The estimated coefficients are very similar, regardless of the method. In fact, the chosen approach leads to estimated effects that are even smaller, and can therefore be viewed as a conservative estimate of the true relationship between music exposures and recording sales.

Estimates from a Fixed Effects Model

The last set of estimates was obtained from a model that closely approximates the methodology utilized by Liebowitz (2006). For reasons discussed earlier, the fixed effect approach removes virtually all of the cross section variation from the data. Unless covariates (such as market demographics, radio station descriptions, and listening behavior) vary significantly over time, this approach is likely to be quite inefficient, thereby leading to imprecise and possibly misleading estimates. For completeness, however, estimates were obtained using a version of the model that most closely approximates the approach used by Liebowitz. In our model, the dependent variable was expressed as album sales per capita. A limited set of covariates was used, reflecting the fact that most of the others do not vary sufficiently over time (though they do vary significantly from area to area). We included a separate dummy variable for each of the sample DMAs. Finally, although we found no evidence supporting the existence of systematic error patterns by DMA, we performed a weighted least squares using weights that are similar to those used by Liebowitz.

The resulting estimates are quite different for the weighted and unweighted versions. While Liebowitz found negative coefficients in his study, our coefficients remain positive and significant for both versions. Indeed, the computed effects are far in excess of those estimated using the preferred methodology. Results here show that the Liebowitz model and data are incomplete. Further, his model does not adequately account

for a whole host whole host of variables that can affect the relationship between radio airplay and music sales, while our models do account for these effects.

Summary of Empirical Results

Table 4.12 summarizes the key empirical results for the primary measures of interest, namely album sales and digital track downloads. The results are expressed as total percentage increases, computed over the whole range of exposures, that can be attributed to the performance of recorded music on radio stations.

For albums, the estimates range from a low of 14 percent to a high of 23 percent. For tracks, the estimated impacts range from a low of 15 percent to a high of 20 percent, depending on the method used.

Table 4.12
 Comparison of Results:
 Expansion of Recording Sales Due to Music Performance
 on Over-the-Air Radio

Model	Method	Albums	Tracks
1.	Raw Arbitron Ratings, Ordinary Least Squares	23%	20%
2.	Music Exposures (logarithmic model), Two-Stage Least Squares	22%	19%
3.	Music Exposures (per capita), predictions for full station sample	14%	16%
4.	Music Exposures (logarithmic model), predictions for full sample	14%	15%
5.	Music Exposures (logistic model), predictions for full sample	16%	15%

5. Summary and Policy Implications

Historically, the radio and recording industries have enjoyed a mutually beneficial relationship. Over 70 percent of the nation's radio stations compete in the media marketplace by providing free, over-the-air music entertainment to listeners. Although composers and publishers receive royalties for the performance of such music, performers and record labels also profit from the exposure provided by airplay through the reproduction, distribution and sale of music recordings. Under this arrangement, both parties expect to profit. The recording industry receives indirect revenues when audiences like and purchase the music they hear. Local radio stations receive revenues from advertisers that pay for access to listeners who are potential customers for the goods and services they are offering. These same listeners generate revenues for the recording industry as customers induced to purchase recordings they have heard on the radio. In essence, we have found that radio exposure is free advertising.

In today's rapidly evolving and uncertain environment, old questions are being asked anew about this symbiotic equilibrium. Of interest here is the question, does the absence of a performance fee for performers and record labels still make sense in this increasingly competitive environment?

Unfortunately, the ongoing debate suffers from the scarcity of rigorous research capable of providing answers to this fundamental question. The goal of this research project was to begin to fill this void. While many issues remain unresolved, the following conclusions are clearly supported by the research:

Previous evidence, in the form of survey research and the persistence of standard industry practices to promote airplay, strongly suggest that new performance fees for performers and record labels is not justified.

The sale of recorded music, at least in terms of revenue production, is lagging behind the growth apparent in other media sectors. This trend is unlikely to change. However, increases in digital sales and Internet activity, the adoption of MP3 players and the comfort of younger generations with new technologies, suggest that new opportunities abound. There is no evidence that radio has played any part in the music

industry's decline. Further, there is no evidence that radio's role in promoting music has diminished.

Economic theory suggests a wide range of circumstances under which record labels would be willing to provide music voluntarily to radio stations at no cost. In fact, one could imagine feasible circumstances in which record labels would pay to have their music promoted. This would be particularly true for recording artists who stand to gain concert and licensing revenue from the promotion of their music.

That record labels would pay (rather than charge) for music exposure would especially be true in markets where independent entities make independent business decisions on their own behalf. Healthy competition between business rivals would likely result in free-market payments by record labels to promote their individual releases and garner radio airplay, even if industry sales suffer as a result. This implies that a positive relationship between industry sales and aggregate radio play of music is a sufficient condition for validating the existence of a promotional impact, significantly tipping the scale against efficacy of new performance fees for performers and record labels.

Recent research on this issue has been flawed, either because of poor methods and data or an inappropriate market context for interpreting results. As we noted, a positive promotional impact for a single album may not be as relevant as the group of music products likely to represent the bargaining unit that is relevant to a record label.

This study resolved several methodological challenges in addressing the key empirical question of whether radio play improves music industry sales. By constructing an appropriate measure of radio exposure, addressing significant data deficiencies and utilizing an approach designed to overcome the potential for spurious correlation, reliable estimates of the promotional effects from radio airplay were obtained. These results were especially noteworthy because of their magnitude, their high statistical significance and because they are remarkably insensitive to a variety of econometric methods, assumptions and measurement techniques.

Most importantly, results demonstrate that a significant portion of industry sales of albums and digital tracks – at minimum 14 percent and as high as 23 percent – is attributable to radio airplay, suggesting that radio is already providing a significant sales benefit that ranges between \$1.5 and \$2.4 billion in incremental revenue annually. If a

performance fee were enacted, stations could reduce music airplay, change formats and even cease to operate, resulting in the loss of much of this promotional benefit.

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Appendix A: Options in Dealing with Measurement Error

In this appendix, we analyze the implications of alternative estimation methodologies in the presence of measurement errors and other data issues. The purpose of this exercise was to demonstrate that the optimal regression strategy depends on a multiplicity of factors, including the source and patterns of measurement error, correlations with other sources of error, and relationships with variables that are included and those that are omitted from the regression model. Such factors have to be considered and, to the extent possible, evaluated for their empirical relevance, before settling on a strategy.

A data set was randomly generated for 99 hypothetical market areas for two years of data ($t = 1, 2$). The population distribution was identical to the top 99 DMAs in 2006. The mean population was 2,550 (in thousands) and the standard deviation was 2,650. For each DMA a population weight w_i was set equal to the percent of total population attributed to that DMA. The range was .004 (or .4 percent) to a high of .07 (or 7.0 percent). The average, since there were 99 DMAs, was .01. Population was assumed to grow at an average rate of four percent over the two time periods. For each DMA the growth was randomly drawn from a normal distribution with a mean of .04 and standard deviation of .01, i.e., $[dP_i/P_i = N(\mu, \sigma) = N(.04, .01)]$.

Recording sales in a given DMA in time period t was assumed given by the following “true” relationship:

$$(1) \quad S_{it} = .1 + .99R_{it} + .0001P_{it} - .3T_t + u_{it}$$

Where S_{it} represents sales, .1 is an intercept, R_{it} are local radio ratings, P_{it} is DMA population, T_t is a dummy variable given a value of one for the second panel year and u_{it} is a disturbance term with characteristics described below.

The disturbance term is assumed to be distributed normally with a mean of zero and standard deviation of $.5m_u$ where m_u is a multiplier that increases the degree to which unknown or unobserved factors affect sales.

In addition, disturbances can be serially correlated, allow for the possibility that some of these characteristics are fixed or changing slowly over time. In other words,

$$(2) \quad u_{it} = (p_u u_{it-1} + (1 - p_u) e_{it}) / (p_u^2 + (1 - p_u)^2)^{.5}$$

the degree of serial correlation is determined by the value of p_u , which takes on a value of between zero and one (one indicates complete correlation, zero none at all). The term e_{it} is the portion of the total disturbance term that is entirely random and independently distributed $N(0, .5m_u)$. Note that the correlation coefficient $C(u_{it}, u_{it-1}) = \sqrt{p_u}$, division of the weighted sum by $(p_u^2 + (1-p_u)^2)$, preserves the standard deviation of the disturbance. That is, u_{it} will also be distributed $N(0, .5m_u)$.

As one additional set of scenarios to explore, we posited a correlation between the population, P_{it} , and the error term, u_{it} . The source of this could be variables for which no data are available that are correlated with population. To model this, we assume that a portion of true population is unavailable so that the observed population is given by $P^*_{it} = m_p P_{it}$.

The ratings R_{it} were also assumed to be drawn from a normal distribution with a mean value of .025 and standard deviation of .005. Given the assumed parameters of the model, this implies average sales of about 2.5.

Ratings data were also generated under three additional sets of scenarios. The first posits measurement error for R_{it} . This measurement error is assumed to be correlated with the size of the DMA market (P_i). This error is given by $me_{it} = m_e(\mathbf{w}/w_i)\epsilon_{it}$ where m_e is a multiplier indicating the magnitude of the measurement error, w_i is the population weight as defined above, and \mathbf{w} is a scale adjustment (set equal to .006587) to guarantee that the average of the scaled weights ($\Sigma(\mathbf{w}/w_i) = 1$, thereby having a neutral effect on the sample standard deviation of the measurement error (but not the distribution across DMA sizes).⁵⁴

The random portion of the measurement error ϵ_{it} is distributed $N(0, .005)$. Thus, observed ratings R^* are given by actual ratings plus measurement error, or

$$(3) \quad R_{it}^* = R_{it} + me_{it} = R_{it} + m_e(\mathbf{w}/w_i)\epsilon_{it}$$

⁵⁴ This specification of measurement error yields a correlation of about -.4 with the population measure. As reported in Liebowitz (2007), the correlation between population and DMA “coverage,” a measure of the degree to which DMA populations are represented by MSAs is .44. Liebowitz implicitly assumes, but does not verify, that coverage is inversely related to measurement error so the alternative characterizations are equivalent.

In addition to the systematic time-series correlation of the standard error of measurement error, we also allowed for year-to-year correlation in the sign of the error. That is,

$$(4) \quad me_{it} = (p_e me_{it-1} + (1 - p_e)m_{it}) / (p_e^2 + (1 - p_e)^2)^{.5}$$

As in the case of serial correlation specified in equation two, this specification allows for serial correlation in the measurement error. The parameter p_e takes on a value between zero and one with zero indicating no correlation. Dividing by the square root of the sum of the squared weighting parameters preserves the mean and standard error of the measurement, zero and $.005m_e$, respectively.

We also allow for both actual ratings to be correlated with population and over time, independent of population.

$$(5) \quad R_{it} = r_{it} (1 + c_{rp}(w_i - .01))$$

As before, R_{it} represents actual ratings, r_{it} is drawn from a normal distribution where $N(.025, .005)$, c_{rp} is a multiplier denoting the strength of the correlation between ratings and DMA population as expressed by the deviation of the DMA weight, w_i , from its mean value, $.01$. Note that for $c_{rp} = 1$, expected ratings for the largest DMA (with a weight of $.07$) would be six percent larger than the average DMA. However, across all DMA's the correlation coefficient would only be $.09$. At a value of $c_{rp} = 8$, the correlation between population and ratings rises to $.40$.

We also allow for systematic differences in markets (having nothing to do with observed population) by specifying that ratings are correlated over time. That is,

$$(6) \quad R_{it} = [p_r R_{it-1} + (1 - p_r)r_{it} (1 + c_{rp}(w_i - .01))] / [p_r^2 + (1 - p_r)^2]^{.5}$$

Finally, a subset of simulations assumes that a key variable, in this case, P_{it} , is a "left-out variable," (LOV). When LOV is set = 1, population is excluded from the analysis. Table B.1 summarizes the key parameters used to generate alternative data sets for simulations. Table B.2 provides specific parameter values for each of 14 sets of simulated data.

Table A.1
Simulation Parameters

m_e	Scale factor indicating the magnitude of measurement error in observing ratings (assumed to be inversely correlated with population)
C_{rp}	Factor indicating correlation between ratings and population $C(r_t, p_t)$
p_r	Factor indicating serial correlation in ratings, true correlation $C(r_t, r_{t-1})$
P_u	Factor indicating serial correlation in regression residuals $C(u_t, u_{t-1})$
P_e	Factor represents serial correlation in measurement error $C(m_{e_t}, m_{e_{t-1}})$
m_u	Scaling factor altering size of the standard deviation of regression residual, $\sigma_u = .005 m_u$
LOV	LOV = 1 (0 otherwise) indicates the presence of missing variables, in this case P_{it}

Table A.2
Alternative Scenarios for Data Simulation

Scenario	Description	Parameter Values						
		m_u	m_e	C_{rp}	p_r	p_e	p_u	LOV
1	Small, "well-behaved" residuals	1	0	0	0	0	0	0
2	Large, "well-behaved" residuals	5	0	0	0	0	0	0
3	Small residuals, modest measurement error	1	1	0	0	0	0	0
4	Small residuals, large measurement error	1	2	0	0	0	0	0
5	Small, "well-behaved" residuals, negative correlation between covariates	1	0	-8	0	0	0	0
6	Small residuals, negative correlation between included and "left-out" variables	1	0	-8	0	0	0	1
7	Small, "well-behaved" residuals, positive correlation between covariates	1	0	8	0	0	0	0
8	Small residuals, positive correlation between included and "left-out" covariates	1	0	8	0	0	0	1
9	Large residuals, modest measurement error	5	1	0	0	0	0	0
10	Small "well-behaved" residuals, positive correlation in ratings	1	0	0	0.75	0	0	0

11	Small residuals, modest measurement error and serially correlated measurement error	1	1	0	0	0.75	0	0
12	Small residuals, serial correlation in regression error	1	0	0	0	0	0.75	0
13	Small residuals, modest measurement error, positive correlation between included and "left-out" covariates	1	1	8	0.75	0	0	1
14	Large residuals, positive correlation between included covariates	5	0	8	0	0	0	0

As we have seen, the data will vary as a function of a variety of assumptions regarding the distribution of regression (the u_t 's), measurement error in ratings (the me_t 's). Key factors include the standard deviations in errors, serial correlations, and correlations among residuals and explanatory variables. Models were then estimated using four alternative estimation strategies. The first two used the complete sample of 99 DMAs. OLS regressions were employed in either levels or first differences where both dependent and independent variables were expressed as changes from year one to year two. The second two used truncated samples as a potential remedy for measurement error that, for some data scenarios, was assumed to be more pronounced for smaller DMAs. Thus, the 60 largest DMAs were used in the regressions.

Table A.3
Alternative Estimation Strategies

Estimation Strategy	Description
A	Levels, full sample
B	Differences, full sample
C	Levels, truncated sample
D	Differences, truncated sample

Key outcomes for each of these regressions are reported in Table A.4. This table shows the R^2 statistic, as well as the coefficient, standard error, and t-statistic for the key variable of interest, the effect of radio ratings on recording sales. Recall that, by assumption, the true coefficient is equal to 100.

The results of the simulations make it clear that the correct choice of a regression strategy depends on a multitude of factors that are not generally known in advance (or in some cases, ever). If the goal is to obtain an accurate and unbiased estimated of a particular coefficient, the optimal approach depends on the structure and patterns of the data, the regression residuals, and measurement error. In cases when the model is well-specified and the data are “well-behaved,” the choice of models is largely irrelevant. In fact, comparisons of results from different methods has been suggested as a valuable test

Table A.4
Simulated Regression Results

Scenario	Strategy	R ²	Coeff.	S.E.	t-statistic
1	A	0.68	99.37	8.19	12.14
1	B	0.46	96.33	10.47	9.19
2	A	0.09	96.85	40.94	2.37
2	B	0.05	81.70	52.36	1.56
3	A	0.58	63.87	6.86	9.31
3	B	0.21	40.95	7.81	5.24
4	A	0.44	34.46	5.35	6.45
4	B	0.11	17.31	5.19	3.33
4	C	0.49	48.82	8.87	5.50
4	D	0.14	27.24	8.12	3.35
5	A	0.62	99.61	8.14	12.24
5	B	0.46	97.69	10.53	9.28
6	A	0.42	80.61	9.49	8.49
6	B	0.44	95.03	10.64	8.93
7	A	0.76	99.13	8.21	12.08
7	B	0.45	95.06	10.36	9.17
8	A	0.64	121.90	9.23	13.20
8	B	0.44	91.77	10.41	8.81
9	A	0.11	84.95	29.36	2.89
9	B	0.01	27.38	32.62	0.84
10	A	0.55	96.92	12.23	7.92
10	B	0.05	85.36	41.89	2.04
11	A	0.47	51.50	7.24	7.12
11	B	0.45	90.10	9.89	9.11
12	A	0.56	97.30	10.20	9.54
12	B	0.96	100.29	2.10	47.81
13	A	0.21	56.73	10.85	5.23
13	B	-0.07	4.58	8.85	0.51

14	A	0.13	95.67	41.04	2.33
14	B	0.02	75.32	51.82	1.45
14	C	0.14	91.75	52.28	1.75
14	D	0.03	37.98	58.32	0.65

to identify potential problems. However, under different scenarios, different strategies emerge as most preferred.

When regression residuals are large, often indicated by a low R^2 , differencing is not generally a good strategy because the “signal to noise” ratio declines after differencing. This is especially the case when there is serial correlation in the level of covariates. By differencing, one loses much of the variation in explanatory variables, thereby diminishing the precision of the estimates. On the other hand, when errors are correlated, such as in the scenarios that assume the existence of a left-out variable that is correlated with an included variable or when measurement errors are serially correlated (such as scenario six and 11), the amount of error is reduced with differencing.

In theory, using a truncated sample involves “throwing away” potentially useful information, thereby reducing efficiency of estimation and generally increasing standard errors of coefficient estimates. Under a wide range of scenarios, this is not an effective strategy. On the other hand, if significant measurement error exists and its pattern is systematic and known a priori, there may be some circumstances under which truncation reduces bias sufficiently to justify the attendant loss in efficiency. In one of our 14 simulated data sets, scenario four, truncation of data resulted in the most accurate estimate of the key coefficient. Scenario four is characterized by significant measurement error but other regression errors are small and well-behaved and the model is otherwise specified with precision. It is worth noting that, under such conditions, the levels model out performs the differences model using truncated data. Indeed, the levels model using the full sample would be preferred to the difference model using truncated data. Although there are likely circumstances under which both differencing and truncation would be advisable (such as large fixed effects as well as systemic measurement error), these circumstances would be difficult to identify *ex ante*.

Without detailed examination of actual data, is not possible to determine which circumstances prevail in the sales of albums or tracks/radio airplay listening data sets.

However, it is likely that many of the aforementioned “problems” prevail to some degree. Moreover, it is clear that the explanatory power of the models utilized is not high and the drop in R^2 , after differencing is substantial. Given that the magnitude and pattern of hypothesized measurement error due to inconsistencies in the match between MSAs, radio markets and DMA remains unknown, the presence of these other factors would cast some doubt on the appropriate choice of methods.

Table A.5
Summary of Simulated Regression Results

Scenario	Description	Dominant Strategy
1	Small, "well-behaved" residuals	A,B
2	Large, "well-behaved" residuals	A
3	Small residuals, modest measurement error	A
4	Small residuals, large measurement error	C
5	Small, "well-behaved" residuals, negative correlation between covariates	A,B
6	Small residuals, negative correlation between included and "left-out" variables	B
7	Small, "well-behaved" residuals, positive correlation between covariates	A,B
8	Small residuals, positive correlation between included and "left-out" covariates	B
9	Large residuals, modest measurement error	A
10	Small "well-behaved" residuals, positive correlation in ratings	A
11	Small residuals, modest measurement error and serially correlated measurement error	B
12	Small residuals, serial correlation in regression error	A,B
13	Small residuals, modest measurement error, positive correlation between included and "left-out" covariates	A

14	Large residuals, positive correlation between included covariates	A
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Appendix B: Supplemental Regression Results

The following represent a series of supplemental analyses conducted to test the sensitivity of empirical findings to alternative methods and data. These are discussed in the Section four of the main report.

Table B.1
Test of Sensitivity: Actual Ratings

Variable	Log(Albums)		Log(Tracks)		Log(Current)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-13.4458	1.8304	-36.3460	2.2201	-6.3079	1.7547
Actual ratings	2.6249	0.5553	2.2771	0.6736	2.8265	0.5324
year = 2006	-0.1802	0.0173	1.9097	0.0209	-0.2148	0.0165
year = 2005	-0.1117	0.0150	1.3936	0.0182	-0.1308	0.0143
East North Central	0.0525	0.0350	0.0182	0.0425	0.0715	0.0336
East South Central	0.0847	0.0375	-0.0206	0.0455	0.0447	0.0360
Middle Atlantic	0.1623	0.0502	0.2446	0.0609	0.1424	0.0482
Mountain	0.1505	0.0454	0.1426	0.0551	0.0828	0.0436
Pacific	0.2175	0.0634	0.2764	0.0769	0.1747	0.0608
South Atlantic	0.0707	0.0406	0.1099	0.0493	0.0917	0.0389
West North Central	0.0108	0.0290	0.1033	0.0351	0.0090	0.0278
West South Central	0.0086	0.0377	0.0391	0.0457	0.0137	0.0361
log(population 12+)	0.6712	0.1896	1.3290	0.2300	0.6891	0.1818
% Asian	-0.6941	0.5327	-1.0713	0.6462	-0.7657	0.5107
% African American	0.2455	0.1356	-0.2501	0.1645	0.2322	0.1300
% Hispanic	-0.0506	0.1213	0.1524	0.1471	-0.0512	0.1163
% Age 18-24	2.5965	1.4935	10.6274	1.8115	1.6823	1.4317
% Age 25-34	0.1903	1.4349	3.0621	1.7405	1.0559	1.3756
% Age 35-44	2.4119	2.5175	9.1917	3.0536	1.2999	2.4134
% Age 45-54	2.1202	1.8669	7.1904	2.2645	0.9728	1.7897
% Age 55-64	3.8765	2.1077	2.2161	2.5565	3.5684	2.0205

Table B.1 (continued)
 Test of Sensitivity: Actual Ratings

Variable	Log(Albums)		Log(Tracks)		Log(Current)	
	Coefficient	Standard Error	Coefficient	Variable	Coefficient	Standard Error
% Age 65+	-0.2007	1.0503	5.1147	1.2739	-0.6022	1.0068
log(Web)	0.4948	0.2184	-0.1743	0.2649	0.4452	0.2094
log(DSL)	-0.1791	0.0364	-0.1145	0.0442	-0.1449	0.0349
log(Cable)	-0.1376	0.0359	0.0571	0.0436	-0.1242	0.0344
log(Web Media)	0.1299	0.0905	-0.0591	0.1097	0.1104	0.0867
log(hourly earnings)	-0.0402	0.1125	-0.1540	0.1364	-0.0071	0.1078
log(commute)	-0.1340	0.1199	0.3967	0.1454	-0.1681	0.1149
log(income)	0.4961	0.1319	1.5071	0.1600	0.5348	0.1264
log(unemployment rate)	-0.1081	0.0448	-0.2337	0.0544	-0.0857	0.0430
log(retail wage)	0.2866	0.1792	0.7929	0.2173	0.1889	0.1718
% Retail employment	-3.5829	0.9440	-0.7782	1.1450	-3.7057	0.9050
% Construction	0.9403	0.3825	-0.5503	0.4639	0.9402	0.3666
% Food Services	6.7357	1.3663	1.7553	1.6572	6.4318	1.3098
% Manufacturing	-1.1502	0.2063	-0.8846	0.2502	-1.0852	0.1978
% Health Care	-0.5941	0.5846	0.8435	0.7091	-0.2391	0.5604

Table B.2
Tests of Sensitivity: Actual Ratings (Predicted)

Variable	Log(Albums)		Log(Tracks)		Log(Current)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-11.2956	1.8230	-34.4248	2.1807	-4.0119	1.7612
Actual ratings, predicted	1.2820	0.3468	1.3147	0.4149	1.3106	0.3351
year = 2006	-0.1771	0.0176	1.9134	0.0211	-0.2118	0.0170
year = 2005	-0.1117	0.0152	1.3940	0.0182	-0.1310	0.0147
East North Central	0.0323	0.0354	0.0004	0.0423	0.0498	0.0342
East South Central	0.0681	0.0383	-0.0372	0.0458	0.0275	0.0370
Middle Atlantic	0.1129	0.0490	0.2055	0.0586	0.0879	0.0473
Mountain	0.1696	0.0459	0.1583	0.0549	0.1037	0.0444
Pacific	0.1586	0.0620	0.2304	0.0742	0.1095	0.0599
South Atlantic	0.0276	0.0409	0.0707	0.0489	0.0459	0.0395
West North Central	0.0040	0.0293	0.0989	0.0351	0.0012	0.0284
West South Central	-0.0329	0.0374	0.0025	0.0448	-0.0309	0.0362
log(population 12+)	0.4231	0.1860	1.1119	0.2225	0.4226	0.1797
% Asian	-0.4127	0.5371	-0.8358	0.6424	-0.4598	0.5188
% African American	0.2756	0.1375	-0.2360	0.1645	0.2687	0.1329
% Hispanic	0.1219	0.1122	0.2875	0.1342	0.1396	0.1084
% Age 18-24	3.3155	1.5132	11.2688	1.8101	2.4504	1.4619
% Age 25-34	-0.6430	1.4356	2.4304	1.7173	0.1271	1.3869
% Age 35-44	2.7238	2.5600	9.4910	3.0623	1.6259	2.4732
% Age 45-54	2.5981	1.8945	7.5913	2.2662	1.4920	1.8302
% Age 55-64	5.4254	2.1611	3.7324	2.5852	5.1767	2.0878
% Age 65+	-0.4906	1.0664	4.8597	1.2756	-0.9131	1.0302
log(Web)	0.7129	0.2172	0.0155	0.2599	0.6798	0.2099
log(DSL)	-0.2039	0.0374	-0.1391	0.0447	-0.1705	0.0361
log(Cable)	-0.1354	0.0366	0.0562	0.0438	-0.1208	0.0353
log(Web Media)	0.1878	0.0934	0.0008	0.1118	0.1695	0.0903
log(hourly earnings)	-0.1638	0.1131	-0.2666	0.1353	-0.1382	0.1093
log(commute)	0.0274	0.1186	0.5408	0.1418	0.0042	0.1145
log(income)	0.3873	0.1328	1.4098	0.1588	0.4186	0.1283
log(unemployment rate)	-0.1238	0.0458	-0.2497	0.0547	-0.1018	0.0442
log(retail wage)	0.1437	0.1840	0.6529	0.2201	0.0405	0.1778
% Retail employment	-3.4156	0.9598	-0.6217	1.1481	-3.5294	0.9272
% Construction	1.2459	0.3763	-0.3237	0.4501	1.2825	0.3635
% Food Services	6.5073	1.3889	1.5467	1.6614	6.1895	1.3417
% Manufacturing	-0.8110	0.2041	-0.5764	0.2441	-0.7247	0.1972
% Health Care	-1.2040	0.5726	0.3394	0.6849	-0.9044	0.5532

Table B.3
 Test of Sensitivity: Actual Music Exposures

Variable	Log(Albums)		Log(Tracks)		Log(Current)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-12.5895	1.7706	-35.5482	2.1734	-5.2907	1.7145
Actual exposures	0.0232	0.0042	0.0188	0.0051	0.0226	0.0040
year = 2006	-0.1932	0.0171	1.8990	0.0210	-0.2278	0.0165
year = 2005	-0.1178	0.0147	1.3884	0.0181	-0.1371	0.0143
East North Central	0.0514	0.0344	0.0162	0.0422	0.0685	0.0333
East South Central	0.0682	0.0370	-0.0342	0.0454	0.0282	0.0358
Middle Atlantic	0.1470	0.0482	0.2279	0.0591	0.1201	0.0467
Mountain	0.1369	0.0450	0.1331	0.0552	0.0721	0.0435
Pacific	0.1676	0.0599	0.2307	0.0735	0.1168	0.0580
South Atlantic	0.0752	0.0400	0.1118	0.0491	0.0930	0.0387
West North Central	0.0120	0.0285	0.1033	0.0350	0.0085	0.0276
West South Central	0.0006	0.0366	0.0304	0.0450	0.0020	0.0355
log(population 12+)	0.6164	0.1830	1.2709	0.2247	0.6118	0.1772
% Asian	-0.0411	0.5229	-0.5235	0.6418	-0.0948	0.5063
% African American	0.2488	0.1330	-0.2412	0.1632	0.2461	0.1288
% Hispanic	0.1246	0.1071	0.3097	0.1315	0.1465	0.1037
% Age 18-24	3.7558	1.4680	11.6008	1.8020	2.8748	1.4215
% Age 25-34	0.0397	1.4000	2.8577	1.7186	0.7661	1.3557
% Age 35-44	3.2076	2.4808	9.8430	3.0452	2.0893	2.4022
% Age 45-54	2.9372	1.8345	7.8843	2.2519	1.8268	1.7764
% Age 55-64	3.3938	2.0794	1.8523	2.5525	3.1437	2.0136
% Age 65+	0.5899	1.0498	5.7385	1.2886	0.1419	1.0165
log(Web)	0.6327	0.2108	-0.0502	0.2587	0.6014	0.2041
log(DSL)	-0.1737	0.0359	-0.1105	0.0440	-0.1401	0.0347
log(Cable)	-0.1556	0.0358	0.0437	0.0439	-0.1397	0.0346
log(Web Media)	0.0356	0.0906	-0.1354	0.1112	0.0182	0.0877
log(hourly earnings)	0.0097	0.1120	-0.1188	0.1375	0.0327	0.1084
log(commute)	-0.1717	0.1187	0.3741	0.1457	-0.1912	0.1150
log(income)	0.4058	0.1285	1.4287	0.1577	0.4375	0.1244
log(unemployment rate)	-0.1234	0.0442	-0.2462	0.0543	-0.1007	0.0428
log(retail wage)	0.2781	0.1763	0.7836	0.2164	0.1763	0.1707
% Retail employment	-2.2667	0.9546	0.2921	1.1718	-2.4120	0.9244
% Construction	0.7607	0.3819	-0.6633	0.4688	0.8206	0.3698
% Food Services	4.6541	1.3882	0.0620	1.7040	4.3847	1.3442
% Manufacturing	-0.9362	0.1963	-0.6968	0.2410	-0.8511	0.1901
% Health Care	-0.6624	0.5669	0.7433	0.6959	-0.3835	0.5490

Table B.4
 Test of Sensitivity: Actual Exposures (Predicted)

Variable	Log(Albums)		Log(Tracks)		Log(Current)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-11.5559	1.7398	-34.7034	2.1343	-4.2847	1.6914
Actual exposures, predicted	0.0238	0.0039	0.0214	0.0047	0.0226	0.0037
year = 2006	-0.1899	0.0168	1.9011	0.0206	-0.2244	0.0163
year = 2005	-0.1183	0.0145	1.3877	0.0178	-0.1374	0.0141
East North Central	0.0557	0.0340	0.0216	0.0417	0.0721	0.0330
East South Central	0.0595	0.0366	-0.0432	0.0449	0.0202	0.0356
Middle Atlantic	0.1551	0.0476	0.2405	0.0585	0.1263	0.0463
Mountain	0.1471	0.0441	0.1387	0.0541	0.0828	0.0429
Pacific	0.1779	0.0593	0.2437	0.0727	0.1255	0.0576
South Atlantic	0.0608	0.0391	0.1021	0.0480	0.0784	0.0380
West North Central	0.0117	0.0281	0.1046	0.0344	0.0078	0.0273
West South Central	-0.0017	0.0360	0.0311	0.0442	-0.0009	0.0350
log(population 12+)	0.4699	0.1778	1.1555	0.2182	0.4679	0.1729
% Asian	0.0661	0.5177	-0.3982	0.6350	-0.0012	0.5032
% African American	0.2857	0.1304	-0.2173	0.1600	0.2839	0.1268
% Hispanic	0.1374	0.1053	0.3130	0.1291	0.1610	0.1023
% Age 18-24	4.2608	1.4559	12.1053	1.7860	3.3401	1.4154
% Age 25-34	-0.4446	1.3695	2.5364	1.6801	0.2736	1.3314
% Age 35-44	4.1062	2.4591	10.7119	3.0167	2.9254	2.3906
% Age 45-54	2.5049	1.8105	7.5184	2.2211	1.4098	1.7602
% Age 55-64	5.2271	2.0509	3.4166	2.5160	4.9091	1.9939
% Age 65+	0.5027	1.0311	5.7562	1.2649	0.0317	1.0024
log(Web)	0.7494	0.2077	0.0479	0.2548	0.7142	0.2019
log(DSL)	-0.1762	0.0354	-0.1118	0.0434	-0.1428	0.0344
log(Cable)	-0.1439	0.0349	0.0508	0.0428	-0.1276	0.0339
log(Web Media)	0.0699	0.0884	-0.1129	0.1084	0.0531	0.0859
log(hourly earnings)	-0.0218	0.1091	-0.1345	0.1339	-0.0009	0.1061
log(commute)	-0.1186	0.1148	0.4062	0.1408	-0.1363	0.1116
log(income)	0.3397	0.1272	1.3693	0.1561	0.3747	0.1237
log(unemployment rate)	-0.1325	0.0437	-0.2556	0.0537	-0.1090	0.0425
log(retail wage)	0.1867	0.1741	0.7044	0.2136	0.0887	0.1693
% Retail employment	-2.4031	0.9337	0.2802	1.1454	-2.5730	0.9077
% Construction	0.7291	0.3749	-0.7580	0.4599	0.8095	0.3645
% Food Services	4.9203	1.3539	0.1272	1.6609	4.6872	1.3162
% Manufacturing	-0.7624	0.1950	-0.5438	0.2392	-0.6850	0.1895
% Health Care	-0.8104	0.5529	0.6737	0.6783	-0.5421	0.5375

Table B.5
 Tests of Sensitivity: Imputed Values, (Predicted m_1)

Variable	Log(Albums)		Log(Tracks)		Log(Current)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-12.9050	1.8559	-36.3611	2.1976	-5.5666	1.8005
Exposures, predicted* (m_1)	0.0113	0.0038	0.0130	0.0045	0.0110	0.0037
year = 2006	-0.1911	0.0179	1.8980	0.0213	-0.2258	0.0173
year = 2005	-0.1228	0.0156	1.3816	0.0185	-0.1419	0.0151
East North Central	0.0422	0.0358	0.0115	0.0426	0.0595	0.0347
East South Central	0.0734	0.0386	-0.0326	0.0459	0.0333	0.0374
Middle Atlantic	0.1250	0.0505	0.2223	0.0600	0.0987	0.0489
Mountain	0.1588	0.0466	0.1452	0.0555	0.0934	0.0452
Pacific	0.1768	0.0642	0.2552	0.0764	0.1258	0.0622
South Atlantic	0.0442	0.0412	0.0883	0.0490	0.0627	0.0399
West North Central	0.0174	0.0305	0.1154	0.0363	0.0138	0.0295
West South Central	-0.0295	0.0378	0.0060	0.0449	-0.0274	0.0366
log(population 12+)	0.5205	0.1899	1.2222	0.2259	0.5182	0.1840
% Asian	-0.5759	0.5468	-1.0294	0.6502	-0.6167	0.5297
% African American	0.2951	0.1386	-0.2228	0.1648	0.2912	0.1343
% Hispanic	0.1114	0.1156	0.2643	0.1375	0.1335	0.1120
% Age 18-24	2.3685	1.5525	10.1965	1.8463	1.5207	1.5042
% Age 25-34	-1.2526	1.4405	1.8015	1.7131	-0.4946	1.3956
% Age 35-44	1.9385	2.5914	8.6125	3.0818	0.8507	2.5108
% Age 45-54	2.2590	1.9174	7.1921	2.2803	1.1649	1.8578
% Age 55-64	3.5893	2.1752	1.7594	2.5868	3.3338	2.1075
% Age 65+	-0.6899	1.0789	4.6285	1.2831	-1.1067	1.0453
log(Web)	0.6062	0.2220	-0.1063	0.2640	0.5755	0.2151
log(DSL)	-0.2007	0.0378	-0.1379	0.0449	-0.1665	0.0366
log(Cable)	-0.1144	0.0366	0.0780	0.0435	-0.0995	0.0355
log(Web Media)	0.1644	0.0937	-0.0187	0.1114	0.1438	0.0908
log(hourly earnings)	-0.1202	0.1138	-0.2208	0.1354	-0.0940	0.1103
log(commute)	0.0423	0.1203	0.5611	0.1430	0.0176	0.1165
log(income)	0.4370	0.1343	1.4645	0.1598	0.4679	0.1302
log(unemployment rate)	-0.1198	0.0462	-0.2468	0.0549	-0.0972	0.0447
log(retail wage)	0.2549	0.1837	0.7683	0.2185	0.1538	0.1780
% Retail employment	-3.8252	0.9752	-1.0827	1.1597	-3.9326	0.9448
% Construction	1.3584	0.3765	-0.2243	0.4478	1.4036	0.3648
% Food Services	7.0220	1.4098	2.1289	1.6766	6.6950	1.3659
% Manufacturing	-0.8278	0.2060	-0.5851	0.2449	-0.7452	0.1996
% Health Care	-1.2220	0.5782	0.3378	0.6877	-0.9293	0.5602

Table B.6
 Tests of Sensitivity: Imputed Values (Predicted m_2)

Variable	Log(Albums)		Log(Tracks)		Log(Current)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-12.9050	1.8559	-36.3611	2.1976	-5.5666	1.8005
Exposures, predicted m_2	0.0103	0.0029	0.0129	0.0034	0.0098	0.0028
year = 2006	-0.1681	0.0180	1.9260	0.0214	-0.2037	0.0175
year = 2005	-0.1071	0.0154	1.4004	0.0182	-0.1268	0.0149
East North Central	0.0177	0.0357	-0.0184	0.0423	0.0360	0.0346
East South Central	0.0676	0.0384	-0.0408	0.0455	0.0279	0.0372
Middle Atlantic	0.0841	0.0487	0.1748	0.0576	0.0589	0.0472
Mountain	0.1726	0.0460	0.1607	0.0544	0.1069	0.0446
Pacific	0.1471	0.0617	0.2233	0.0731	0.0963	0.0599
South Atlantic	0.0392	0.0408	0.0824	0.0483	0.0578	0.0396
West North Central	-0.0065	0.0293	0.0879	0.0347	-0.0095	0.0284
West South Central	-0.0125	0.0378	0.0272	0.0447	-0.0112	0.0366
log(population 12+)	0.4357	0.1862	1.1251	0.2205	0.4355	0.1807
% Asian	-0.5988	0.5417	-1.0813	0.6414	-0.6328	0.5255
% African American	0.2656	0.1383	-0.2657	0.1637	0.2647	0.1341
% Hispanic	0.0843	0.1153	0.2194	0.1365	0.1105	0.1118
% Age 18-24	3.7617	1.5228	11.8535	1.8032	2.8663	1.4773
% Age 25-34	-0.9337	1.4311	2.1978	1.6947	-0.1907	1.3884
% Age 35-44	2.7477	2.5636	9.5624	3.0356	1.6354	2.4870
% Age 45-54	2.9523	1.8983	8.0156	2.2479	1.8348	1.8417
% Age 55-64	5.4989	2.1679	4.0735	2.5671	5.1677	2.1032
% Age 65+	-0.3548	1.0682	5.0249	1.2649	-0.7825	1.0363
log(Web)	0.7156	0.2175	0.0198	0.2576	0.6821	0.2110
log(DSL)	-0.1956	0.0372	-0.1332	0.0440	-0.1612	0.0361
log(Cable)	-0.1223	0.0363	0.0683	0.0430	-0.1071	0.0352
log(Web Media)	0.1609	0.0926	-0.0191	0.1096	0.1396	0.0898
log(hourly earnings)	-0.1730	0.1136	-0.2861	0.1345	-0.1445	0.1102
log(commute)	0.0732	0.1202	0.6042	0.1423	0.0459	0.1166
log(income)	0.4307	0.1330	1.4601	0.1575	0.4611	0.1291
log(unemployment rate)	-0.0986	0.0458	-0.2214	0.0542	-0.0768	0.0444
log(retail wage)	0.2659	0.1823	0.7831	0.2159	0.1639	0.1768
% Retail employment	-3.5577	0.9611	-0.7835	1.1380	-3.6696	0.9324
% Construction	1.4472	0.3711	-0.1271	0.4395	1.4914	0.3601
% Food Services	6.5188	1.3907	1.5460	1.6467	6.2052	1.3491
% Manufacturing	-0.7509	0.2071	-0.4810	0.2452	-0.6740	0.2009
% Health Care	-1.2763	0.5722	0.2848	0.6776	-0.9845	0.5551

Table B.7
Tests of Sensitivity: Log Model

Variable	Log(Albums)		Log(Tracks)		Log(Current)		Log(Catalog)		Log(Urban)		Log(Country)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-14.2423	1.9187	-37.5800	2.2928	-6.8569	1.8610	-8.3549	2.1591	-6.9371	2.7596	-5.2552	2.2198
log(exposures)	0.1411	0.0346	0.1520	0.0414	0.1351	0.0336	0.0539	0.0159	0.0061	0.0017	0.2171	0.0221
year = 2006	-0.1646	0.0180	1.9272	0.0215	-0.2002	0.0175	-0.1081	0.0209	-0.4327	0.0254	-0.0706	0.0206
year = 2005	-0.1050	0.0153	1.4014	0.0183	-0.1247	0.0148	-0.0730	0.0179	-0.1718	0.0220	-0.0526	0.0178
East North												
Central	0.0138	0.0355	-0.0197	0.0424	0.0322	0.0344	-0.0037	0.0415	-0.0102	0.0523	0.1105	0.0433
East South												
Central	0.0679	0.0381	-0.0380	0.0455	0.0281	0.0369	0.1367	0.0448	0.0314	0.0554	-0.0676	0.0446
Middle												
Atlantic	0.0709	0.0485	0.1615	0.0580	0.0462	0.0471	0.1159	0.0572	0.1105	0.0742	-0.1190	0.0587
Mountain	0.1770	0.0456	0.1659	0.0545	0.1111	0.0443	0.2938	0.0538	0.1486	0.0667	-0.0739	0.0544
Pacific	0.1363	0.0611	0.2080	0.0730	0.0860	0.0593	0.1984	0.0719	0.1156	0.0893	-0.0503	0.0724
South Atlantic	0.0376	0.0405	0.0808	0.0484	0.0563	0.0393	0.0100	0.0477	0.0229	0.0616	0.0958	0.0500
West North												
Central	-0.0081	0.0291	0.0864	0.0347	-0.0111	0.0282	0.0087	0.0343	0.0176	0.0432	-0.0099	0.0347
West South												
Central	-0.0237	0.0372	0.0122	0.0445	-0.0218	0.0361	-0.0368	0.0438	-0.1317	0.0565	0.1415	0.0460
log(population												
12+)	0.2836	0.1886	0.9611	0.2254	0.2898	0.1830	0.3357	0.2197	0.2549	0.2821	0.4747	0.2267
% Asian	-0.5149	0.5352	-0.9486	0.6395	-0.5542	0.5191	-0.1796	0.6285	0.2585	0.7761	-2.3607	0.6290
% African												
American	0.2877	0.1361	-0.2269	0.1627	0.2852	0.1320	0.3847	0.1593	2.1971	0.1986	-1.2023	0.1652
% Hispanic	0.1185	0.1113	0.2791	0.1329	0.1422	0.1079	0.1420	0.1285	0.6725	0.1599	-0.8869	0.1309
% Age 18-24	3.8642	1.5130	11.8655	1.8080	2.9687	1.4675	5.4621	1.7835	4.5071	2.2303	0.8928	1.7876
% Age 25-34	-1.3941	1.4196	1.6513	1.6963	-0.6295	1.3769	-2.9746	1.6750	-4.6640	2.0859	-1.7204	1.6687
% Age 35-44	2.8885	2.5464	9.6777	3.0428	1.7718	2.4698	4.4359	2.9951	8.4912	3.7140	-7.9408	2.9921
% Age 45-54	2.5907	1.8837	7.5789	2.2510	1.4905	1.8271	4.2709	2.2176	-3.9135	2.7497	3.1915	2.2141
% Age 55-64	5.7787	2.1580	4.1691	2.5787	5.4446	2.0931	6.0040	2.5267	12.1325	3.1003	9.8485	2.5299

% Age 65+	-0.4428	1.0603	4.9100	1.2670	-0.8659	1.0284	0.0731	1.2499	-1.6777	1.5572	-5.5280	1.2603
log(Web)	0.7019	0.2160	0.0039	0.2581	0.6691	0.2095	0.8333	0.2551	0.8508	0.3190	0.2094	0.2576
log(DSL)	-0.1986	0.0370	-0.1345	0.0442	-0.1642	0.0359	-0.2545	0.0436	-0.2306	0.0537	-0.0666	0.0448
log(Cable)	-0.1075	0.0361	0.0852	0.0432	-0.0929	0.0350	-0.1379	0.0424	-0.0511	0.0525	-0.1388	0.0424
log(Web Media)	0.1690	0.0920	-0.0163	0.1100	0.1475	0.0893	0.1566	0.1076	0.0903	0.1360	0.2624	0.1084
log(hourly earnings)	-0.1755	0.1127	-0.2811	0.1347	-0.1472	0.1093	-0.2468	0.1338	-0.1589	0.1678	-0.4241	0.1367
log(commute)	0.1106	0.1207	0.6318	0.1442	0.0823	0.1171	0.1812	0.1445	-0.0820	0.1744	-0.0786	0.1412
log(income)	0.4476	0.1323	1.4737	0.1581	0.4774	0.1284	0.4015	0.1557	0.4022	0.1966	0.6146	0.1566
log(unemploy rate)	-0.1040	0.0454	-0.2290	0.0542	-0.0819	0.0440	-0.1283	0.0536	-0.0407	0.0659	-0.0220	0.0537
log(retail wage)	0.2687	0.1810	0.7823	0.2163	0.1667	0.1756	0.3881	0.2129	0.5283	0.2653	-0.0230	0.2135
% Retail employment	-3.8286	0.9578	-1.0629	1.1445	-3.9296	0.9290	-3.6141	1.1258	-4.2728	1.3984	-3.0228	1.1289
% Construction	1.4921	0.3684	-0.0712	0.4402	1.5340	0.3573	1.5320	0.4345	2.3623	0.5380	0.6560	0.4350
% Food Services	6.8460	1.3825	1.9081	1.6520	6.5181	1.3409	7.4176	1.6268	6.8698	2.0139	5.2545	1.6358
% Manufacturing	-0.7155	0.2065	-0.4691	0.2468	-0.6390	0.2003	-0.9145	0.2407	-0.8827	0.2979	-1.1418	0.2372
% Health Care	-1.2316	0.5686	0.3178	0.6795	-0.9410	0.5515	-1.8560	0.6681	-1.0800	0.8289	-0.0932	0.6685
	R ²	0.9839	R ²	0.9918	R ²	0.9847	R ²	0.9784	R ²	0.9724	R ²	0.9581

Table B.8
 Test of Sensitivity: Logistic Model

	Log(Albums)		Log(Tracks)	
	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-13.0866	1.8622	-36.2173	2.2247
Exposures per cap				
μ	0.0300	0.0049	0.0341	0.0059
κ	0.1550	0.0473	0.1497	0.0463
year = 2006	-0.1654	0.0182	1.9249	0.0217
year = 2005	-0.1049	0.0155	1.4001	0.0185
East North Central	0.0119	0.0360	-0.0226	0.0429
East South Central	0.0698	0.0384	-0.0338	0.0458
Middle Atlantic	0.0719	0.0488	0.1627	0.0584
Mountain	0.1772	0.0461	0.1697	0.0551
Pacific	0.1403	0.0617	0.2084	0.0736
South Atlantic	0.0375	0.0408	0.0825	0.0488
West North Central	-0.0108	0.0294	0.0860	0.0351
West South Central	-0.0264	0.0375	0.0100	0.0448
log(population 12+)	0.4736	0.1864	1.1610	0.2230
% Asian	-0.5792	0.5414	-0.9785	0.6473
% African American	0.2583	0.1383	-0.2513	0.1656
% Hispanic	0.1032	0.1134	0.2732	0.1359
% Age 18-24	3.8162	1.5265	11.7154	1.8199
% Age 25-34	-1.2022	1.4372	1.7123	1.7193
% Age 35-44	3.1116	2.5766	9.6960	3.0770
% Age 45-54	2.6720	1.9016	7.7855	2.2702
% Age 55-64	5.3939	2.1634	3.6589	2.5801
% Age 65+	-0.2390	1.0740	5.0213	1.2856
log(Web)	0.6648	0.2177	-0.0298	0.2605
log(DSL)	-0.1924	0.0372	-0.1296	0.0444
log(Cable)	-0.1115	0.0364	0.0798	0.0434
log(Web Media)	0.1524	0.0926	-0.0301	0.1105
log(hourly earnings)	-0.1684	0.1134	-0.2754	0.1355
log(commute)	0.0816	0.1204	0.5996	0.1438
log(income)	0.4442	0.1333	1.4652	0.1592
log(unemployment rate)	-0.1005	0.0457	-0.2269	0.0546
log(retail wage)	0.2880	0.1825	0.8013	0.2181
% Retail employment	-3.8326	0.9759	-1.1627	1.1605
% Construction	1.5448	0.3722	0.0007	0.4437
% Food Services	6.8874	1.4084	2.0988	1.6746
	R ²	0.9837	R ²	0.9917

Table B.9
Separate Estimates by Genre

Variable	Log(Country)		Log(RB)		Log(Rap)		Log(Latin)		Log(Top)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	-1.3822	2.4193	-12.1688	2.6441	-12.4553	2.8441	-27.3711	6.5980	-4.9106	1.7363
Exposures per cap (Predicted m ₃)	0.0155	0.0029	0.0113	0.0032	0.0104	0.0034	0.0071	0.0079	0.0082	0.0021
year = 2006	-0.0576	0.0237	-0.4098	0.0259	-0.4208	0.0279	0.0754	0.0648	-0.2407	0.0170
year = 2005	-0.0421	0.0202	-0.1707	0.0220	-0.1400	0.0237	0.0792	0.0550	-0.1560	0.0145
East North Central	0.2062	0.0466	0.0159	0.0509	-0.0088	0.0548	0.4914	0.1271	0.0138	0.0334
East South Central	-0.1078	0.0501	0.0006	0.0548	-0.0289	0.0589	-0.3919	0.1367	-0.0265	0.0360
Middle Atlantic	-0.0034	0.0638	0.1597	0.0697	0.2041	0.0750	0.5174	0.1739	0.0294	0.0458
Mountain Pacific	-0.1686	0.0600	0.1601	0.0655	0.1993	0.0705	-0.0492	0.1635	0.0385	0.0430
South Atlantic	0.0692	0.0804	0.1545	0.0879	0.2011	0.0945	0.5882	0.2192	0.0354	0.0577
West North Central	0.2395	0.0533	0.0848	0.0582	0.0813	0.0626	0.7192	0.1453	0.0534	0.0382
West South Central	0.0435	0.0382	-0.0201	0.0418	-0.0237	0.0449	0.2452	0.1043	-0.0191	0.0274
log(population 12+)	0.2923	0.0490	-0.0504	0.0535	-0.0861	0.0576	0.4501	0.1335	-0.0466	0.0351
% Asian	1.0958	0.2431	0.5403	0.2657	0.6037	0.2857	2.0882	0.6629	0.4856	0.1744
% African American	-3.1699	0.7050	0.1992	0.7705	-0.5308	0.8288	-2.7299	1.9227	-0.6906	0.5060
% Hispanic	-1.7519	0.1789	2.4349	0.1955	1.7922	0.2103	1.0847	0.4878	0.1533	0.1284
% Age 18-24	-1.3521	0.1473	0.5778	0.1610	0.7101	0.1731	3.5435	0.4017	-0.0839	0.1057
% Age 25-34	-0.5213	1.9892	6.5794	2.1741	7.7025	2.3385	-3.3869	5.4250	2.8503	1.4277
% Age 35-44	-0.9065	1.8654	-5.2231	2.0387	-6.3511	2.1929	3.0785	5.0872	-2.7048	1.3388
	-7.7411	3.3493	9.5992	3.6605	11.9837	3.9373	-13.5152	9.1341	2.5993	2.4037

% Age 45-55	3.3770	2.4757	-2.8801	2.7058	-3.6286	2.9104	-11.3609	6.7518	-0.7590	1.7768
% Age 55-64	8.4189	2.8296	13.5912	3.0925	11.8581	3.3264	-11.8020	7.7168	6.7153	2.0307
% Age 65+	-6.9936	1.3953	-0.9474	1.5250	0.1533	1.6403	2.5245	3.8053	-2.1739	1.0014
log(Web)	-0.2420	0.2839	0.6543	0.3103	0.5777	0.3337	-0.6611	0.7742	0.6158	0.2038
log(DSL)	0.0374	0.0484	-0.2118	0.0529	-0.2335	0.0569	-0.0880	0.1320	-0.1271	0.0347
log(Cable)	-0.1401	0.0476	-0.0115	0.0520	-0.0374	0.0559	-0.0008	0.1297	-0.0493	0.0341
log(Web Media)	0.1767	0.1206	0.0057	0.1318	0.0385	0.1417	-0.2421	0.3288	0.0635	0.0865
log(hourly earnings)	-0.1288	0.1478	-0.0674	0.1615	-0.0313	0.1737	-0.3309	0.4031	-0.1845	0.1061
log(commute)	-0.1963	0.1576	0.1386	0.1722	0.1896	0.1852	-1.3905	0.4297	0.0738	0.1131
log(income)	0.4680	0.1738	0.6422	0.1900	0.5291	0.2043	1.4170	0.4741	0.4752	0.1248
log(unemployment rate)	-0.0818	0.0596	-0.0169	0.0651	-0.0879	0.0701	-0.4609	0.1626	-0.0298	0.0428
log(retail wage)	-0.1772	0.2379	0.3833	0.2600	0.5063	0.2796	2.7374	0.6487	0.0625	0.1707
% Retail employment	-2.1670	1.2564	-5.3055	1.3731	-5.0935	1.4769	-4.8725	3.4263	-3.4261	0.9017
% Construction	0.2535	0.4841	2.0933	0.5291	2.3852	0.5691	2.1592	1.3203	1.4741	0.3474
% Food Services	3.5064	1.8154	7.6261	1.9841	7.7834	2.1341	9.7519	4.9509	5.1971	1.3029
% Manufacturing	-0.9699	0.2704	-0.5432	0.2956	-0.3448	0.3179	2.8059	0.7375	-0.6068	0.1941
% Health Care	0.4696	0.7468	-0.4110	0.8162	-1.2386	0.8779	-5.8970	2.0366	-0.4411	0.5359
	R ²	0.9476	R ²	0.9740	R ²	0.9667	R ²	0.9261	R ²	0.9846

Table B.10
Sensitivity Tests: Two-Stage Least Squares

Variable	Log(Exposures) m_2		Log(Albums)		Log(Tracks)		Log(Current)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	7.8924	2.9917	-15.4970	2.2466	-38.1110	2.6336	-8.6404	2.1937
log(exposures), m_2 predicted	-		0.2489	0.0769	0.2150	0.0901	0.2760	0.0751
year = 2006	0.0789	0.0261	-0.2060	0.0197	1.8874	0.0231	-0.2434	0.0192
year = 2005	0.0731	0.0219	-0.1323	0.0168	1.3758	0.0197	-0.1535	0.0164
East North Central	0.0475	0.0632	0.0477	0.0373	0.0139	0.0437	0.0666	0.0364
East South Central	-0.0289	0.0583	0.0748	0.0400	-0.0292	0.0469	0.0338	0.0391
Middle Atlantic	-0.2801	0.0891	0.1713	0.0569	0.2521	0.0667	0.1548	0.0555
Mountain	-0.0258	0.0745	0.1422	0.0491	0.1356	0.0576	0.0729	0.0480
Pacific	-0.4740	0.0963	0.2515	0.0750	0.3054	0.0879	0.2153	0.0732
South Atlantic	-0.0335	0.0733	0.0696	0.0437	0.1089	0.0512	0.0915	0.0426
West North Central	-0.0198	0.0609	0.0594	0.0366	0.1452	0.0429	0.0634	0.0358
West South Central	0.0293	0.0651	-0.0107	0.0396	0.0223	0.0464	-0.0066	0.0387
Log (population 2+)	0.3072	0.3117	0.4539	0.1949	1.1404	0.2284	0.4558	0.1903
% Asian	0.9036	0.8988	-0.9686	0.5929	-1.3072	0.6951	-1.0810	0.5789
% African American	0.7414	0.2179	0.2053	0.1494	-0.2844	0.1752	0.1842	0.1459
% Hispanic	1.1711	0.1872	-0.0389	0.1387	0.1635	0.1626	-0.0468	0.1354
% Age 18-24	10.0543	2.2661	1.4834	1.6710	9.6683	1.9589	0.4284	1.6317
% Age 25-34	0.0430	2.1833	-0.4437	1.5135	2.5092	1.7743	0.3982	1.4779
% Age 35-44	13.6989	3.8887	0.4930	2.7540	7.5348	3.2285	-0.8323	2.6892
% Age 45-54	3.3703	3.2953	2.5599	1.9841	7.5723	2.3259	1.4421	1.9374
% Age 55-64	7.4039	3.5969	1.7531	2.3792	0.3837	2.7891	1.1989	2.3232
% Age 65+	5.7668	1.6748	-0.6331	1.1178	4.7402	1.3104	-1.0731	1.0915
log(Web)	0.4408	0.3442	0.4402	0.2422	-0.2206	0.2839	0.3778	0.2365
log(DSL)	0.2182	0.0550	-0.2240	0.0407	-0.1534	0.0477	-0.1945	0.0397
log(Cable)	0.1532	0.0548	-0.1327	0.0383	0.0614	0.0449	-0.1194	0.0374
log(Web Media)	-0.3133	0.1414	0.1819	0.0978	-0.0141	0.1146	0.1682	0.0955
log(hourly earnings)	-0.0644	0.1684	-0.0653	0.1197	-0.1759	0.1403	-0.0320	0.1169

log(commute)	-0.0227	0.1844	0.0660	0.1255	0.5699	0.1472	0.0493	0.1226
log(income)	-0.2392	0.2102	0.5195	0.1433	1.5270	0.1680	0.5636	0.1400
log(unemployment rate)	0.0940	0.0672	-0.1363	0.0485	-0.2581	0.0568	-0.1169	0.0473
log(retail wage) % Retail employment	-0.1285	0.2857	0.3138	0.1917	0.8163	0.2248	0.2204	0.1872
	2.5959	1.5145	-4.2466	1.0319	-1.3511	1.2097	-4.4447	1.0076
% Construction	1.0254	0.5587	1.1421	0.4026	-0.3739	0.4719	1.1462	0.3931
% Food Services	-2.6423	2.1455	7.4469	1.4791	2.3690	1.7339	7.2258	1.4442
% Manufacturing	0.0853	0.3150	-0.8337	0.2132	-0.6103	0.2499	-0.7423	0.2082
% Health Care	-2.2025	0.8933	-0.8092	0.6218	0.6549	0.7290	-0.4528	0.6072
log(radio station)	0.3878	0.0552						
log(class A stations)	0.6979	0.2247						
log(class B stations)	1.3370	0.2323						
log(class B1 stations)	0.5012	0.5422						
log(class C stations)	1.4562	0.2729						
log(class C0 stations)	1.7176	0.3658						
log(class C1 stations)	-0.3494	0.2874						
log(class C2 stations)	0.3374	0.3242						
log(class C3 stations)	1.1351	0.3360						
	R ²	0.9600	R ²	0.9822	R ²	0.9912	R ²	0.9829

Table B.12
Heteroscedasticity Tests

	Residuals from Log(Albums)		Residuals from Log(Tracks)	
	Coefficient	Standard Error	Coefficient	Standard Error
Test One:				
intercept	0.0539	0.0170	0.0935	0.0211
MSA Coverage	0.0237	0.0212	-0.0104	0.0264
Test Two:				
intercept	0.0693	0.0102	0.0761	0.0127
% in Arbitron	0.0052	0.0177	0.0162	0.0219
Test Three:				
intercept	0.0970	0.0711	0.1539	0.0878
log(population 12+)	-0.0018	0.0050	-0.0049	0.0062
Test Four:				
intercept	0.0744	0.0101	0.0990	0.0072
year = 2005	-0.0047	0.0083	-0.0233	0.0101
year = 2006	-0.0075	0.0082	-0.0228	0.0101

Note: Residuals taken from full sample predictions (\hat{m}_3)

Table B.13
Alternative Ways of Allocating Music Exposures from Radio Markets to DMAs

	Log(Albums)		Log(Tracks)		Log(Current)	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Assume unobserved have small markets, "assigned DMA"	0.0097	0.0022	0.0112	0.0026	0.0090	0.0021
Based on typical DMA "inside- outside" distribution	0.0104	0.0022	0.0118	0.0026	0.0097	0.0022

Table B.14
Fixed Effects Models

	Per Capita Albums (weighted)		Per Capita Albums (unweighted)	
	Coefficient	Standard Error	Coefficient	Standard Error
Arbitron ratings	0.0208	0.0021	0.0132	0.0024
year = 2005	-0.0004	0.0001	-0.0005	0.0001
year = 2006	-0.0004	0.0000	-0.0003	0.0000
log(hourly earnings)	-0.0013	0.0010	-0.0010	0.0009
log(income)	0.0129	0.0016	-0.0014	0.0031
log(unemploy rate)	0.0004	0.0002	-0.0001	0.0002
log(retail wage)	0.0022	0.0012	0.0015	0.0013
% Retail employment	0.0008	0.0075	-0.0072	0.0067
% Construction	-0.0005	0.0029	0.0017	0.0017
% Food Services	-0.0060	0.0108	0.0161	0.0097
% Manufacturing	0.0027	0.0039	-0.0059	0.0031
% Health Care	0.0024	0.0027	0.0005	0.0024
	R ²	0.9535	R ²	0.9333

Notes: Models absorb a fixed effect for each DMA. Weighted model uses square of DMA population.



“THE NATIONAL RECORD BUYERS SURVEY”
presented by Edison Media Research

What’s the most effective radio promotion? Do music videos provide a good return on investment? What’s the impact of the Internet on music purchase behavior? R&R challenged Edison Media Research to find the answers to these and other questions in an attempt to quantify the many factors that go into a music purchase decision and to create a valuable resource for the radio and record industries.

In response, Edison Media Research conducted a national study of 748 interviews of 16 to 40 year olds to take a closer look at the thought processes, influences, and decisions behind a music purchase. The study was conducted in May 2001 and the sample was weighted to reflect the age, sex, and race of 16 to 40 year olds according to US Census estimates.

In this report we present the primary findings from our survey along with our research presentation from the 2001 R&R Convention in Los Angeles. Several articles written by the R&R format editors are also included. These articles look at the survey findings specifically among fans of each of the formats reported in R&R.

I would love to receive any questions or comments you have regarding this report. The data is entirely for public use and I will happily discuss any further analysis that may be of interest. You can reach me at JCharneski@edisonresearch.com or 908.707.4707. I am available to present these findings at meetings as well.

Sincerely,
Edison Media Research

Jayne Charneski
Director of Research



edison media research
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PRIMARY FINDINGS

Radio airplay is still by far the biggest influence on music purchase behavior

It is no secret that radio airplay leads to record sales. But you may be surprised just how effective airplay is – 77% of respondents in our study agreed with the statement “You will not buy a new CD unless you have already heard a few songs from that CD you like on the radio.”

For most consumers, it not only takes radio airplay, but airplay of more than one track before they will purchase a CD. This finding was consistent across age groups. Women are slightly more likely to need to hear a few tracks on the radio before making a purchase than Men (Women 81% vs. Men 74%).

In addition, 55% of respondents said hearing a song on the radio was the *most* influential factor in purchasing music. Friends and relatives followed, with 15% of respondents saying they are most influenced by word of mouth. Music video channels (9%), live performances (6%), and heard or saw it in a store (5%) round out the list of most influential factors.

Most consumers first learn about a new release through radio

When asked how they *first* learned the last CD they bought was available, 37% of respondents said radio airplay, followed by friend/relative (16%). A large number of respondents don't learn about new releases until they are in a store (heard or saw it in store 14%).

This finding is especially important because most consumers do not keep track of when a new CD comes out – even for CDs from their favorite artists. When asked “do you keep track of when a new CD comes out from your favorite artists” OR “do you usually just happen to find out that a new CD has come out” only 35% said they try to keep track of new releases. This number was especially low among 35 to 40s (22%). Most consumers are not proactive in keeping on top of release schedules and instead rely on other sources, especially radio, to inform them about release dates.

Radio could have an even greater impact on release awareness if it were more aggressive in announcing the names and artists of the songs on the air. The majority of respondents in our study (62%) said the radio stations they listen to do not announce the names and artists of the songs they play often enough. Of that majority, 62% said radio should announce song and artist names before or after every song they play while 33% want announcements only for new songs. So announcing the songs and artists would not only



please radio listeners, but would help with record sales – announcements also serve to front sell and back sell records.

Live performances are the most effective radio promotion overall

To help gauge the impact of different promotions, we asked respondents about things radio stations do to promote new releases. Topping the list of effective promotions were local live performances sponsored by a radio station (37% said they are “very effective”) and live in-studio performances (35% said they are “very effective”). These “performance” promotions were especially effective among those liking Alternative or Rock best. Artist appearances in the studio where artists talk to DJs and CD contest giveaways were found to be least effective across our entire sample.

Among respondents who like CHR or Hip-Hop best, “Countdown shows where top new songs are played in order” were the most effective promotion. Nearly half of CHR and Hip-Hop fans feel the music countdowns are “very effective” versus only 30% of the total sample. These findings suggest a blanket approach for all the artists on your roster is not the most effective way to promote to radio.

Music videos have some impact with the younger demos

MTV enjoyed the highest ratings in its history in 2000. Our study suggests its ratings will be exceptionally strong in 2001 as well. Just over half the persons in our sample reported ever watching MTV. Among cable or satellite TV subscribers in our sample, 72% reported ever watching MTV. MTV is enormously popular with the younger demos as 9 out of 10 16 to 24s having watched it. And they watch *a lot* of MTV - on average 16 to 24s watch just over five hours per week.

VH1’s numbers were not quite as strong, with 65% of cable or satellite TV subscribers ever tuning in. VH1 does best among 25 to 34s with 69% reporting they have watched the channel in the past. Respondents who watch VH1 watch it on average about three hours per week.

BET has been watched by 34% of cable or satellite subscribers in our sample, but this number increases dramatically among African-Americans as 93% of African-Americans report having watched BET. And they watch it often – African-Americans who watch BET report watching on average eight hours per week.

BET is also strong among 16 to 24s overall (all ethnic groups), with almost half of the respondents in this demo reporting they’ve tuned in.

CMT has been watched by 31% of the cable or satellite TV subscribers in our sample and is most popular among the 35 to 40s with 37% having watched in the past.



As expected, there were large age discrepancies when it comes to the effectiveness of music videos on music purchase behavior. About one-third of our total sample said music videos are often a new music information source. This number jumps up to 49% among 16 to 24s and then drops down to 24% among 25 to 34s and drops even further to 18% among 35 to 40s.

More than half of 16 to 24s (67%) said they have purchased a new CD as a result of seeing a music video. Again age is a factor as this number drops down to 43% among 25 to 34s and down to 36% among 35 to 40s.

Ethnicity plays a role in the effectiveness of music videos as African-Americans are nearly twice as likely as Whites to be influenced by a music video.

Videos aside, there is still an enormous opportunity with video music channels. TV advertising can sell records. 25% of 16 to 24s told us seeing an advertisement on TV was an influence behind their last music purchase. This number was even higher among African-Americans (36%) and Hispanics/Latinos (39%). MTV in particular enjoys incredible reach within their target demo, which is often the same demo the labels are going after. Instead of spending thousands on music video production, another effective promotion option is to advertise your new release on TV, especially for releases that won't easily find a spot on MTV's limited playlist.

Many parents are buying records based on what their children see on Nickelodeon

Among respondents with children under the age of 17 living in the household, 88% reported their children watch Nickelodeon. Slightly less watch The Disney Channel (86%) and 25% reported their children tune into Radio Disney.

Of the three, exposure on Nickelodeon sells the most records. One in four respondents with children under the age of 17 in their household reported they or their children bought a CD after hearing an artist or group on Nickelodeon. Hispanics and Latinos were most influenced by Nickelodeon, with 30% making a music purchase for an artist who appeared on Nickelodeon compared to 23% of Whites and 28% of African Americans.

One in five respondents with children under the age of 17 in their household reported purchasing a CD after hearing an artist or group on The Disney Channel and about one in ten reported making a purchase after hearing an artist on Radio Disney.



Music magazines have limited influence on purchase behavior

Readership of mainstream music magazines is relatively low among 16 to 40s. *Vibe* was the most read music magazine among the total sample, with 14% of respondents reading it at least sometimes. Among African-Americans, 59% told us they sometimes read *Vibe*.

Only 13% of respondents said they read *Rolling Stone* at least sometimes and even less read *Spin*, with only 9% reading it at least sometimes.

A vast majority of respondents (75%) told us they *almost never* learn about new music from reading music magazines such as *Rolling Stone*, *Spin*, or *Vibe*. Respondents age 16 to 24 were three times as likely as 25 to 34s to say they often use music magazines as a new music source, but the number of 16 to 24s who use music magazines as a new music source is still quite small (14%).

Only 2% of our respondents said reading something in a magazine or newspaper was the biggest influence in purchasing the *last* CD they bought for themselves. But nearly 30% said *in the past* they bought a CD after reading a review or article about an artist or group in a magazine. Older respondents were slightly more likely to have purchased a CD after reading a review or article than younger respondents (35-40s 32% vs. 16-24s 25%).

Initial CDs purchased through Record Clubs would not be purchased otherwise by most

Half of the respondents in our study have been members of record clubs in the past, while one third are currently members. Hispanics and Latinos are twice as likely to be members of record clubs than Whites and African-Americans.

We asked current record club members about the initial CDs or cassettes they acquired when they first joined the club – “Would you have purchased many of those initial CDs or cassettes at full price anyway” OR “would you *not* have purchased those initial CDs or cassettes at full price?” A majority (72%) told us they *would not* have purchased those initial CDs or cassettes if they didn’t belong to the club.

Rap and Hip-Hop rule among today’s 16-24s

More evidence for the “Hip-Hop Generation Gap” emerged in this study. When asked to rate different music types “Hip-Hop and Rap” was the most liked music type among 16 to 24s and was the least liked music type among 35 to 40s. 61% of 16 to 24s gave “Hip-Hop and Rap” a “4” or “5” rating on a 5 point scale where “1” is really dislike “Hip-Hop and Rap” and “5” is really like “Hip-Hop and Rap”. This number drops dramatically among 25-34s (18%) and 35-40s (8%). So there seems to be wall somewhere around the age of 25 when it comes to preference for this music type.



This “Hip-Hop Generation Gap” is also evident in several music purchase intention questions we asked. We asked respondents on an unaided basis, which artists’ upcoming CDs are they likely to purchase. Eight of the top 15 most mentioned artists among 16 to 24s were Hip-Hop and Rap artists. *No* Hip-Hop or Rap artists made the Top 15 among 25 to 34s.

“Dropouts” from music purchasing total 5.5% of 16-40 year-olds

5.5% of respondents in the study have not purchased a single CD or cassette in the last 12 months but are actively downloading music from the Internet. Downloaders between the ages of 16 and 24 were twice as likely to report purchasing less music since they began downloading than persons in the older demos. This 5.5% adds up to a tremendous number of music purchasers who are lost if one thinks about this figure in terms of total population.

Some good news - of the downloaders in our study, 22% said they are purchasing *more* CDs since they began downloading and 60% said downloading has not changed their music purchase behavior. But again, that 5.5% number means a huge chunk of potential consumers is no longer available.

We also asked downloaders “if music was not available for free anywhere on the Internet, would you be willing to pay for it?” 37% of downloaders said “Yes” they would pay for it. In general, the older the downloader, the more willing they are to pay for music over the Internet. 52% of 35-40s said they were willing to pay vs. only 30% of 16-24s.

We also asked respondents several questions about Napster, which was still operating at the time of this study. We asked which statement about Napster comes closer to your view: “Napster should be allowed to operate free of charge” OR “Napster should not be allowed to operate unless musicians are compensated”. Just over half of respondents were in favor of artist compensation and 41% said Napster should operate free of charge. This finding suggests the record industry should think about how they are “framing their argument” when it comes to file sharing sites like Napster. Most people do want *artists* to be compensated; it is the *record labels* they don’t want to give their money to.



About Jayne Charneski

Jayne Charneski is a Director of Research at Edison Media Research. Charneski is an expert in music research, regularly conducting projects regarding music preferences both in the U.S. and in Europe for Edison's radio and record industry clients. Charneski oversees dozens of projects and directs all of Edison's research for Internet companies including Launch.com, AOL, and Yahoo! Charneski is a frequent speaker at industry conventions and is often quoted as a research expert in industry trade publications including Radio & Records, Billboard, Airplay Monitor, FMQB, and Gavin. Charneski was featured by CNN as a leading researcher of music trends.

Charneski previously served as a researcher for the 1996 Presidential Primaries and General Election at the Voter News Service, a consortium of the CNN, CBS, ABC, NBC, and FOX News networks responsible for projecting all elections for broadcast. Charneski is a graduate of Albright College.

Jayne can be contacted at JCharneski@edisonresearch.com or 908.707.4707

About Edison Media Research

Edison Media Research conducts survey research and provides strategic information to radio stations, television stations, newspapers, cable networks, record labels, Internet companies and other media organizations. Edison Media Research is the fastest growing market research company in America over the past five years according to *Advertising Age*. Edison Media Research works with many of the largest Radio Ownership Groups and also conducts strategic and perceptual research for a broad array of companies including AOL, Yahoo!, CBS, CNN, Entertainment Weekly, Sony Music, Island Records, Maverick Records, The Cleveland Cavaliers, The Orlando Magic, Princeton University, The Blackstone Group and Time-Life Music. Edison Media Research also conducts research for successful radio stations in South America, Canada, and Europe.



Draft
FOR DISCUSSION PURPOSES ONLY

Sirius XM / [REDACTED]

OVERVIEW

- Sirius XM proposes to broadcast some special programming in celebration of the 20th Anniversary of [REDACTED] album in September, including a special “Town Hall” event featuring band members answering questions from fans at Sirius XM’s NYC studios and five days of continuous, commercial-free [REDACTED] music (pending the required DMCA waiver from Universal Music). This programming will be promoted on multiple Sirius XM music, talk and sports channels to over 40 million weekly listeners, and will be incorporated into Sirius XM’s marketing and PR efforts as outlined below.

MARKETING PROGRAM

Contest

- Sirius XM will launch a contest to invite its subscribers to an exclusive [REDACTED] “Town Hall” broadcast event at its NYC studios on September 24, 2011. The contest, and the broadcast itself, will be promoted across the Sirius XM platform on-air and online, as detailed below.
- Web banners for the contest, featuring approved [REDACTED] artwork, will run on the Sirius XM website for a minimum of one week. Banners will link to the contest entry page which will include the album art and a link to [REDACTED] website for more information.

On-Air Promotion

- Recorded promos and/or liners will air across multiple Sirius XM music, talk, entertainment and sports channels, including Howard Stern, Opie & Anthony, ESPN Radio and NFL Radio.

Online Promotion

- [REDACTED] will be featured on the homepage of the Sirius XM website at the launch of the contest and during the week of the “Town Hall” event in September.
- [REDACTED] content will appear on the Lithium channel page of the Sirius XM website starting with the launch of the contest and continuing through the broadcast of the “Town Hall” event. The page will include approved band images and/or album art, a mention of

the [REDACTED] CD release and a link to [REDACTED] website for more information.

- Promotion via Sirius XM's Facebook and Twitter presence.
- Video Promotion of the "Town Hall" event on the Sirius XM YouTube page as well as on the Sirius XM website, pending approval from management.
- Viral/Grassroots and Social Media Marketing via postings on relevant fan sites, social media, blogs, message boards, etc.

Direct Marketing

- [REDACTED] will be featured in at least one "Highlights" email newsletter to Sirius XM subscribers.
- [REDACTED] will also be featured in one dedicated email blast sent to Sirius XM subscribers. The email will include approved band images and/or album art, a mention of the [REDACTED] CD release and a link to [REDACTED] website for more information.

Retail Marketing

- Sirius XM will include the [REDACTED] name and a mutually approved song title on radio screens featured in marketing/advertising materials created with its retail distributors (Best Buy, RadioShack, etc.) at least once in Q4 2011. Examples of these materials include newspaper circulars and in-store point-of-purchase displays.

Public Relations

- Sirius XM, working together with [REDACTED] management and [REDACTED] will issue a mutually approved press release to announce this programming. The press release will be serviced to all relevant national and local media outlets, and will include a mention of the [REDACTED] CD release and a link to [REDACTED] website for more information.

SIRIUS XM / [REDACTED] – MARKETING PROPOSAL

OVERVIEW

- SIRIUS XM will promote [REDACTED] his [REDACTED] radio show and his music (new albums and/or new releases of catalog albums like the [REDACTED] on multiple channels to over 40 million weekly listeners across the country, and will incorporate [REDACTED] into its marketing and PR efforts during the Term as outlined below.

ON-AIR PROMOTION

- Recorded promos and/or liners for [REDACTED] will air across multiple SIRIUS XM music, talk, news and sports channels, including Classic Vinyl, Classic Rewind, Deep Tracks, The Spectrum, The Loft, Outlaw Country, Opie & Anthony/The Virus, Raw Dog Comedy, NASCAR Radio, NFL Radio, MLB Network Radio, SIRIUS XM Fantasy Sports Radio and Mad Dog Radio (24/7 Sports Talk).

RETAIL MARKETING

- SIRIUS XM will include [REDACTED] name and a mutually agreed upon song title on the retail packaging for one of our radios (SIRIUS or XM) in 2011. For example, [REDACTED] will appear on the radio screen pictured on the packaging (outer box) that contains the radio. This would generate thousands of valuable consumer impressions for [REDACTED] at high-traffic retailers like Best Buy and RadioShack, where SIRIUS XM radios are sold.
- SIRIUS XM will include [REDACTED] name and a mutually agreed upon song title on radio screens featured in marketing/advertising materials created with our retail partners (Best Buy, RadioShack, etc.) at least 1x per quarter during the term. Examples of these materials include in-store point-of-purchase displays and newspaper circulars.
- [REDACTED] image will continue to be included in SIRIUS XM retail brochures, channel guides and other marketing materials distributed by our retail and OEM partners.

DIRECT MARKETING

- Inclusion in the Highlights email newsletter sent to SIRIUS XM subscribers across the country at least 2x during the Term.
- Dedicated email blast sent to SIRIUS XM subscribers across the country at least 1x during the Term. Would promote a new [REDACTED] event (album release, tour, exclusive SIRIUS XM programming, etc.) and would include a link to [REDACTED] website for more information.

ONLINE PROMOTION

- Dedicated page on the SIRIUS XM website for [REDACTED] will include a link to [REDACTED] website for more information.
- Homepage placement on the SIRIUS XM website for [REDACTED] at least 1x per month.
- Promotion via SIRIUS XM's social media presence, including Facebook and Twitter.
- Promotion on SIRIUS XM's YouTube page, pending approved [REDACTED] video clips.
- Ongoing viral marketing incorporating [REDACTED] on sites and social media.

PUBLICITY

- The SIRIUS XM Publicity Department will issue a mutually approved press release to announce the new season of [REDACTED]. Press release will be serviced to all relevant national and local media outlets, and will include a link to [REDACTED] website for more information.

SWEEPSTAKES

- In the event of a new [REDACTED] tour, or a special live performance exclusively for SIRIUS XM subscribers and [REDACTED] fan club members, SIRIUS XM will launch a sweepstakes on its platform and extensively promote it on air and online.
- A sweepstakes banner would run on the web pages for the channels listed above on the SIRIUS XM website, and would also be included in at least one SIRIUS XM Highlights email newsletter.
- A partner opt-in box for [REDACTED] would be included on the sweepstakes entry page, so people can sign up to receive email updates from [REDACTED] when entering the sweepstakes. Opt-ins will be shared with [REDACTED] mgmt after the sweepstakes ends.

ADDITIONAL PROGRAMMING

SIRIUS XM can create additional special programming opportunities that can further generate awareness and excitement for [REDACTED]. These include:

- An in-depth special dedicated to a new album or catalog release (like the [REDACTED] [REDACTED] featuring track-by-track commentary by [REDACTED]).
- Guest DJ sessions that would air on appropriate SIRIUS XM channels (eg: B.B. King's Bluesville, Outlaw Country).
- A one-on-one interview that could air on music as well as on relevant talk, entertainment and sports channels.

AGREEMENT

This AGREEMENT, dated as of April 7, 2011 (this "Agreement"), is between SIRIUS XM RADIO INC. (together with its subsidiaries and affiliates, "Sirius XM") and WARNER BROS. RECORDS INC. ("Company").

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Company and Sirius XM hereby agree as follows:

1. Company hereby grants Sirius XM the right to: (a) transmit on its audio entertainment service (the "Sirius XM Service"), without restriction as to the number of songs from the same phonorecord or by the same artist that may be played in a certain time period, all sound recordings of the present and former artists of the bands currently known as Metallica (each, an "Artist" and, collectively, the "Artists" or the "Band"), that are owned and/or controlled by Company (collectively, the "Masters", the definition of which includes all sound recordings set forth on attached "Exhibit A"), for use on a full-time channel dedicated principally to the music of the Band that features the Masters and other sound recordings selected by Sirius XM on the Sirius XM Service (the "Channel") for the period commencing on April 9, 2011 and ending on September 7, 2011 (the "Term"); (b) make and use ephemeral copies of the Masters in connection with such transmissions; and (c) promote and publicize, through the use of any means, the Masters in connection with the Channel and the availability of the Channel on the Sirius XM Service, including announcing the date and time of transmission on the Sirius XM Service. Subject to paragraph 2 below, such right shall apply to the Sirius XM Service, however distributed, including satellite radio, internet streaming and mobile telephones in a non-downloadable format and linear distribution (i.e., not "on demand") over cable and satellite TV systems.

2. The Channel shall be broadcast on Sirius XM's satellite radio service from April 16, 2011 through and including April 29, 2011; during the remainder of the Term, the Channel shall be broadcast solely on Sirius XM's internet radio service. Company and Sirius XM agree that the name of the Channel shall be "Metallica Presents: Big 4 Radio" through May 7, 2011 and "Mandatory Metallica" for the remainder of the Term.

3. Company hereby grants Sirius XM and licensees a license, without compensation, to use the name, image, voice, and likeness of Artists (collectively, "Artist Identification"), any trademarks or service marks owned or controlled by Company relating to Artists (collectively, the "Marks") for the purposes of creating, producing, broadcasting, marketing, advertising, publicizing and promoting the Channel in connection with the Sirius XM Service. The Marks may be used in packaging for Sirius XM branded radio receivers, Sirius XM channel guides, circulars and point of sale materials relating to Sirius XM. Any such use pursuant to this paragraph 3 in connection with the advertising and promotion of the Channel or the Sirius XM Service shall be approved in advance by Company (which approval shall not be unreasonably withheld, conditioned or delayed) and Artist.

4. From the date hereof through the expiration of the Term, Sirius XM shall have the irrevocable, royalty-free, worldwide right to promote and publicize the Channel and its

availability on the Sirius XM Service, each in any and all media, as determined by Sirius XM in its sole discretion (unless otherwise specified herein). The foregoing right shall include the right to use the Channel Material, the name and approved images of the Band and the name, voice and approved likeness of each Artist. As used in this Agreement, "Channel Material" shall collectively refer to the results and proceeds of any recording sessions and previously-recorded material that features one or more of the Artists.

5. Sirius XM shall (i) issue a mutually agreeable press release regarding the Channel (subject to Artists providing quotes); (ii) record promotional announcements for the Channel for broadcast on various music, talk and sports channels on the Sirius XM Service; (iii) provide a page dedicated to the Channel on Sirius XM's www.siriusxm.com website (the "Sirius XM Website"), which page shall include a link to the Band's official website ("Artists' Website") and the cover art of the DVD entitled, "The Big 4: Live From Sofia Bulgaria" (the "Album" and such art, the "Album Art"); (iv) feature the Channel on the homepage of the Sirius XM Website upon the launch of the Channel and at least once per month during the Term; (v) feature the Channel on the "Listen Online" page of the Sirius XM Website (such feature to include approved images of the Artists and/or the Album Art); (vi) feature the Channel in the banner of the webpage on which Sirius XM's online media player appears; (vii) include the Channel and reference to the Band in a dedicated e-mail blast to listeners requesting such correspondence (such blast to include the Album Art and a link to the Artist's Website); (viii) include the Channel and reference Artists in the "Sirius XM Highlights" electronic newsletter at least once during the Term; (ix) mention the Channel and the Album in Sirius XM's online/ social media postings (including on Sirius XM's Facebook page and Twitter feed); (x) include a video clip featuring Artists on Sirius XM's YouTube Channel (such video subject to Band's approval); and (xi) include the name of the Band and a mutually approved song title in the display of radio screens featured in marketing and/or advertising materials of Sirius XM and/or its retail distributors (e.g., newspaper circulars and point-of-purchase displays) at least once. Except as specified above, Sirius XM shall determine all matters relating to the foregoing promotional obligations in its sole, good faith discretion.

6. Each party hereby represents and warrants to the other party that it has the power and authority to enter into this Agreement and to perform all of its obligations hereunder and that neither the execution and delivery of this Agreement, nor the performance of its obligations hereunder, will violate any agreement to which it is a party or any federal, state, or local law or regulation to which it is subject. Company hereby represents and warrants to Sirius XM that: (i) it has all requisite rights, waivers, permissions, clearances, power, and authority to license the Masters, the Artists Identification, the Marks and any other material or content licensed or provided by Company to Sirius XM hereunder; and (ii) Sirius XM's distribution, transmission, performance and promotion of the Masters and any other material or content licensed or provided by Company to Sirius XM hereunder as contemplated by this Agreement will not infringe upon or violate the rights of any person or entity, including rights relating to or arising from copyright, publicity, privacy, trademark, unfair competition, defamation, or any other right of any third party. Nothing herein shall be construed to augment, reduce or change in any respect: (i) the fees otherwise payable by Sirius XM in connection with the Masters transmitted pursuant to this Agreement or otherwise to SoundExchange pursuant to the Copyright Act or (ii) Company's right to collect, as it otherwise would under its agreement with SoundExchange (or

its successor) or pursuant to the Copyright Act, its pro rata share of such fees paid by Sirius XM to SoundExchange (or its successor) pursuant to this agreement or otherwise. In addition, Sirius XM shall be solely responsible for any and all payments required in connection with Sirius XM's public performance of the musical works embodied in the Masters.

7. All notices and other communications hereunder shall be in writing and shall be deemed given when delivered personally or via facsimile (with confirmation of receipt received by the sender), one business day after being delivered to a nationally recognized overnight courier with next day delivery specified or three business days after being deposited in the United States mail, first class postage prepaid, with return receipt requested, to the addresses specified below, or at such other address as either party may supply by written notice delivered in accordance herewith. Notices to Company shall be sent to Warner Bros. Records Inc., 3300 Warner Blvd., Burbank, CA 91505 Attn: SVP, Business Affairs. Notices to Sirius XM shall be sent to Sirius XM Radio Inc., 1221 Avenue of the Americas, New York, NY 10020, or to Facsimile No. (212) 584-5353, Attention: General Counsel.

8. This Agreement shall be governed by, and construed in accordance with, the laws of the State of New York, regardless of principles of conflicts of laws that may require the application of the laws of another jurisdiction.

9. This Agreement constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior agreements and understandings, both oral and written, between Sirius XM and Company with respect to the subject matter hereof. Neither this Agreement nor any of the terms hereof may be amended, supplemented, waived or modified except by in writing signed by both parties, and all rights not specifically granted are reserved.

10. This Agreement may be executed in counterparts, all of which shall be considered one and the same agreement, and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party. Delivery of a counterpart by facsimile or in a .pdf format shall be as effective as physical delivery of an original signed counterpart.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

WARNER BROS. RECORDS INC.

By: 
Name: Marc Cimino
Title: SUP, Business Affairs

SIRIUS XM RADIO INC.

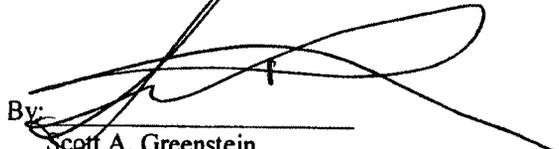
By: 
Scott A. Greenstein
President and Chief Content Officer

EXHIBIT A**Studio albums**

Kill 'Em All
Ride the Lightning
Master of Puppets
...And Justice for All
Metallica
Load
ReLoad
St. Anger
Death Magnetic

Live albums

Live Shit: Binge & Purge
S&M
Orgullo, Pasión y Gloria: Tres Noches en la Ciudad de México
The Big 4 Live from Sofia, Bulgaria

Cover albums

Garage Inc.

Video albums

Cliff 'Em All
2 of One
A Year and a Half in the Life of Metallica
Live Shit: Binge & Purge
Cunning Stunts
S&M
Classic Albums: Metallica – Metallica
The Videos 1989–2004
Français Pour Une Nuit
Orgullo, Pasión y Gloria: Tres Noches en la Ciudad de México
The Big 4 Live from Sofia, Bulgaria

Extended plays

The \$5.98 E.P.: Garage Days Re-Revisited
Some Kind of Monster
Six Feet Down Under
Six Feet Down Under (Part II)
Live at Grimey's

Box sets

The Good, the Bad and the Live
Metallica: Vinyl Box Set

The Metallica Collection

Live Downloads

As made available from www.livemetallica.com throughout the Term

November 18, 2009

Mr. Steve Blatter
Sr. Vice President
Music Programming
Sirius XM Radio Inc.
1221 Avenue of the Americas
New York, New York 10020
Facsimile No.: (212)901-6507

Dear Mr. Blatter:

Warner Brothers ("Company") hereby grants Sirius XM Radio Inc. ("Sirius") the right (i) to transmit on its audio entertainment service (the "Sirius Service"), without restriction as to the number of songs from the same phonorecord or by the same artist that may be played in a certain time period, sound recordings known as "The Live Anthology" of the artist known as Tom Petty which are owned and/or controlled by Company (collectively, the "Masters"), for use as part of a feature to be initially broadcast on the Sirius Service during the period from **November 18, 2009** through **December 31, 2009** and (ii) promote, through the use of any means, the Masters in connection with the feature on the Sirius Service, including announcing the dates and times of transmissions on the Sirius Service. Such right shall apply to Sirius' audio entertainment service, however distributed, including satellite radio, internet streaming and distribution over cable and satellite TV systems. No other rights are granted by Company to Sirius hereunder.

Nothing herein shall be construed to change the fees payable by Sirius to SoundExchange pursuant to rates adopted by the Copyright Royalty Board for satellite transmission of the Masters, any other sound recording fees payable by Sirius to SoundExchange for Sirius' streaming of the Masters on the Internet or any other medium that are ultimately adopted by the Copyright Royalty Board or owed pursuant to a private agreement, or Company's right to collect from SoundExchange any of the foregoing fees paid by Sirius.

Sincerely,

Company: Warner Bros. Records Inc.

By: Marc Cimino

Name: Marc Cimino

Title: SVP, Business & Legal Affairs

per attached promotional plan

September 22, 2010

Mr. Steve Blatter
Sr. Vice President
Music Programming
Sirius XM Radio Inc.
1221 Avenue of the Americas
New York, New York 10020
Facsimile No.: (212)901-6507

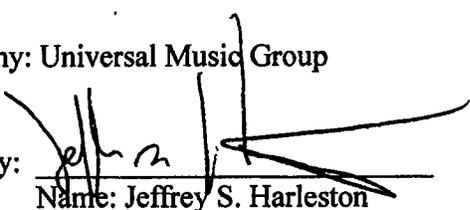
Dear Mr. Blatter:

Universal Music Group ("Company") hereby grants Sirius XM Radio Inc. ("Sirius") the right (i) to transmit on its audio entertainment service (the "Sirius Service"), without restriction as to the number of songs from the same phonorecord or by the same artist that may be played in a certain time period, sound recordings of the artist known as Elton John which are listed on Exhibit A and owned and/or controlled by Company (collectively, the "Masters"), for use as part of a feature (the "Feature") to be broadcast on the Sirius Service, solely during the period from **October 15, 2010** through **October 22, 2010** and (ii) to promote, through the use of any means, the Masters in connection with the Feature on the Sirius Service, including announcing the dates and times of transmissions on the Sirius Service. Such right shall apply to Sirius' audio entertainment service, however distributed, including satellite radio, internet streaming and distribution over cable and satellite TV systems. No other rights are granted by Company to Sirius hereunder.

Nothing herein shall be construed to change the fees payable by Sirius to SoundExchange pursuant to rates adopted by the Copyright Royalty Board for satellite transmission of the Masters, any other sound recording fees payable by Sirius to SoundExchange for Sirius' streaming of the Masters on the Internet or any other medium that are ultimately adopted by the Copyright Royalty Board or owed pursuant to a private agreement, or Company's right to collect from SoundExchange any of the foregoing fees paid by Sirius.

Sincerely,

Company: Universal Music Group

By: 

Name: Jeffrey S. Harleston

Title: Senior Vice President

Business & Legal Affairs

Exhibit A

Studio albums

- *Empty Sky* (1969)
- *Elton John* (1970)
- *Tumbleweed Connection* (1970)
- *Madman Across the Water* (1971)
- *Honky Château* (1972)
- *Don't Shoot Me I'm Only the Piano Player* (1973)
- *Goodbye Yellow Brick Road* (1973)
- *Caribou* (1974)
- *Captain Fantastic and the Brown Dirt Cowboy* (1975)
- *Rock of the Westies* (1975)
- *Blue Moves* (1976)
- *A Single Man* (1978)
- *Victim of Love* (1979)
- *21 at 33* (1980)
- *The Fox* (1981)
- *Jump Up!* (1982)
- *Too Low for Zero* (1983)
- *Breaking Hearts* (1984)
- *Ice on Fire* (1985)
- *Leather Jackets* (1986)
- *Reg Strikes Back* (1988)
- *Sleeping with the Past* (1989)
- *The One* (1992)
- *Duets* (1993)
- *Made in England* (1995)
- *The Big Picture* (1997)
- *Songs from the West Coast* (2001)
- *Peachtree Road* (2004)
- *The Captain & the Kid* (2006)
- *The Union (w/Leon Russell)* (2010)

Live albums

- *17-11-70* (1971)
- *Here and There* (1976)
- *Elton John live in Australia with the Melbourne Symphony Orchestra* (1987)
- *Elton John One Night Only - The Greatest Hits* (2000)

Soundtracks, scores & theatre albums

- *Friends* (soundtrack)
- *The Lion King* (1997)
- *Aida* (1998)
- *The Muse* (1999)
- *The Road to El Dorado (soundtrack)* (2000)
- *Billy Elliot* (2005)
- *Lestat* (2005)

Compilation albums

- *Elton John's Greatest Hits* (1974)
- *Elton John's Greatest Hits Volume II* (1977)
- *Lady Samantha* (1980)
- *The Very Best of Elton John* (1980)
- *Love Songs* (1982)
- *Your Songs* (1985)
- *Elton John's Greatest Hits Vol. 3* (1987)
- *To Be Continued* (1990)
- *The Very Best of Elton John* (1990)
- *Rare Masters* (1992)
- *Elton John's Greatest Hits 1976-1986* (1992)
- *Love Songs* (1995)
- *Greatest Hits 1970-2002* (2002)
- *Elton John's Christmas Party* (2005)
- *Rocket Man: The Definitive Hits* (2007)

Extended plays

- 1979 *The Thom Bell Sessions*
- 1989 *The Complete Thom Bell Sessions*
- 2003 *Remixed EP*

November 1, 2010

Mr. Steve Blatter
Sr. Vice President
Music Programming
Sirius XM Radio Inc.
1221 Avenue of the Americas
New York, New York 10020
Facsimile No.: (212)901-6507

Dear Mr. Blatter:

Capitol Records ("Company") hereby grants Sirius XM Radio Inc. ("Sirius") the right (i) to transmit on its audio entertainment service (the "Sirius Service"), without restriction as to the number of songs from the same phonorecord or by the same artist that may be played in a certain time period, sound recordings of the artist known as Katy Perry from the album "Teenage Dream" which are owned and/or controlled by Company (collectively, the "Masters"), for broadcast on the Sirius Service during the period from November 5, 2010 through March 5, 2011 and (ii) promote, through the use of any means, the Masters in connection with the feature on the Sirius Service, including announcing the dates and times of transmissions on the Sirius Service. Such right shall apply to Sirius' audio entertainment service, however distributed, including satellite radio, internet streaming and distribution over cable and satellite TV systems. No other rights are granted by Company to Sirius hereunder.

Nothing herein shall be construed to change the fees payable by Sirius to SoundExchange pursuant to rates adopted by the Copyright Royalty Board for satellite transmission of the Masters, any other sound recording fees payable by Sirius to SoundExchange for Sirius' streaming of the Masters on the Internet or any other medium that are ultimately adopted by the Copyright Royalty Board or owed pursuant to a private agreement, or Company's right to collect from SoundExchange any of the foregoing fees paid by Sirius.

Sincerely,

Company: CAPITOL RECORDS

By: Joe Raluy
Name: [Signature]
Title: [Signature]

VP Pop Promotion/
Marketing



June 22, 2010

Mr. Steve Blatter
 Sr. Vice President
 Music Programming
 Sirius XM Radio Inc.
 1221 Avenue of the Americas
 New York, New York 10020
 Facsimile No.: (212)901-6507

Dear Mr. Blatter:

Interscope Records("Company") hereby grants Sirius XM Radio Inc. ("Sirius") the right (i) to transmit on its audio entertainment service (the "Sirius Service"), without restriction as to the number of songs from the same phonorecord or by the same artist that may be played in a certain time period, sound recordings from the album "Recovery" of the artist known as Eminem which are owned and/or controlled by Company (collectively, the "Masters"), for use as part of a feature to be initially broadcast on the Sirius Service on the Shade 45 channel and (ii) promote, through the use of any means, the Masters in connection with the feature on the Sirius Service, including announcing the dates and times of transmissions on the Sirius Service. Such right shall apply to Sirius' audio entertainment service, however distributed, including satellite radio, internet streaming and distribution over cable and satellite TV systems. No other rights are granted by Company to Sirius hereunder.

Nothing herein shall be construed to change the fees payable by Sirius to SoundExchange pursuant to rates adopted by the Copyright Royalty Board for satellite transmission of the Masters, any other sound recording fees payable by Sirius to SoundExchange for Sirius' streaming of the Masters on the Internet or any other medium that are ultimately adopted by the Copyright Royalty Board or owed pursuant to a private agreement, or Company's right to collect from SoundExchange any of the foregoing fees paid by Sirius.

Sincerely,

Company:

Interscope Records

By:

Brenda Romano
 Name: Brenda Romano
 Title: Co-President

INTERSCOPE GEPFEN A & M

2220 Colorado Avenue Santa Monica, CA 90404 310-865-1000

Island Def Jam Music Group

November 16, 2009

Mr. Steve Blatter
Senior Vice President, Music Programming
Sirius Satellite Radio Inc.
1221 Avenue of the Americas, 36th Floor
New York, New York 10020
Facsimile No.: (212) 901-6507

Dear Mr. Blatter:

Island Def Jam Music Group, a division of UMG Recordings, Inc. ("Company") hereby grants Sirius XM Radio Inc. (together with its subsidiaries and its and their affiliated entities, "Sirius") the right to: (a) transmit on its audio entertainment service (whether branded 'Sirius' and/or 'XM', the "Sirius Service"), without restriction as to the number of songs from the same phonorecord or by the same artist that may be played in a certain time period, recordings from the new Bon Jovi ("Artist") album entitled "The Circle" (the "Album") and any and all other sound recordings featuring Artist that are owned and/or controlled by Company (collectively, the "Masters"), for use on a full-time channel branded "[Bon Jovi Radio]" or such other name as Company and Sirius agree (the "Channel"), on the Sirius Service from November 20, 2009 through November 22, 2009 (the "Term"), (b) make and use ephemeral copies of the Masters in connection with such transmissions, (c) promote and publicize, through the use of any means, the Masters in connection with the Channel and the availability of each of the foregoing on the Sirius Service, including announcing the date and time of transmission on the Sirius Service, and (d) use the name, approved voice, approved likeness and approved biographical information of Artist in the promotion and publicity of the Channel. Such right shall apply to the Sirius Service, however distributed, including satellite radio, internet streaming, and distribution as an audio-only channel over cable and satellite TV systems. In consideration of the grant of such rights by Company, Sirius shall (i) cause the Channel to include daily features to highlight the Album, (ii) issue a mutually agreeable press release regarding the Channel and (iii) cross-promote the Channel on various Sirius' music and entertainment channels. To the extent permissible, Sirius will use reasonable efforts to enhance awareness of the Album in such cross-promotions.

Company represents and warrants to Sirius that it has the authority to grant Sirius the rights set forth herein. No other rights are granted by Company to Sirius hereunder. Nothing herein shall be construed to change the fees payable by Sirius to SoundExchange pursuant to rates adopted by the Copyright Royalty Board for satellite transmission of the Masters, any other sound recording fees payable by Sirius to SoundExchange for Sirius' streaming of the Masters on the Internet or any other medium that are ultimately adopted by the Copyright Royalty Board or owed pursuant to a private agreement, or Company's right to collect from SoundExchange any of the foregoing fees paid by Sirius. In addition, Sirius shall be solely responsible for all payments required in connection with Sirius' public performance of the musical works embodied in the Masters.

Sincerely,

Island Def Jam Music Group,
a division of UMG Recordings, Inc.

By: 
Name: *Heath Kudler*
Title: *vp, Business & Legal Affairs*

1/4/10

Mr. Steve Blatter
Sr. Vice President
Music Programming
Sirius XM Radio Inc.
1221 Avenue of the Americas
New York, New York 10020
Facsimile No.: (212)901-6507

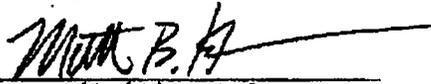
Dear Mr. Blatter:

XL Recordings("Company") hereby grants Sirius XM Radio Inc. ("Sirius") the right (i) to transmit on its audio entertainment service (the "Sirius Service"), without restriction as to the number of songs from the same phonorecord or by the same artist that may be played in a certain time period, sound recordings of the artist known as Vampire Weekend which are owned and/or controlled by Company (collectively, the "Masters"), for use as part of a feature to be initially broadcast on the Sirius Service during the period from **5pm on January 8, 2010 through January 10, 2010** and (ii) promote, through the use of any means, the Masters in connection with the feature on the Sirius Service, including announcing the dates and times of transmissions on the Sirius Service. Such right shall apply to Sirius' audio entertainment service, however distributed, including satellite radio, internet streaming and distribution over cable and satellite TV systems. No other rights are granted by Company to Sirius hereunder.

Nothing herein shall be construed to change the fees payable by Sirius to SoundExchange pursuant to rates adopted by the Copyright Royalty Board for satellite transmission of the Masters, any other sound recording fees payable by Sirius to SoundExchange for Sirius' streaming of the Masters on the Internet or any other medium that are ultimately adopted by the Copyright Royalty Board or owed pursuant to a private agreement, or Company's right to collect from SoundExchange any of the foregoing fees paid by Sirius.

Sincerely,

Company: Beggars Group USA

By: 
Name: Matthew B. Harman
Title: G.M.

1/4/10

Mr. Steve Blatter
Sr. Vice President
Music Programming
Sirius XM Radio Inc.
1221 Avenue of the Americas
New York, New York 10020
Facsimile No.: (212)901-6507

Dear Mr. Blatter:

XL Recordings("Company") hereby grants Sirius XM Radio Inc. ("Sirius") the right (i) to transmit on its audio entertainment service (the "Sirius Service"), without restriction as to the number of songs from the same phonorecord or by the same artist that may be played in a certain time period, sound recordings of the artist known as Vampire Weekend which are owned and/or controlled by Company (collectively, the "Masters"), for use as part of a feature to be initially broadcast on the Sirius Service during the period from **5pm on January 8, 2010 through January 10, 2010** and (ii) promote, through the use of any means, the Masters in connection with the feature on the Sirius Service, including announcing the dates and times of transmissions on the Sirius Service. Such right shall apply to Sirius' audio entertainment service, however distributed, including satellite radio, internet streaming and distribution over cable and satellite TV systems. No other rights are granted by Company to Sirius hereunder.

Nothing herein shall be construed to change the fees payable by Sirius to SoundExchange pursuant to rates adopted by the Copyright Royalty Board for satellite transmission of the Masters, any other sound recording fees payable by Sirius to SoundExchange for Sirius' streaming of the Masters on the Internet or any other medium that are ultimately adopted by the Copyright Royalty Board or owed pursuant to a private agreement, or Company's right to collect from SoundExchange any of the foregoing fees paid by Sirius.

Sincerely,

Company: Beggars Group USA

By: Matthew B. Harmon

Name: Matthew B. Harmon

Title: G.M.

April 16, 2010

Mr. Steve Blatter
Sr. Vice President
Music Programming
Sirius XM Radio Inc.
1221 Avenue of the Americas
New York, New York 10020

Dear Mr. Blatter:

Sirius XM Radio Inc ("Sirius") requests permission, for a limited time, to publicly perform certain sound recordings by Janet Jackson in a manner that would otherwise violate the sound recording performance complement, 17 U.S.C. §114(d)(2)(B)(i), 17 U.S.C. §114(d)(2)(C)(i) and 17 U.S.C. §114(j)(13). To this end, Virgin Records ("Company") hereby (i) grants Sirius for the period from April 24, 2010 through April 27, 2010 (the "Broadcast Period") a non-exclusive, non-transferable license to publicly perform sound recordings embodying the performances of the artist professionally known as Janet Jackson ("Artist") which are owned and/or controlled by Company (collectively, the "Masters"), solely in connection with a Sirius program about Artist (the "Feature") (the Feature shall not exceed ninety (90) minutes in length, and shall focus on the Artist and Masters and may feature newly recorded interview material with the Artist (the "Interview Material") and (ii) agrees to waive enforcement of the statutory license conditions relating to the sound recording performance complement of 17 U.S.C. §114(d)(2)(B)(i), 17 U.S.C. §114(d)(2)(C)(i) and 17 U.S.C. §114(j)(13) with respect to the performance of such sound recordings and (iii) grants to Sirius non-exclusive, non-transferable right to promote, through the use of any means, the Masters in connection with the Feature on the Sirius Service, including announcing the date and time of transmission on the Sirius Service. Such permission shall apply to Sirius' audio entertainment service, however distributed, including satellite radio, internet streaming and distribution over cable and satellite TV systems. Other than permission to transmit more than 4 songs by the Artist controlled by Company within any 3-hour transmission or broadcast period on the Sirius Service and the promotion of such transmissions as set forth herein, no other rights are granted by Company to Sirius hereunder. Upon expiration of the Broadcast Period, Sirius will deliver the Interview Materials, if any, to Company and shall grant to Company the right to exploit the Interview Material worldwide in perpetuity.

The grant of rights set forth above are strictly subject to Sirius' payment to SoundExchange of all applicable sound recording performance royalties due in connection with all transmissions hereunder, including but not limited to fees owed by Sirius pursuant to its agreement with SoundExchange for satellite transmission and all other fees owed as a result of Sirius's streaming of such sound recordings at the applicable rates for such transmissions and shall make all necessary reportings of the performances to Soundexchange. Failure by Sirius to make such payments to Soundexchange will automatically nullify this waiver and the grant of rights set forth above shall be deemed void from inception.

Company does not own or control rights in any musical compositions embodied on the Master(s) and no such rights are granted hereunder. It is understood that Sirius shall be solely



responsible for obtaining from any third parties any public performance rights or other publishing clearances in respect of Sirius' use of the Master(s) and any costs or payments associated therewith.

Nothing herein shall be construed to change the fees payable by Sirius to SoundExchange pursuant to rates adopted by the Copyright Royalty Board for satellite transmission of the Masters, any other fees payable by Sirius to SoundExchange for Sirius' streaming of the Masters on the Internet or any other medium or any fees owed pursuant to any private agreement or Company's right to collect from SoundExchange or otherwise any of the foregoing fees paid by Sirius.

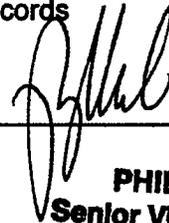
Sincerely,

Virgin Records



By: _____

Name:



PHILIP WILD
Senior Vice-President
Business Affairs



September 17, 2010

Mr. Steve Blatter
Sr. Vice President
Music Programming
Sirius XM Radio Inc.
1221 Avenue of the Americas
New York, New York 10020
Facsimile No.: (212)901-6507

Dear Mr. Blatter:

Island Def Jam ("Company") hereby grants Sirius XM Radio Inc. ("Sirius") the right (i) to transmit on its audio entertainment service (the "Sirius Service"), without restriction as to the number of songs from the same phonorecord or by the same artist that may be played in a certain time period, sound recordings of the artist known as Rihanna which are owned and/or controlled by Company (collectively, the "Masters"), for use on the Hits 1 and 20 on 20 channels on the Sirius Service and (ii) promote, through the use of any means, the Masters in connection with the feature on the Sirius Service, including announcing the dates and times of transmissions on the Sirius Service. Such right shall apply to Sirius' audio entertainment service, however distributed, including satellite radio, internet streaming and distribution over cable and satellite TV systems. No other rights are granted by Company to Sirius hereunder.

Nothing herein shall be construed to change the fees payable by Sirius to SoundExchange pursuant to rates adopted by the Copyright Royalty Board for satellite transmission of the Masters, any other sound recording fees payable by Sirius to SoundExchange for Sirius' streaming of the Masters on the Internet or any other medium that are ultimately adopted by the Copyright Royalty Board or owed pursuant to a private agreement, or Company's right to collect from SoundExchange any of the foregoing fees paid by Sirius.

Sincerely,

Company: JDJMG

By: Erik Olesen

Name: ERIK OLESEN

Title: SVP Promotions

646-313-2475

File Under: _____



AGREEMENT AND RELEASE

The undersigned artist, performer, athlete or personality ("Artist") hereby agrees as follows:

1. Artist hereby grants to Sirius XM Radio Inc., its subsidiaries, affiliates and the successors and assigns of each of the foregoing (collectively, "Sirius XM") the right to use the name, image and likeness of Artist and any transcripts, audio, video, photographs and other recordings of Artist's interview, performance and/or appearance on 6.16.11, 2011, in any and all media, including without limitation, satellite radio, cable and satellite television, mobile telephones, internet (streaming and/or archiving for download), Sirius XM's physical and electronic newsletters, other subscriber emails and physical mailings, and as "B-roll" material in connection with media and news coverage involving Sirius XM.

2. Artist represents and warrants to Sirius XM that (a) Artist has all the power and authority to enter into this Agreement and Release, to grant all of the rights described in Section 1 above and to perform all of Artist's obligations hereunder, and (b) the execution and delivery of this Agreement and Release, the grant of the rights described in Section 1 above and the performance of Artist's obligations hereunder each will not violate any agreement to which Artist is a party or to which Artist is aware, any federal, state or local law or regulation to which Artist is subject, or any right of any third party. The signatory of this Agreement and Release represents that he or she is duly authorized and has the authority to execute this Agreement and Release on behalf of the Artist.

3. Artist hereby releases and indemnifies Sirius XM from and against any and all damages, claims, liability and demands arising out of or in connection with any use in accordance with Sections 1 and 2 above, including without limitation, any and all claims relating to rights of publicity, invasion of privacy, defamation, libel, slander and other personal and property rights. Artist agrees not to bring or participate in any such claim or proceeding against Sirius XM.

4. Artist understands and agrees that Sirius XM is under no obligation to make any use of Artist's interview, performance, appearance, name, image or likeness.

ACCEPTED AND AGREED:

Name of Artist:

Aretha Franklin

Signature:

[Handwritten Signature]

Name (if other than Artist):

Tracey Jordan

Company:

Aretha's Records

Date:

6.16.11

Contact Number:

212.399.0335

Address:

299 W. 12th St

City, State, ZIP:

NYC NY 10014

Rev 6/09



AGREEMENT AND RELEASE

In consideration of potential promotional exposure, the undersigned artist(s) or performer(s) (individually and collectively, "Artist"), or where an individual other than Artist is specified, the signatory on Artist's and its' own behalf, hereby agrees as follows:

1. Artist hereby grants to Sirius XM Radio Inc., its affiliated entities and its and their successors and assigns (collectively, "Sirius XM") the worldwide, royalty-free right to use the Artist's performance and/or appearance on the date and at the venue set forth below (collectively, "Artist's Appearance"), on Sirius XM's entertainment service one time live and one rebroadcast on January 1, 2011 however distributed. The foregoing right shall include the right to use Artist's name in a press release, approved by Artist, such approval not to be unreasonably withheld, conditioned, or delayed.

2. Artist hereby represents and warrants to Sirius XM that Artist has all requisite rights, waivers, permissions, clearances power, and authority to provide the rights in paragraph 1 above to Sirius XM and that no other rights are required for Sirius XM to use Artist's Appearance in accordance with paragraph 1 above. Artist hereby releases and indemnifies Sirius XM from and against any and all damages, claims, liability and demands (collectively, "Claims") arising out of or in connection with any exercise of rights in accordance with paragraph 1 above, including without limitation, any and all Claims relating to rights of publicity, invasion of privacy, defamation, libel, slander and other personal and property rights. Artist agrees not to bring or participate in any such Claim or proceeding against Sirius XM. The signatory of this Agreement and Release represents that he or she is duly authorized and has the authority to execute this Agreement and Release on behalf of the Artist.

3. Artist understands and agrees that Sirius XM is under no obligation to make any use of Artist's Appearance, name, image and/or likeness.

ACCEPTED AND AGREED:

Date of Performance: Dec 31, 2010

Name of Performance Venue: POWRAY BALL ROOM

Signature: [Handwritten Signature]
Name of Artist: Patti Smith

Name (if other than Artist):

Company (if any):

Contact Number: andi ostrave 914-924-0698

Address: 51 Mac Dougal St #253

City, State, ZIP Code: NYC, NY 10012



AGREEMENT AND RELEASE

In consideration of potential promotional exposure, the undersigned artist, performer or personality ("Artist") hereby agrees as follows:

1. Artist hereby grants to Sirius XM Radio Inc., its successors and assigns ("Sirius") the worldwide, royalty-free right to use any transcripts and audio recordings of Artist's interview, performance and/or appearance on the date and at the venue set forth below (collectively, "Artist's Appearance"), on Sirius' entertainment service in various media, including without limitation, satellite radio, satellite and cable television, mobile phones, the internet (streaming only); in Sirius' physical and electronic newsletters, other subscriber e-mails and physical mailings, and as "B-roll" material in connection with media and news coverage involving Sirius.

2. Artist hereby represents and warrants to Sirius that Artist has all requisite rights, waivers, permissions, clearances power, and authority to provide the rights in paragraph 1 above, to Sirius and that no other rights are required for Sirius to use Artist's Appearance in accordance with paragraph 1, above. Artist hereby releases and indemnifies Sirius from and against any and all damages, claims, liability and demands (collectively, "Claims") arising out of or in connection with any use of Artist's Appearance in accordance with paragraph 1 above, including without limitation, any and all Claims relating to rights of publicity, invasion of privacy, defamation, libel, slander and other personal and property rights. Artist agrees not to bring or participate in any such Claim or proceeding against Sirius.

3. Artist understands and agrees that Sirius is under no obligation to make any use of Artist's Appearance, name, image and/or likeness.

ACCEPTED AND AGREED:

Date of Performance:

7/13/10

Name of Performance Venue:

les nuits de fourvier, Lyon France

Signature:

[Handwritten Signature]

Name of Artist:

Vampire Weekend

Name (if other than Artist):

Matt Pollack

Company (if any):

monotone, Inc

Contact Number:

917 494 3449

Address:

City, State, ZIP Code:



AGREEMENT AND RELEASE

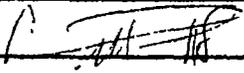
The undersigned artist, performer, athlete or personality ("Artist") hereby agrees as follows:

1. Artist hereby grants to Sirius XM Radio Inc., its subsidiaries, affiliates and the successors and assigns of each of the foregoing (collectively, "Sirius XM") the right to any transcripts, audio, video, photographs and other recordings of Artist's interview and/or appearance (excluding any musical performance of Artist, the "Appearance") on October 1, 2009 ("Program") and the right to use Artist's name, image and/or likeness solely as embodied in the materials embodying the Appearance, in any and all non-downloadable media in which Sirius XM's radio broadcast channels are distributed and/or promoted by Sirius XM, including without limitation, satellite radio, cable and satellite television, mobile telephones, internet (streaming only), Sirius XM's physical and electronic newsletters, other subscriber emails and physical mailings; provided that Sirius XM shall not use the Appearance (including, without limitation, my name, likeness and/or performance) other than as part of the transmission of the Program and in the in-context promotion of the Program. All rights not expressly granted to Sirius XM hereunder are reserved by Artist.
2. Artist represents and warrants to Sirius XM that (a) Artist has all the power and authority to enter into this Agreement and Release, to grant all of the rights described in Section 1 above and to perform all of Artist's obligations hereunder; and (b) the execution and delivery of this Agreement and Release, the grant of the rights described in Section 1 above and the performance of Artist's obligations hereunder each will not violate any agreement to which Artist is a party or to which Artist is aware, any federal, state or local law or regulation to which Artist is subject, or any right of any third party. The signatory of this Agreement and Release represents that he or she is duly authorized and has the authority to execute this Agreement and Release on behalf of the Artist.
3. Artist hereby releases and indemnifies Sirius XM from and against any and all damages, claims, liability and demands arising out of or in connection with any use and/or exploitation of the Appearance by Sirius XM as permitted in Sections 1 and 2 above, including without limitation, any and all claims relating to rights of publicity, invasion of privacy, defamation, libel, slander and other personal and property rights. Subject to Sirius XM's use and/or exploitation of the Appearance as set forth herein, Artist agrees not to bring or participate in any such claim or proceeding against Sirius XM.

[signature page follows]

4. Artist understands and agrees that Sirius XM is under no obligation to make any use of Artist's interview, performance, appearance, name, image or likeness.

ACCEPTED AND AGREED:

Name of Artist: Carrie Underwood
Signature: 
Name (if other than Artist): -
Company: -
Date: 10-21-09
Contact Number: 310 777 1940
Address: ap 19 ext. 8560 W Sunset Blvd, 9th Floor
City, State, ZIP: West Hollywood, CA 90069

Rev 5/09



AGREEMENT AND RELEASE

The undersigned artist, performer, athlete or personality ("Artist") hereby agrees as follows:

- 1. Artist hereby grants to Sirius XM Radio Inc., its subsidiaries, affiliates and the successors and assigns of each of the foregoing (collectively, "Sirius XM") the right to use the name, image and likeness of Artist and any transcripts, audio, video, photographs and other recordings of Artist's interview, performance and/or appearance on Tues, Dec 16, 2008, in any and all media, including without limitation, satellite radio, cable and satellite television, mobile telephones, internet (streaming and/or archiving for download), Sirius XM's physical and electronic newsletters, other subscriber emails and physical mailings, and as "B-roll" material in connection with media and news coverage involving Sirius XM.
2. Artist represents and warrants to Sirius XM that (a) Artist has all the power and authority to enter into this Agreement and Release, to grant all of the rights described in Section 1 above and to perform all of Artist's obligations hereunder; and (b) the execution and delivery of this Agreement and Release, the grant of the rights described in Section 1 above and the performance of Artist's obligations hereunder each will not violate any agreement to which Artist is a party or to which Artist is aware, any federal, state or local law or regulation to which Artist is subject, or any right of any third party.
3. Artist hereby releases and indemnifies Sirius XM from and against any and all damages, claims, liability and demands arising out of or in connection with any use in accordance with Sections 1 and 2 above, including without limitation, any and all claims relating to rights of publicity, invasion of privacy, defamation, libel, slander and other personal and property rights. Artist agrees not to bring or participate in any such claim or proceeding against Sirius XM.
4. Artist understands and agrees that Sirius XM is under no obligation to make any use of Artist's interview, performance, appearance, name, image or likeness.

ACCEPTED AND AGREED:

Name of Artist:

Colbie Corbett

Signature:

Colbie Corbett

Name (if other than Artist):

Company:

Universal Music Group

Date:

12/16/08

Contact Number:

412-370-1815

Address:

1755 Broadway NY 10019

City, State, ZIP:



AGREEMENT AND RELEASE

The undersigned artist, performer, athlete or personality ("Artist") hereby agrees as follows:

1. Artist hereby grants to Sirius XM Radio Inc., its subsidiaries, affiliates and the successors and assigns of each of the foregoing (collectively, "Sirius XM") the right to use the name, image and likeness of Artist and any transcripts, audio, video, photographs and other recordings of Artist's interview, performance and/or appearance on 9/30/09, 2009, in any and all media, including without limitation, satellite radio, cable and satellite television, mobile telephones, internet (streaming and/or archiving for download), Sirius XM's physical and electronic newsletters, other subscriber emails and physical mailings, and as "B-roll" material in connection with media and news coverage involving Sirius XM.
2. Artist represents and warrants to Sirius XM that (a) Artist has all the power and authority to enter into this Agreement and Release, to grant all of the rights described in Section 1 above and to perform all of Artist's obligations hereunder; and (b) the execution and delivery of this Agreement and Release, the grant of the rights described in Section 1 above and the performance of Artist's obligations hereunder each will not violate any agreement to which Artist is a party or to which Artist is aware, any federal, state or local law or regulation to which Artist is subject, or any right of any third party. The signatory of this Agreement and Release represents that he or she is duly authorized and has the authority to execute this Agreement and Release on behalf of the Artist.
3. Artist hereby releases and indemnifies Sirius XM from and against any and all damages, claims, liability and demands arising out of or in connection with any use in accordance with Sections 1 and 2 above, including without limitation, any and all claims relating to rights of publicity, invasion of privacy, defamation, libel, slander and other personal and property rights. Artist agrees not to bring or participate in any such claim or proceeding against Sirius XM.
4. Artist understands and agrees that Sirius XM is under no obligation to make any use of Artist's interview, performance, appearance, name, image or likeness.

ACCEPTED AND AGREED:

Name of Artist: Queen Latifah Inc.
Signature: [Signature]
Name (if other than Artist): DANA OWENS
Company: Queen Latifah Inc.
Date: 9/30/09
Contact Number: 201-333-4883
Address: 155 Morgan Street
City, State, ZIP: Jersey City, NJ 07302



AGREEMENT AND RELEASE

The undersigned artist, performer, athlete or personality ("Artist") hereby agrees as follows:

1. Artist hereby grants to Sirius XM Radio Inc., its subsidiaries, affiliates and the successors and assigns of each of the foregoing (collectively, "Sirius XM") the right to use the name, approved image and approved likeness of Artist and the recordings of Artist's interview, performance and/or appearance as provided by Artist and recorded at Alpine Valley, Wisconsin on July 24, 2010 ("Artist's Appearance"), and to exploit the Artist's Appearance for distribution on the Sirius XM system, including but not limited to satellite radio, cable and satellite television, mobile telephones, internet (streaming and/or archiving for download), Sirius XM's physical and electronic newsletters, other subscriber emails and physical mailings, and as "B-roll" material in connection with media and news coverage involving Sirius XM. Sirius XM shall not have the right to make available Artist's Appearance, either in whole or in part, for retail sale. Artist shall have the right to approve in advance the use of Artist's image and likeness, such approval to be deemed granted for any submission that is not approved or rejected by Artist within three (3) business days of Artist's receipt of such final edit for review.

2. Artist represents and warrants to Sirius XM that (a) Artist has all the power and authority to enter into this Agreement and Release, to grant all of the rights described in Section 1 above and to perform all of Artist's obligations hereunder; and (b) the execution and delivery of this Agreement and Release, the grant of the rights described in Section 1 above and the performance of Artist's obligations hereunder each will not violate any agreement to which Artist is a party or to which Artist is aware, any federal, state or local law or regulation to which Artist is subject, or any right of any third party. The signatory of this Agreement and Release represents that he or she is duly authorized and has the authority to execute this Agreement and Release on behalf of the Artist.

3. Artist hereby releases and indemnifies Sirius XM from and against any and all damages, claims, liability and demands arising out of or in connection with any use in accordance with Sections 1 and 2 above, including without limitation, any and all claims relating to rights of publicity, invasion of privacy, defamation, libel, slander and other personal and property rights. Artist agrees not to bring or participate in any such claim or proceeding against Sirius XM.

4. Artist understands and agrees that Sirius XM is under no obligation to make any use of Artist's interview, performance, appearance, name, image or likeness.

ACCEPTED AND AGREED:

Name of Artist: Jack Johnson
Signature: [Handwritten Signature]
Name (if other than Artist): Josh Nicotra
Company: Brushfire Records
Date: 7/20/10
Contact Number: 323-957-9967
Address: 424 LArchmont Blvd
City, State, ZIP: LA, CA 90004



AGREEMENT AND RELEASE

The undersigned artist, performer, athlete or personality ("Artist") hereby agrees as follows:

1. Artist hereby grants to Sirius XM Radio Inc., its subsidiaries, affiliates and the successors and assigns of each of the foregoing (collectively, "Sirius XM") the right to use the professional name, approved image and approved likeness of Artist and any transcripts, audio, approved photographs and other recordings of Artist's interview and/or appearance on _____, 2010 (such approvals not to be unreasonably withheld, conditioned or delayed), solely in connection with the Artist, Artist's albums and/or Artist's appearance on Sirius XM's audio entertainment service), in any and all media, including without limitation, satellite radio, internet (streaming only), Sirius XM's physical and electronic newsletters, other subscriber emails and physical mailings, and as "B-roll" material in connection with media and news coverage involving Sirius XM; provided that Sirius XM may distribute audio-visual recordings of Artist's interview or appearance in a non-downloadable format via websites owned or controlled by Sirius XM. For the avoidance of doubt, no rights are being granted to Sirius XM to film, record and/or exploit any live, in-studio musical performance by Artist.
2. Artist represents and warrants to Sirius XM that (a) Artist has all the power and authority to enter into this Agreement and Release, to grant all of the rights described in Section 1 above and to perform all of Artist's obligations hereunder; and (b) the execution and delivery of this Agreement and Release, the grant of the rights described in Section 1 above and the performance of Artist's obligations hereunder each will not violate any agreement to which Artist is a party or to which Artist is aware, any federal, state or local law or regulation to which Artist is subject, or any right of any third party. The signatory of this Agreement and Release represents that he or she is duly authorized and has the authority to execute this Agreement and Release on behalf of the Artist.
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4. Artist understands and agrees that Sirius XM is under no obligation to make any use of Artist's interview, appearance, name, image or likeness.

ACCEPTED AND AGREED:

Name of Artist: _____

Signature: _____

Name (if other than Artist): _____

Company: _____

Date: _____

Contact Number: _____

Address: _____

Lady Antebellum
Daniel Miller
Daniel Miller
for Lady A'd Productions, Inc.
9/21/10
615.320-3000
4322 Harding Pike #429
Nashville, TN 37205



AGREEMENT AND RELEASE

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1. Artist hereby grants to Sirius XM Radio Inc., its subsidiaries, affiliates and the successors and assigns of each of the foregoing (collectively, "Sirius XM") the right to use the name, image and likeness of Artist and any transcripts, audio, ~~video~~, photographs and other recordings of Artist's interview, performance and/or appearance on Oct 20, 2010, in any and all media, including without limitation, satellite radio, cable and satellite television, mobile telephones, internet (streaming and/or archiving for download), Sirius XM's physical and electronic newsletters, other subscriber emails and physical mailings, and as "B-roll" material in connection with media and news coverage involving Sirius XM.

2. Artist represents and warrants to Sirius XM that (a) Artist has all the power and authority to enter into this Agreement and Release, to grant all of the rights described in Section 1 above and to perform all of Artist's obligations hereunder; and (b) the execution and delivery of this Agreement and Release, the grant of the rights described in Section 1 above and the performance of Artist's obligations hereunder each will not violate any agreement to which Artist is a party or to which Artist is aware, any federal, state or local law or regulation to which Artist is subject, or any right of any third party. The signatory of this Agreement and Release represents that he or she is duly authorized and has the authority to execute this Agreement and Release on behalf of the Artist.

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4. Artist understands and agrees that Sirius XM is under no obligation to make any use of Artist's interview, performance, appearance, name, image or likeness.

ACCEPTED AND AGREED:

Name of Artist:

Clubs of Leon

Signature:

[Handwritten Signature]

Name (if other than Artist):

RCA

Company:

Date:

10/20/10

Contact Number:

212-837-5535

Address:

550 Madison Ave.

City, State, ZIP:

NY NY 10022

From: Schoenwetter, Gary <Gary.Schoenwetter@siriusxm.com>
Sent: Monday, May 02, 2011 12:04 PM
To: Steele, Gregg; Blatter, Steve; Dry, Randy
Subject: FW: Bob Schneider first week sales

Note the last sentence....

From: [REDACTED]
Sent: Monday, May 02, 2011 11:54 AM
To: Schoenwetter, Gary; Besack, Jessica
Subject: Bob Schneider first week sales

Hey Gary and Jess,

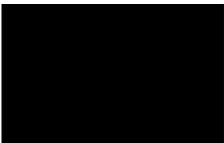
I wanted to send to you some info on Bob's first week sales.

First sales week for a Perfect day & Bob Schneider! 4,546 units scanned...**his BEST scan week EVER!!**

Check out these Chart Debuts!

- #3 Heatseeker!! (previous best was #5)
- #1 C.I.M.S. Chart
- #150 Billboard Top 200 (merged with catalog titles since Bob's last release)
- #122 Current Top 200 (was the Billboard Top 200 when *Lovely Creatures* was released and that peaked @ #140)!!
- #27 Indie Chart

The sales are pretty spread out around the nation which I am attributing to your airplay.



From: Steele, Gregg <Gregg.Steele@siriusxm.com>
Sent: Friday, May 20, 2011 3:28 PM
To: Blatter, Steve
Subject: FW: EMPHATIC

Octane band called Emphatic -

From [REDACTED]
Sent: Friday, May 20, 2011 3:25 PM
To: Steele, Gregg
Subject: Re: EMPHATIC

4 week trend on "Bounce" = 285, 319, 328, **854!** Up 160% this week. Seems to coincided pretty well with your airplay. Other stations just starting to play.

Just wanted to say thanks for the HUGE support on "Bounce" by Emphatic!!! Not sure what all you've heard, but we've got an album deeeeeeep with big rock smashes. Lots more to come!!

Thanks,

[REDACTED]

From: Marks, John <John.Marks@siriusxm.com>
Sent: Wednesday, June 08, 2011 10:44 AM
To: Blatter, Steve
Subject: FW: Thank you

Steve –

Here is some attributable information about Highway airplay for the song “I’m Doing Alright” by Jacob Lyda from [REDACTED]

John Marks
Sr. Director of Country Programming
Sirius XM Radio
501 Broadway
Suite 600
Nashville, TN. 37203
615-846-9616 (office)
646-204-5583 (cell)
john.marks@siriusxm.com

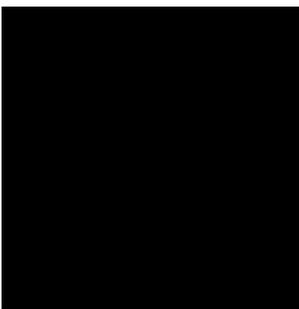
From: [REDACTED]
Sent: Tuesday, June 07, 2011 3:01 PM
To: Marks, John
Cc: [REDACTED]
Subject: Thank you

John,

Thanks for your support of Jacob Lyda.

You guys re-engaged and my single sales doubled this week! It’s rare that I can directly correlate my sales like that.

You’re the best!



PUBLIC VERSION

From: Steele, Gregg <Gregg.Steele@siriusxm.com>
Sent: Wednesday, August 03, 2011 1:47 PM
To: Blatter, Steve
Subject: FW: Red Line Chemistry and the MIGHT of Sirius

Active Rock band RED LINE CHEMISTRY -

Sales success attributed to Octane airplay -

Gregg Steele
- Sirius XM

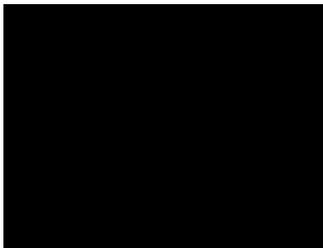
-----Original Message-----

From: [REDACTED]
Sent: Wednesday, August 03, 2011 1:41 PM
To: Mangin, Jose
Cc: Steele, Gregg [REDACTED]
Subject: Red Line Chemistry and the MIGHT of Sirius

Guys
since you've opened up Ultragigantor we have seen an explosion of sales and we know it's attributed to you since we see the reaction coming from non radio markets(album sales up 25%, single sales up 60% this week alone!)
So thank you!
We'd certainly love to know if you've gotten any research or feedback to back up what we are seeing
AND we want to know if we can do anything for you and with you
A National Promotion ie, Halloween event? a Ski/Snowboard/performance weekend in Tahoe.
a Red Line Chemistry Tour brought to you by Sirius?

We are very committed to breaking the band and truly would love to get you as involved as you'd like to be.

Again, thank you



Mulholland Dr
8400 W

2011 LOS ANGELES
NAMA



DARREN STUPAK

Sony Music Entertainment

What's going right with the music business is that the industry, specifically retail, is getting very creative when it comes to innovating around new campaigns and new promotions. Each meeting I have had with accounts this year has been about growing the business, and that openness to trying new ideas has resulted in excellent results for many of the titles that have been released during the first few months of 2011. While this is a challenging time to be in this business, it is also an exciting time to be in it – something I'm reminded of every Monday when we see positive sales results stemming from fresh approaches in the marketplace.



BOB MORELLI

RED

Music is getting to more people now in more ways than ever before. Presentations from retailers through physical/ digital. Songs in movies/TV/commercials, reviews, touring, radio, online everything, word of mouth, video, social media... That is a good thing. And if the music is great, it lasts. RED has been fortunate to work with some great contemporary artists such as Mumford and Sons, Jason Aldean, Cage the Elephant and A Day to Remember. Virtually all of the above-mentioned efforts were used to assist in the overall Marketing campaign, and the results have been great and long lasting.



DANIEL GLASS

Glassnote

There are a lot of good things going on...

In the past, it was difficult to collect for streaming/radio on the Internet. Now record companies, especially indies like us, have SoundExchange doing this for us.

The club business for new breaking bands is excellent. We feel companies like Bowery Presents and Don Strasburg truly invest in our bands from the embryonic stage on and help us grow in the markets.

Sirius XM continues to grow and support meaningful music reaching more people than ever and we feel the impact on sales.

MTV Networks' franchises such as VHI's *You Oughta Know* and mtvU Woodies are great exposure for developing artists, and help sell records.

PUBLIC VERSION

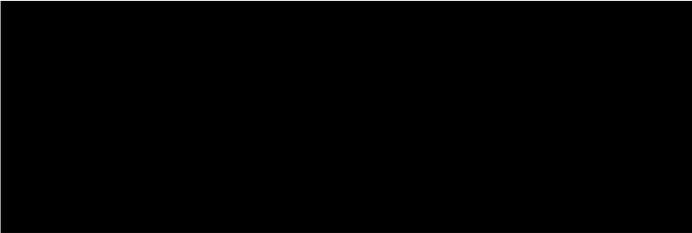
From: Regan, Jeff <Jeff.Regan@siriusxm.com>
Sent: Thursday, May 12, 2011 10:25 AM
To: Blatter, Steve; Steele, Gregg
Subject: FW: Grouplove sales

FYI - Another solid sales week for Grouplove "Colours" the only other station playing the track (Tampa) dropped it 6 spins last week for a total of 14 spins.

From: [REDACTED]
Sent: Thursday, May 12, 2011 10:16 AM
To: Regan, Jeff
Subject: Grouplove sales

Jeff, digital single sales on "Colours" were up again from 1,049 to 1,195. Pretty great and all because of Alt Nation. That is the only explanation.

Thanks, it looks like this is a highly reactive song. We are going to break this song/band!!



From: [REDACTED]
Sent: Monday, June 13, 2011 12:14 PM
To: Blatter, Steve; Steele, Gregg; Regan, Jeff; Leeds, Steve
Cc: [REDACTED]
Subject: This is really exciting. I hope you can attend.

Hi guys, I wanted to reach out to all of you and let you know that since you started playing Grouplove "Colours" on Alt Nation we have seen our digital single sales go way up, it can directly attributed to your airplay. Our sales went from 200 singles a week to 800 to around 1,000-1,200 a week since you started playing it.

This band is going to be a huge priority for us and it is [REDACTED] favorite band. I think it would be great if one or all of you can join us tomorrow night as we launch this band in NYC, The band will be playing at Tammany Hall 152 Orchard St. Between Rivington & Stanton. Band goes on a 9PM tomorrow night. Also, [REDACTED] will be there as well.

I think I would important for you to attend, your early airplay to sales is certainly our focal point in our planning meetings on the band and very inspiring to us in our launch. We are so excited to have you leading the charge.

Please let me know if you can join us.

Thanks
[REDACTED]

January, 2011 through December, 2011															
GROUPE	Colours	Canvasback/Atlantic													
Station	Market	Format	Total Spins	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan	First Played This Year	
Alt Nation	>SiriusXM	Alternative	760	58	132	150	140	91	120	69	0	0	0	4/18/2011	
WSUN-FM	Tampa	Alternative	614	67	121	100	70	64	61	80	49	2	0	2/27/2011	
KNDD-FM	Seattle	Alternative	353	49	133	135	36	0	0	0	0	0	0	7/7/2011	
KRAB-FM	Bakersfield	Alternative	322	63	111	95	50	3	0	0	0	0	0	6/27/2011	
XTRA-FM	San Diego	Alternative	321	44	119	62	35	38	22	0	1	0	0	3/25/2011	
WVIC-FM	Lansing	Alternative	233	65	120	48	0	0	0	0	0	0	0	8/8/2011	
WWCD-FM	Columbus, OH	Alternative	221	58	104	46	4	3	1	0	3	2	0	2/21/2011	
KXRK-FM	Salt Lake City	Alternative	216	55	55	66	16	6	1	2	7	6	2	1/20/2011	
WFNX-FM	Boston	Alternative	194	54	70	51	3	6	6	4	0	0	0	4/14/2011	
WEQX-FM	Albany, NY	Alternative	188	43	86	42	10	0	1	0	0	3	3	1/16/2011	
WKRL-FM	Syracuse	Alternative	174	37	75	56	0	0	0	0	1	2	3	1/9/2011	
WRRV-FM	Newburgh, NY	Alternative	165	48	90	27	0	0	0	0	0	0	0	8/24/2011	
KYSR-FM	Los Angeles	Alternative	158	34	71	39	9	4	0	0	0	0	1	1/30/2011	
WLUM-FM	Milwaukee	Alternative	151	36	64	51	0	0	0	0	0	0	0	8/4/2011	
WARQ-FM	Columbia, SC	Alternative	138	41	66	26	1	4	0	0	0	0	0	6/28/2011	
KRXP-FM	Colorado Springs	Alternative	138	40	52	46	0	0	0	0	0	0	0	8/1/2011	
WZNE-FM	Rochester	Alternative	131	42	57	27	0	0	0	0	2	3	0	2/13/2011	
KNRK-FM	Portland, OR	Alternative	124	50	56	18	0	0	0	0	0	0	0	8/1/2011	
WBRU-FM	Providence	Alternative	120	35	51	30	0	2	2	0	0	0	0	5/4/2011	
KKDO-FM	Sacramento	Alternative	110	21	36	37	16	0	0	0	0	0	0	7/18/2011	
KRBZ-FM	Kansas City	Alternative	92	25	43	23	1	0	0	0	0	0	0	7/8/2011	
KUCD-FM	Honolulu	Alternative	87	17	45	25	0	0	0	0	0	0	0	8/11/2011	
WXXJ-FM	Jacksonville	Alternative	83	29	54	0	0	0	0	0	0	0	0	9/6/2011	
KITS-FM	San Francisco	Alternative	76	13	40	9	4	1	4	3	2	0	0	3/20/2011	
KJEE-FM	Santa Barbara, C	Alternative	74	24	47	2	0	0	0	0	0	0	1	1/9/2011	
WWWX-FM	Appleton, WI	Alternative	64	32	32	0	0	0	0	0	0	0	0	-9/4/2011	
KMYZ-FM	Tulsa	Alternative	59	29	15	8	7	0	0	0	0	0	0	7/4/2011	
KCXX-FM	Riverside	Alternative	42	10	22	10	0	0	0	0	0	0	0	8/18/2011	
WWDC-FM	Washington, DC	Alternative	39	14	19	5	1	0	0	0	0	0	0	7/31/2011	
WROX-FM	Norfolk	Alternative	35	21	6	0	0	1	1	2	2	2	0	2/19/2011	
WCYY-FM	Portland, ME	Alternative	33	19	12	2	0	0	0	0	0	0	0	8/20/2011	
WMRQ-FM	Hartford	Alternative	31	7	19	5	0	0	0	0	0	0	0	8/24/2011	
WXDX-FM	Pittsburgh	Alternative	30	13	6	6	4	1	0	0	0	0	0	6/19/2011	
KBZT-FM	San Diego	Alternative	28	28	0	0	0	0	0	0	0	0	0	10/1/2011	
KRCL-FM	Salt Lake City	Triple A	22	1	3	0	1	2	2	2	3	5	3	1/11/2011	
KNRQ-FM	Eugene, OR	Alternative	21	20	1	0	0	0	0	0	0	0	0	9/4/2011	
WBTZ-FM	Burlington, VT	Alternative	20	16	0	1	0	0	0	0	0	0	3	1/9/2011	
KTCL-FM	Denver	Alternative	17	16	0	0	0	0	0	0	0	0	1	1/16/2011	
KEXX-FM	Phoenix	Alternative	15	0	15	0	0	0	0	0	0	0	0	9/12/2011	
KFMA-FM	Tucson	Alternative	15	1	1	0	0	2	2	0	2	4	3	1/16/2011	
WRFF-FM	Philadelphia	Alternative	15	0	2	5	5	3	0	0	0	0	0	6/13/2011	
WRZX-FM	Indianapolis	Alternative	15	1	0	2	1	11	0	0	0	0	0	6/15/2011	
KROQ-FM	Los Angeles	Alternative	14	3	0	1	1	0	1	1	3	1	3	1/9/2011	

KRZQ-FM	Reno, NV	Hot AC	13	0	10	1	0	0	1	1	0	0	0	4/3/2011
KXNA-FM	Fayetteville, AR	Alternative	13	12	1	0	0	0	0	0	0	0	0	9/29/2011
WFUV-FM	New York	Triple A	13	1	0	0	1	0	2	3	2	2	2	1/14/2011
WTTS-FM	Indianapolis	Triple A	12	0	0	2	2	0	0	0	2	2	4	1/17/2011
KROX-FM	Austin	Alternative	12	0	0	0	0	0	0	0	4	4	4	1/9/2011
KXTE-FM	Las Vegas	Alternative	10	9	1	0	0	0	0	0	0	0	0	9/18/2011
KGSR-FM	Austin	Triple A	9	0	0	0	0	0	0	0	4	3	2	1/25/2011
KPNT-FM	St. Louis	Alternative	8	2	2	0	0	0	0	0	0	2	2	1/23/2011
WBOS-FM	Boston	Alternative	7	7	0	0	0	0	0	0	0	0	0	10/12/2011
WXRT-FM	Chicago	Triple A	7	2	5	0	0	0	0	0	0	0	0	9/15/2011
KDGE-FM	Dallas	Alternative	6	0	0	2	1	0	0	1	0	0	2	1/16/2011
WEND-FM	Charlotte	Alternative	5	1	1	1	1	1	0	0	0	0	0	6/26/2011
WMMM-FM	Madison, WI	Triple A	5	1	0	0	0	0	0	0	0	2	2	1/10/2011
WRNR-FM	Baltimore	Triple A	4	0	0	0	0	0	0	0	0	0	4	1/15/2011
KQKQ-FM	Omaha	Hot AC	4	0	0	0	0	0	0	0	0	0	4	1/9/2011
MTV2-TV	> VideoTV	Rhythmic	3	0	1	0	0	0	0	0	1	1	0	2/23/2011
KXLI-FM	Las Vegas	Alternative	3	3	0	0	0	0	0	0	0	0	0	10/1/2011
KFRR-FM	Fresno	Active Rock	3	1	2	0	0	0	0	0	0	0	0	9/4/2011
KFTE-FM	Lafayette, LA	Alternative	3	3	0	0	0	0	0	0	0	0	0	10/14/2011
WQXA-FM	Harrisburg	Active Rock	3	2	1	0	0	0	0	0	0	0	0	9/4/2011
WXEG-FM	Dayton	Active Rock	3	2	1	0	0	0	0	0	0	0	0	9/4/2011
WXZZ-FM	Lexington, KY	Active Rock	3	2	1	0	0	0	0	0	0	0	0	9/4/2011
WFTK-FM	Cincinnati	Active Rock	3	2	1	0	0	0	0	0	0	0	0	9/4/2011
WEHM-FM	Hamptons-Riverhe	Triple A	2	0	0	0	0	0	0	0	0	1	1	1/11/2011
WTKX-FM	Pensacola, FL	Active Rock	2	2	0	0	0	0	0	0	0	0	0	10/2/2011
KQRA-FM	Springfield, MO	Active Rock	2	0	0	0	0	0	0	0	0	0	2	1/16/2011
KTEG-FM	Albuquerque	Alternative	1	0	0	0	1	0	0	0	0	0	0	7/6/2011
KPND-FM	Spokane	Triple A	1	0	0	0	0	0	0	0	0	0	1	1/20/2011
WRNX-FM	Springfield, MA	Triple A	1	0	0	0	0	0	0	0	0	0	1	1/23/2011
WTFX-FM	Louisville	Alternative	1	1	0	0	0	0	0	0	0	0	0	10/8/2011
WPBZ-FM	West Palm	Active Rock	1	0	0	0	0	0	0	0	0	1	0	2/6/2011
WQKL-FM	Ann Arbor, MI	Triple A	1	0	0	0	0	0	0	0	0	1	0	2/6/2011

Track Title Report: DMA Sales																													
Title:COLOURS	2011 YTD:15052	RTD Units	% TOT																										
Artist:GROUPLOVE	Total:15052																												
Format:Tracks	Wks Top 200 RK:	Digital:15052	100																										
Label:ATLG	TW Rank:																												
ISRC:USAT21003217	LW Rank:																												
	ZW Rank:																												
Week Ending:07/10/2011	Config: Digital	Weeks: 13	Display: %CHG																										
DMA	Week End 07/10/11	% CHG	Week End 07/03/11	% CHG	Week End 06/26/11	% CHG	Week End 06/19/11	% CHG	Week End 06/12/11	% CHG	Week End 06/05/11	% CHG	Week End 05/29/11	% CHG	Week End 05/22/11	% CHG	Week End 05/15/11	% CHG	Week End 05/08/11	% CHG	Week End 05/01/11	% CHG	Week End 04/24/11	% CHG	Week End 04/17/11	% CHG	92 TD Tot		
Total	1114	6	1055	7	987	-1	997	14	876	-10	975	14	853	-12	971	-13	1114	-7	1195	14	1049	36	773	250	221	29	15052		
New York, NY	81	-6	86	-21	109	35	81	29	63	-21	80	38	58	-21	73	-16	87	-9	96	4	92	48	62	313	15	25	1242		
Los Angeles, CA	55	8	51	-7	55	-15	65	48	44	-31	55	64	12	64	3	62	5	59	48	40	-23	52	247	15	-21	938			
Chicago, IL	44	7	41	24	33	-8	36	-16	43	87	23	-8	25	-40	42	17	36	-10	40	-2	41	58	26	225	8	33	568		
Philadelphia, PA	50	4	48	45	33	-8	36	57	23	-18	28	87	15	-52	31	-21	36	-25	48	129	21	950	2	100	478				
SF-Oakland-San Jose	19	-32	28	33	21	-16	25	47	17	0	17	0	17	0	17	-32	25	4	24	-8	26	86	14	40	10	-9	367		
Boston, MA	16	-36	25	-11	28	40	20	54	13	-19	28	16	0	16	-27	22	-15	26	-4	27	29	21	40	15	200	7	322		
Dallas-Ft. Worth, TX	45	67	27	35	20	-50	40	67	24	-14	28	-3	29	7	27	-21	34	-32	50	85	27	80	15	114	7	250	451		
Detroit, MI	23	77	13	-13	15	-6	16	-24	21	250	10	-6	-40	10	0	10	-23	13	-52	27	50	18	12	16	220	5	400	219	
Washington, DC	39	15	34	31	26	-30	37	16	32	-11	38	-5	38	0	38	-31	55	12	49	17	42	50	28	155	0	11	999	543	
Houston, TX	25	-14	29	38	21	31	16	15	13	-48	10	25	92	17	-47	17	-19	32	19	23	-27	37	85	0	12	300	0	-100	310
Cleveland, OH	10	25	8	33	6	-45	11	22	6	9	-50	18	100	9	-55	20	18	17	-26	12	0	12	300	0	12	300	0	191	
Atlanta, GA	24	20	20	11	18	-5	19	73	10	-54	24	41	17	0	17	-15	20	0	20	0	20	82	11	267	3	50	268		
Minneapolis-St. Paul, MN	32	28	25	9	23	10	21	-5	22	16	19	73	11	-31	16	-54	35	-10	32	22	32	28	25	-32	37	106	534		
Tampa-St. Petersburg, FL	24	-27	33	-6	35	-3	36	12	32	0	32	39	23	-23	30	67	18	-40	30	43	21	-5	22	47	15	-35	454		
Seattle-Tacoma, WA	21	91	11	38	8	-33	12	33	9	12	8	-11	9	-25	12	33	9	-50	18	29	14	-12	16	60	10	11	306		
Miami, FL	11	-27	15	7	14	56	9	-10	10	-33	15	114	7	-12	8	-11	9	-18	11	67	7	75	4	300	1	1	130		
Pittsburgh, PA	8	-11	9	-31	0	13	-7	0	14	0	14	0	14	-7	15	15	13	-35	20	33	15	36	11	999	1	0	180		
St. Louis, MO	14	27	11	0	11	57	7	-36	11	22	9	-18	11	10	10	-17	12	9	11	38	8	14	7	600	1	0	148		
Denver, CO	28	47	19	111	9	-50	18	-5	19	-5	20	18	17	-23	22	0	22	19	-17	23	35	17	467	3	0	280			
Phoenix, AZ	12	-25	16	7	15	-38	24	140	10	-33	15	-17	18	6	17	31	13	-38	21	50	14	27	11	999	1	-67	223		
Sacramento-Stockton, CA	10	-9	11	38	8	33	6	-40	10	11	8	-31	13	8	12	100	6	-50	12	71	7	0	7	133	3	0	200	136	
Baltimore, MD	21	17	18	29	14	17	12	-37	19	19	16	-16	19	90	10	-44	18	50	12	20	10	-44	18	0	-100	213			
Hartford-New Haven, CT	13	333	3	-70	10	43	7	40	5	-44	9	29	7	-46	13	117	6	-25	7	8	-47	15	114	7	0	0	117		
San Diego, CA	32	68	19	27	15	36	11	-15	13	-28	18	12	16	14	8	13	30	10	-29	14	75	8	100	4	33	223			
Orlando-Daytona Bch-Mlrne	8	60	5	-29	7	-22	9	0	9	0	9	-18	11	83	6	-40	10	11	9	12	8	0	8	300	2	2	121		
Indianapolis, IN	12	0	12	100	6	50	4	-43	7	-22	9	200	3	-25	4	-56	9	-25	12	0	12	200	4	0	-100	114			
Portland, OR	11	57	7	40	5	25	4	-56	9	-44	16	167	6	20	5	-55	11	-27	15	88	8	60	5	-29	7	0	199		
Milwaukee, WI	8	33	6	-25	8	167	3	200	1	-83	6	50	4	33	3	-79	14	56	9	-10	10	67	6	500	1	-50	95		
Kansas City, KS-MO	7	40	5	-50	10	43	7	17	6	0	6	100	3	-57	7	-12	8	0	8	-20	10	100	5	400	1	0	105		
Cincinnati, OH	7	133	3	-50	6	-25	8	-11	9	50	6	0	6	-14	7	133	3	-50	6	20	5	-17	6	0	-100	95			
Charlotte, NC	12	33	9	-18	11	-21	14	56	9	-10	10	100	5	-64	14	-22	18	38	5	13	18	11	120	5	0	-100	146		
Nashville, TN	9	12	8	700	1	-88	8	100	4	-69	13	225	4	33	3	-70	10	-9	11	0	11	57	7	0	0	101			
Raleigh-Durham, NC	14	17	12	71	7	-22	9	-18	11	-27	15	36	11	22	9	-44	16	-24	21	75	12	-8	13	550	2	0	179		
Columbus, OH	11	22	9	0	9	12	8	14	7	75	4	-56	9	29	7	0	7	0	7	17	6	0	6	500	1	0	108		
Greenville-Sprtnbrg-Ashvl	9	125	4	33	3	-40	3	25	4	-43	7	17	6	100	3	0	3	0	3	0	3	0	0	0	0	0	59		
New Orleans, LA	9	125	4	0	4	-50	8	700	1	-88	8	100	4	-33	6	-33	9	80	5	-29	7	133	3	0	0	69			
Grnd Rpd-Kimzo-Bttle Crk	4	-20	5	-29	7	250	2	-60	5	150	2	-50	4	33	3	-62	8	100	4	300	1	-67	3	200	1	0	61		
Buffalo, NY	6	50	4	33	3	0	3	-25	4	0	4	100	2	100	1	-88	8	60	5	25	4	0	4	0	-100	55			
Memphis, TN	1	-80	5	150	2	-33	3	-25	4	33	3	-40	5	0	-100	2	-71	7	-22	9	350	2	0	0	0	52			
Oklahoma City, OK	7	0	7	-42	12	71	7	-12	8	14	7	40	5	-29	7	250	2	-67	6	-33	9	800	1	0	0	88			
Salt Lake City, UT	9	-18	11	83	6	-14	7	17	6	20	5	-17	6	-14	7	17	6	8	0	8	14	7	600	1	-75	139			
Nrlk-Prsmth-NwptNws-Hmp	7	0	7	-12	8	167	3	0	3	-75	12	500	2	-85	13	8	12	71	7	75	4	-56	9	800	1	0	102		
San Antonio, TX	12	0	12	9	11	38	8	0	8	0	8	33	6	-62	16	60	10	0	10	11	9	350	2	0	-100	134			
Providence-New Bedford, RI	7	17	6	200	2	0	2	0	0	-100	5	400	1	-67	3	200	1	-83	6	200	2	0	2	0	0	42			
Harrsbrg-Yrk-Lncstr-Lbnon	8	-27	11	120	5	-29	7	17	6	-14	7	75	4	-60	10	150	4	-43	7	-12	8	100	4	0	-100	95			
Louisville, KY	3	-57	7	250	2	0	2	-71	7	75	4	0	4	100	2	-71	7	133	3	-25	4	100	2	0	0	55			
Birmingham, AL	6	20	5	0	5	67	3	-25	4	33	3	-57	7	17	6	20	5	-29	7	133	3	-57	7	600	1	0	68		
Charlesbro-Huntington, WV	2	-50	4	100	2	0	0	-100	2	-60	5	67	3	0	3	-25	4	0	4	300	1	0	0	0	0	35			
Greensbro-Wnstr-Salm-HIPnt	3	0	0	-100	7	250	2	-33	3	0	3	50	2	-67	6	0	6	20	5	25	4	300	1	0	-100	50			
WstPlmBch-FrtPerc-VeroBch	6	100	3	-57	7	17	6	20	5	0	5	67	3	-25	4	-20	5	25	4	0	4	100	2	0	0	58			
Albuquerque, NM	9	200	3	-40	5	25	4	-33	6	-25	8	33	6	-40	10	11	9	29	7	0	7	75	4	300	1	0	89		
Dayton, OH	0	-100	5	150	2	-50	4	0	4	33	3	200	1	-50	2	-50	4	0	4	300	1	-50	2	0	0	38			
Albany-Schnclady-Troy, NY	2	-60	5	25	4	0	0	-100	7	40	5	400	1	-67	3	-50	6	20	5	25	4	33	3	50	2	0	49		
Wilkes-Barre-Scranton, PA	1	-88	8	33	6	0																							

Lincoln-Hastings-Kearney	3	200	1		0		0	-100	3		0	-100	3	0	3	-40	5		0	-100	1		0		23		
Ft. Myers-Naples, FL	2	0	2	100	1	-50	2	0	2	-50	4	300	1	-75	4	300	1	0	1	-67	3		0		29		
Waco-Temple-Bryan, TX	2	-67	6	-25	8	33	6	500	0	-100	2	-67	6	100	3	-40	5	150	2	100	1		0		49		
Springfield, MA	0	-100	1	0	1	0	1	0	1	-50	2	0	2	0	0	-100	4	0	-100	3		0		0		17	
Colorado Sprngs-Pueblo, CO	2	-67	6	20	5	25	4	-20	5	0	5	25	4	0	5	0	5	25	4	300	1	0	1	0		57	
Hawaii, HI	1	0	1	0	1	0	0	-100	1	-50	2	0	2	0	0	-100	1	0	1	-67	3	200	1	0		24	
Puerto Rico & VI	1	0	0	0	0	0	0	0	0	-100	1	0	1	0	0	-100	1	0	1	0	0	0	0	0		3	
Other	118	9	108	8	100	-15	117	-6	125	23	102	-2	104	18	88	-31	128	-4	134	6	127	55	82	228	25	108	1616

Kaplan, Jaime

From: Regan, Jeff <Jeff.Regan@siriusxm.com>
Sent: Wednesday, September 21, 2011 12:22 PM
To: Blatter, Steve; Steele, Gregg
Subject: Atlas Genius

Quick note from lead singer of Australian band **Atlas Genius**, we are the only place on the planet playing their music:

- *Hey Jeff,*

cheers for the email address. We certainly do intend to get over to the states. It's one of our main focuses. We feel that we need to build the fan base to the point where it could support a tour.

People from MTV and other management groups have contacted us after hearing Trojans on AltNation, and we've picked up a lot of fans. We're just about to hit 1000 facebook likes haha.

Speak soon

*Cheers
Keith*

**Jeff Regan
SiriusXM/Alt-nation
212-584-5364**

Kaplan, Jaime

From: Regan, Jeff <Jeff.Regan@siriusxm.com>
Sent: Thursday, September 29, 2011 2:19 PM
To: Blatter, Steve; Steele, Gregg
Cc: Schoenwetter, Gary
Subject: FW: Atlas Genius

From Atlas Genius lead singer:

From: Atlas Genius [mailto:atlasgenius@gmail.com]
Sent: Thursday, September 29, 2011 5:07 AM
To: Regan, Jeff
Subject: Atlas Genius

Hey Jeff,

Just want to thank you for the continued support. We've been getting a crazy amount of traffic. Had a good chat with Andrew at MTV. Seems like a really nice guy.

We owe you a beer when we get over there!

Cheers
Keith
AG

--

Atlas Genius

w: www.atlasgenius.com
e: atlasgenius@gmail.com

January, 2011 through December, 2011															
ATLAS GENIUS	Trojans	Frogs Head Records													
Station	Market	Format	Total Spins	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan	First Played This Year
Alt Nation	>SiriusXM	Alternative	199	0	111	88	0	0	0	0	0	0	0	0	9/13/2011
WEQX-FM	Albany, NY	Alternative	1	0	1	0	0	0	0	0	0	0	0	0	10/23/2011
KNRK-FM	Portland, OR	Alternative	1	0	1	0	0	0	0	0	0	0	0	0	10/23/2011

Mediabase - Published Panel



ATLAS GENIUS

Trojans

Mediabase - Published Panel - **by Spins to Date**

7 Days Through 10/16/2011

ALL Owners | ALL Formats

(Additional Viewing Options)

- Print Mode

Show Stations With:
0+ Spins - This Week

LW: 10/3/2011 - 10/9/2011

TW: 10/10/2011 - 10/16/2011

Mediabase Sortable Stats™ - Click any Blue Header

Spins
Click # for Spin Grid

by Daypart

Historical Data

New Station (Click Graphic for Airplay Trends)	Market	Format	Trade	TW	lw	+/-	ov	nam	mid	p	me	ve	First Spins Played to Date	
													69/13/2011	255
<input checked="" type="checkbox"/> Alt Nation	> SiriusXM	Alternative	Published	29	37	-8	5	4	7	7	69/13/2011	255		

(Additional Viewing Options) ▼

ATLAS GENIUSTrojans
Frogs Head Records

7 Days Ending 10/16/2011

**Mediabase 24/7
Executive Summary**

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Mediabase 24/7 Current Airplay Information

Rnk LW	Rnk TW	Specific Format	Spins TW	Spins LW	Spin Trend	% of Play	Stations Playing	Aud Millions	AudLW Millions	Aud Trend Millions
89	111	Alternative	29	37	-8	100.0	1/56	NA	NA	0.0
---	---	TOTALS	29	37	-8			NA	NA	0.00

Past 7 Days ▼

(Additional Viewing Options) ▼

ATLAS GENIUSTrojans
Frogs Head Records

7 Days Ending 11/13/2011

**Mediabase 24/7
Daypart Summary**

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Mediabase 24/7 Current Airplay Information**Historical Information**

Specific Format	Spins TW	OVN	AMD	MID	PMD	EVE	Spins To Date	OVN To Date	AMD To Date	MID To Date	PMD To Date	EVE To Date
Alternative	25	5 (20.0%)	4 (16.0%)	7 (28.0%)	3 (12.0%)	6 (24.0%)	261	51 (19.5%)	40 (15.3%)	64 (24.5%)	48 (18.4%)	58 (22.2%)
Triple A	8	2 (25.0%)	3 (37.5%)	0 (0.0%)	1 (12.5%)	2 (25.0%)	13	4 (30.8%)	4 (30.8%)	0 (0.0%)	3 (23.1%)	2 (15.4%)
Total	33	7	7	7	4	8	274	55	44	64	51	60

Track Title Report: DMA Sales																												
Title: TROJANS		2011 YTD: 6047		RTD Units		% TOT																						
Artist: ATLAS GENIUS		Total: 6047																										
Format: Tracks		Wks Top 200 RK:		Digital: 6047		100																						
Label:		TW Rank:																										
ISRC: TCAAX1193882		LW Rank:																										
Week Ending: 10/23/2011		Config: Digital		Weeks: 13		Display: %CHG																						
DMA	Week End 10/23/11	% CHG	Week End 10/16/11	% CHG	Week End 10/09/11	% CHG	Week End 10/02/11	% CHG	Week End 09/25/11	% CHG	Week End 09/18/11	% CHG	Week End 09/11/11	% CHG	Week End 09/04/11	% CHG	Week End 08/28/11	% CHG	Week End 08/21/11	% CHG	Week End 08/14/11	% CHG	Week End 08/07/11	% CHG	Week End 07/31/11	% CHG	92 TD Total	
Total	900	-25	1199	29	930	12	829	1	819	8	761	88	405	999	8	-62	21	11	19	-46	35	400	7	-36	11	-27	6047	
New York, NY	83	-21	105	28	82	15	71	1	70	-1	71	163	27	999	1	-75	4	100	2	-67	6	500	1	-50	2	0	537	
Los Angeles, CA	60	-21	76	52	50	2	49	-22	63	50	42	75	24	999	1	0	-100	2	-60	5	0	0	-100	1	0	388		
Chicago, IL	42	-16	50	14	44	42	31	-18	38	-22	49	227	15	0	-100	1	-67	3	50	2	0	0	0	0	0	282		
Philadelphia, PA	32	-16	38	41	27	-4	28	22	23	15	20	11	18	999	1	0	0	-100	1	0	1	0	0	0	0	-100	188	
SF-Oakland-San Jose	21	-5	22	10	20	18	17	6	16	-24	21	200	7	0	-100	0	0	0	0	0	-100	0	0	0	0	0	-100	135
Boston, MA	17	-41	29	53	19	-5	37	27	27	4	22	47	15	88	0	0	0	0	0	0	0	0	0	0	0	0	193	
Dallas-Ft. Worth, TX	24	-31	35	-5	37	37	27	4	26	-13	30	173	11	0	0	0	-100	1	0	0	0	0	0	0	0	0	89	
Detroit, MI	7	-56	16	45	11	-15	13	-13	15	-12	17	143	7	0	-100	1	0	0	0	0	0	0	0	0	0	0	284	
Washington, DC	46	-25	81	79	34	-17	41	21	34	-6	36	100	18	0	0	-100	3	50	2	100	1	-50	2	0	0	146		
Houston, TX	22	-31	32	19	27	80	15	-6	16	-24	21	162	8	700	1	0	1	0	-100	2	0	0	0	0	0	0	90	
Cleveland, OH	16	0	16	45	11	-27	15	0	15	50	10	67	6	0	-100	1	0	0	0	0	0	0	0	0	0	0	128	
Atlanta, GA	21	-19	26	24	21	11	19	12	17	21	14	100	7	0	0	0	0	0	0	0	0	-100	0	0	0	0	77	
Minneapolis-St. Paul, MN	10	0	10	-17	12	-25	16	60	10	-17	12	100	6	0	0	0	0	0	0	0	0	0	0	0	0	0	65	
Tampa-St. Petersburg, FL	9	-18	11	10	10	11	9	-18	11	120	5	-44	9	0	0	0	0	0	0	0	0	0	0	0	0	0	57	
Seattle-Tacoma, WA	11	-39	18	125	8	700	1	-83	6	-25	8	700	1	0	-100	1	0	0	0	0	0	0	0	0	0	0	50	
Miami, FL	9	-40	15	-25	20	67	12	-29	17	42	12	300	3	0	-100	0	0	0	0	0	0	0	0	0	0	0	82	
Pittsburgh, PA	9	-40	15	86	8	-27	11	22	9	50	6	100	3	0	0	-100	1	0	0	0	0	0	0	0	0	0	56	
St. Louis, MO	10	25	9	0	8	0	8	-43	14	180	5	67	3	0	0	0	0	0	0	0	0	0	0	0	0	0	121	
Denver, CO	16	-25	20	33	15	-25	20	18	17	31	13	8	12	0	0	0	0	-100	1	0	0	-100	0	0	0	0	114	
Phoenix, AZ	13	-52	27	42	19	-10	21	133	9	-25	12	50	8	700	1	0	0	0	-100	1	0	0	0	0	0	0	59	
Sacramento-Stockton, CA	9	-25	12	9	11	38	8	0	8	33	6	20	5	0	0	0	0	0	0	0	0	0	0	0	0	0	87	
Baltimore, MD	14	-26	19	0	19	73	11	-31	16	300	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	42	
Hartford-New Haven, CT	9	-18	11	267	3	-50	6	-14	7	133	3	50	2	0	0	0	0	0	0	0	0	0	0	0	0	0	85	
San Diego, CA	8	-43	14	8	13	0	13	18	11	0	11	38	8	0	0	0	0	-100	1	0	0	0	0	0	0	0	57	
Orlando-Daytona Bch-Mlbme	4	-69	13	44	9	12	8	33	6	-33	9	80	5	0	-100	1	0	0	0	0	0	0	0	0	0	0	39	
Indianapolis, IN	5	0	5	25	4	-56	9	50	6	20	5	25	4	0	0	0	0	0	0	0	0	0	0	0	0	0	38	
Portland, OR	3	-57	7	49	5	-29	7	-36	11	450	2	-33	3	0	0	0	0	0	0	0	0	0	0	0	0	0	33	
Milwaukee, WI	5	-44	9	80	5	-17	6	100	3	0	3	50	2	0	0	0	0	0	0	0	0	0	0	0	0	0	44	
Kansas City, KS-MO	8	0	8	33	6	-14	8	7	40	5	25	4	-20	5	400	1	0	0	0	0	0	0	0	0	0	0	41	
Cincinnati, OH	4	-50	8	-20	10	67	6	0	6	20	5	150	2	0	0	0	0	0	0	0	0	0	0	0	0	0	75	
Charlotte, NC	14	-26	19	217	6	-54	13	117	6	-57	14	999	1	0	-100	1	0	0	0	0	0	0	0	0	0	0	47	
Nashville, TN	8	-27	11	57	7	250	2	-75	8	-11	9	0	9	0	-100	1	0	0	0	0	0	0	0	0	0	0	85	
Raleigh-Durham, NC	13	18	11	-27	15	50	10	-9	11	-8	12	71	7	0	-100	1	0	0	-100	2	0	0	0	0	0	0	58	
Columbus, OH	11	22	9	29	7	-42	12	71	7	-22	9	800	1	0	0	0	0	0	0	0	0	0	0	0	0	0	33	
Greenville-Spartanbg-Ashvll	4	0	4	0	4	-60	10	67	6	200	2	100	1	0	0	-100	1	0	0	0	-100	1	0	0	0	0	29	
New Orleans, LA	5	67	3	-62	8	60	5	67	3	0	3	50	2	0	0	-100	0	0	0	0	0	0	0	0	0	0	27	
Grand Rapids-Klmzo-Bttle Crk	2	-60	5	0	5	25	4	0	4	-33	6	200	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24	
Buffalo, NY	4	-20	5	400	1	-83	6	100	3	-57	7	500	1	0	-100	0	0	0	0	0	0	0	0	0	0	0	20	
Memphis, TN	6	0	6	200	2	-60	3	50	2	50	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	
Oklahoma City, OK	8	-33	12	20	10	67	6	0	6	20	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	52	
Salt Lake City, UT	3	-70	10	11	9	80	5	-17	6	500	1	0	1	0	0	0	0	-100	1	0	0	0	0	0	0	0	40	
Nrftk-Prtsmth-NwplNws-Hmp	4	-69	13	160	5	-44	9	80	5	25	4	100	2	0	0	0	0	0	0	0	0	0	0	0	0	0	42	
San Antonio, TX	7	-50	14	0	14	8	13	-7	14	75	8	100	4	0	0	0	0	0	0	0	0	0	0	0	0	0	75	
Providence-New Bedford, RI	5	67	3	50	2	-33	3	0	4	-100	4	100	2	0	-100	1	0	0	-100	1	0	0	0	0	0	0	21	
Hartsgb-Yrk-Lncstr-Lbnon	5	-55	11	83	6	200	2	-50	4	300	1	-50	2	100	1	0	0	0	0	0	0	0	0	0	0	0	33	
Louisville, KY	3	200	1	-50	2	0	0	-100	5	0	5	150	4	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
Birmingham, AL	4	-33	6	20	5	0	5	-38	8	167	3	-25	4	0	0	0	0	0	0	0	0	0	0	0	0	0	35	
Charleston-Huntington, WV	1	-100	1	-50	2	0	0	-100	1	-67	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
Greensboro-WinstSalm-HiPnt	2	-71	7	250	2	0	2	-100	2	0	2	100	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
WstPmBch-FnPer-VeroBch	4	-43	7	-22	9	12	8	33	6	500	1	-67	3	0	0	0	0	-100	1	0	0	0	0	0	0	0	41	
Albuquerque, NM	7	-50	14	75	8	100	4	-33	6	50	4	100	2	0	-100	1	0	0	-100	1	0	0	0	0	0	0	47	
Dayton, OH	2	-33	3	0	0	-100	5	67	3	50	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
Albany-Schndady-Troy, NY	4	-50	8	167	3	0	3	200	1	-50	2	-50	4	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
Wilkes-Barre-Scranton, PA	3	-25	4	100	2	100	1	-50	2	-50	4	300	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
Mobile-Pensacola, AL-FL	9	80	5	150	2	-50	4	33	3	-40	5	400	1	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
Jacksonville, FL	4	-50	8	14	7	-22	9	80	5	67	3	-40	5	0	0	0	0	0	0	0	0	0	0	0	0	0	41	
Little Rock, AR	5	25	4	-20	5	150	2	100	1	-75	4	100	2	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
Tulsa, OK	4	33	4	0	4	0	4	0	4	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
First-Saginaw-BayCity, MI	4																											

Baton Rouge, LA	5		0	-100	3		0	-100	1	-75	4		0		0		0		0		0		0		13
Lincoln-Haslings-Kearney	2		0	-100	1	0	1	-50	2	-50	4	100	2		0		0		0		0		0		12
Ft. Myers-Naples, FL	3	-57	7	75	4	300	1		0	-100	1		0		0		0		0		0		0		16
Waco-Temple-Bryan, TX	3	-40	5	400	1	-89	9	350	2	100	1	0	1		0		0		0		-100	1		0	23
Springfield, MA	0		0		0		0	-100	1	0	1		0		0		0		0		0		0		2
Colorado Spmgs-Pueblo, CO	2	0	2	0	2	-33	3	200	1	-86	7	133	3		0		0		0		0		0		20
Hawaii, HI	0		0	-100	1		0		0	-100	1		0		0		-100		0		0		0		3
Puerto Rico & VI	1	0	1		0	-100	1		0	-100	1		0		0		0		0		0		0		4
Other	95	-21	120	32	91	17	78	4	75	3	73	35	54		0		0		0		-100	2		0	591

Mediabase - All Stations(U.S)



GREEN RIVER ORDINANCE

Dancing Shoes

Mediabase - All Stations(U.S) - by Spins
to Date

(Additional Viewing Options)

- Print Mode

Show Stations With:

0+ Spins - This Week

ALL Owners

ALL Formats

Past 7 Days

LW: Oct 27 - Nov 2

TW: Nov 3 - Nov 9

Updated: Thu Nov 10 3:07 AM PST

N Mediabase Sortable Stats™ - Click any Blue Header

Spins
Click # for Spin Grid

by Daypart

Historical Data
(Click Below for
Daypart Info)

Station (Click Graphic for Airplay Trends)	Sng Rnk @Station Market (currents)	Format	Trade	TW	lw	+/-	ov	nm	mid	pm	eve	First Played	Spins to Date
<input checked="" type="checkbox"/> The Highway	23	>SiriusXMCountry	Mediabase	29	26	3	8	4	7	5	510/24/2011	64	

Mediabase - All Stations(U.S)



GREEN RIVER ORDINANCE

Dancing Shoes

Mediabase - All Stations(U.S) - by First
Played Date

7 Days Through 11/13/2011

ALL Owners ALL Formats

(Additional Viewing Options)

- Print Mode

Show Stations With:
0+ Spins - This Week

LW: 10/31/2011 - 11/6/2011

TW: 11/7/2011 - 11/13/2011

Mediabase Sortable Stats™ - Click any Blue Header				Spins		by Daypart					Historical Data			
Station (Click e)	Market	Format	Trade	TW	lw	+/-	ov	nm	mid	p	m	e	ve	First Spins Played to Date
<input checked="" type="checkbox"/> The Highway	>SiriusXM	Country	Mediabase	29	28	1	8	5	6	6	4	10	24/2011	112

(Additional Viewing Options) ▼

GREEN RIVER ORDINANCE

Dancing Shoes
Independent

7 Days Ending 11/13/2011

Mediabase 24/7 Current Airplay Information

Rnk LW	Rnk TW	Specific Format	Spins TW	Spins LW	Spin Trend	% of Play	Stations Playing	Aud Millions	AudLW Millions	Aud Trend Millions
111	105	Country	29	28	1	100.0	1/232	NA	NA	0.0
---	---	TOTALS	29	28	1			NA	NA	0.00

Past 7 Days ▼

(Additional Viewing Options) ▼

GREEN RIVER ORDINANCE

Dancing Shoes
Independent

7 Days Ending 11/20/2011

Mediabase 24/7 Current Airplay Information

Historical Information

Specific Format	Spins TW	OVN	AMD	MID	PMD	EVE	Spins To Date	OVN To Date	AMD To Date	MID To Date	PMD To Date	EVE To Date
Country	31	8 (25.8%)	5 (16.1%)	7 (22.6%)	5 (16.1%)	6 (19.4%)	112	28 (25.0%)	19 (17.0%)	25 (22.3%)	21 (18.8%)	19 (17.0%)
Total	31	8	5	7	5	6	112	28	19	25	21	19

Past 7 Days

(Additional Viewing Options)

GREEN RIVER ORDINANCE

**Mediabase 24/7
Executive Summary**
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Dancing Shoes
Independent

7 Days Ending 11/9/2011

Mediabase 24/7 Current Airplay Information

Historical Information

Rnk	Rnk	Specific	GRC	Spins	Spins	Spin	% of	Stations	Aud	Aud	Aud	Spins	Aud	Peak	Peak	Pe
LW	TW	Format		TW	LW	Trend	Play	Playing	TW	LW	Trend	To	To	Date	Spins	Ch
									Millions	Millions	Millions	Date	Date			
114	114	Country	C	29	26	3	100.0	1/232	NA	NA		64	NA	11/8/2011	30	1
---	---	TOTALS		29	26	3			NA	NA	0.00	64	NA			

Past 7 Days

(Additional Viewing Options)

GREEN RIVER ORDINANCE

**Mediabase 24/7
Executive Video Summary**
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Dancing Shoes
Independent

7 Days Ending 11/9/2011

**No Airplay Detected
For GREEN RIVER ORDINANCE Dancing Shoes**

Past 7 Days

(Additional Viewing Options)

GREEN RIVER ORDINANCE

**Mediabase 24/7
Daypart Summary**
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Dancing Shoes
Independent

7 Days Ending 11/9/2011

Mediabase 24/7 Current Airplay Information

Historical Information

Specific	Spins	OVN	AMD	MID	PMD	EVE	Spins	OVN	AMD	MID	PMD	EVE
Format	TW						To	To	To	To	To	To
							Date	Date	Date	Date	Date	Date
Country	29	8	4	7	5	5	64	16	10	15	12	11
		(27.6%)	(13.8%)	(24.1%)	(17.2%)	(17.2%)		(25.0%)	(15.6%)	(23.4%)	(18.8%)	(17.2%)
Total	29	8	4	7	5	5	64	16	10	15	12	11

GREEN RIVER ORDINANCE**Dancing Shoes**
Independent**7 Days Ending 11/9/2011****Mediabase 24/7****Group Owner Summary**

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Past 7 Days ▾

ALL Owners ▾

ALL Formats ▾

(Additional Viewing Options) ▾

% of Total Spins	% of Total Audience	Group (Click below to Filter by This Group)	Format (Click below to Filter by Group/Format)	Spins								Daypart				Stations Playing	Avg Spins p/Station	Audience	Spins to Date
				TW	lw	Move	OVN	AMD	MID	PMD	EVE								
100.0	0.0	<i>SiriusXM</i>	<i>Country</i>	29	26	3	8	4	7	5	5	1	/1	29.0	0.000	64			
100.0	0.0	Overall - Group Owners		29	26	3	8	4	7	5	5	1	/1	29.0	0.000	64			

Track Title Report: DMA Sales																		
Title:DANCING SHOES	2011 YTD:6330	RTD Units	% TOT															
Artist:GREEN RIVER ORDINANCE		Total:8725																
Format:Tracks	Wks Top 200 RK:	Digital:8725	100															
Label:TCRE	TW Rank:																	
ISRC:TCAAR1046657	LW Rank:																	
	2W Rank:																	
Week Ending:11/06/2011	Config: Digital	Weeks: 8	Display: %CHG															
DMA	Week End 11/06/11	% CHG	Week End 10/30/11	% CHG	Week End 10/23/11	% CHG	Week End 10/16/11	% CHG	Week End 10/09/11	% CHG	Week End 10/02/11	% CHG	Week End 09/25/11	% CHG	Week End 09/18/11	% CHG	92 TD Total	
Total	1426	29	1105	999	58	-3	60	13	53	-9	58	32	44	2	43	-22	8725	
New York, NY	61	9	56	999	4	33	3	200	1	-75	4	100	2	-33	3	200	360	
Los Angeles, CA	43	23	35	999	2	100	1	-50	2	-33	3	0	3	200	1	-50	284	
Chicago, IL	44	47	30	999	2		0	-100	2	0	2	100	1	0	1	-75	249	
Philadelphia, PA	27	35	20	900	2	100	1		0	-100	1	0	1	0	1	0	165	
SF-Oakland-San Jose	9	-25	12	500	2		0	-100	1		0		0		0	-100	114	
Boston, MA	16	-6	17	467	3	-57	7	133	3	200	1	0	1	0	1		181	
Dallas-Ft. Worth, TX	54	4	52	999	2	100	1	-75	4	33	3	50	2	-33	3	-57	579	
Detroit, MI	19	6	18	999	1	0	1		0	-100	1	-50	2		0	-100	106	
Washington, DC	35	46	24	999	1		0	-100	2	-33	3	200	1	-50	2	100	218	
Houston, TX	54	80	30	999	1	0	1	-67	3	50	2	-50	4	100	2	100	264	
Cleveland, OH	10	43	7	600	1		0		0		0	-100	1		0		71	
Atlanta, GA	33	-15	39	999	2	100	1		0	-100	2	100	1	0	1	0	246	
Minneapolis-St. Paul, MN	14	8	13	550	2	-50	4		0	-100	1	0	1	-75	4		176	
Tampa-St. Petersburg, FL	10	0	10	900	1		0		0	-100	1	-50	2		0		65	
Seattle-Tacoma, WA	7	0	7		0	-100	1		0	-100	1	0	1		0		98	
Miami, FL	10	100	5	400	1		0		0		0		0	-100	1		47	
Pittsburgh, PA	14	56	9		0		0		0	-100	1		0		0		70	
St. Louis, MO	9	-10	10	400	2		0	-100	1		0		0		0	-100	97	
Denver, CO	25	9	23	999	1	0	1	-50	2	100	1		0		0	-100	192	
Phoenix, AZ	9	-10	10		0		0		0	-100	1	-50	2	100	1	0	97	
Sacramento-Stockton, CA	9	-10	10	900	1		0	-100	1		0		0	-100	1		58	
Baltimore, MD	13	30	10		0	-100	1	-50	2		0		0	-100	1	0	78	
Hartford-New Haven, CT	10	-9	11		0		0		0	-100	1	-50	2		0		57	
San Diego, CA	4	-64	11		0		0		0		0	-100	1	0	1	0	68	
Orlando-Daytona Bch-Mlbne	9	29	7	600	1	0	1		0		0		0		0		51	
Indianapolis, IN	21	250	6	200	2	100	1	0	1		0	-100	1		0		84	
Portland, OR	10	100	5		0		0		0		0		0		0	-100	69	
Milwaukee, WI	3	-50	6		0		0	-100	1		0		0		0		61	
Kansas City, KS-MO	9	125	4		0		0		0	-100	1	0	1		0	-100	66	
Cincinnati, OH	11	10	10		0	-100	1		0	-100	1		0		0		84	
Charlotte, NC	20	11	18		0	-100	1		0		0		0		0		104	
Nashville, TN	19	27	15	650	2	100	1	0	1		0	-100	2	100	1	0	126	
Raleigh-Durham, NC	22	100	11	999	1	0	1		0	-100	1		0	-100	2		107	
Columbus, OH	14	75	8		0	-100	1	0	1	-50	2		0		0		64	
Greenville-Sprtnbrg-Ashvll	11	10	10		0		0		0	-100	3		0	-100	1	0	87	
New Orleans, LA	6	50	4		0		0		0		0		0		0		41	
Grnd Rpds-Klmzo-Bttle Crk	4	-33	6		0		0		0		0		0		0		52	
Buffalo, NY	8	300	2		0		0		0		0		0		0		23	
Memphis, TN	16	45	11		0		0	-100	2		0		0		0	-100	83	
Oklahoma City, OK	25	14	22	999	1		0		0		0	-100	1		0		105	
Salt Lake City, UT	14	180	5	67	3	50	2	0	2		0	-100	1	-50	2		96	
Nrflk-Prtsmth-NwptNws-Hmp	9	29	7		0	-100	1		0		0		0		0		47	
San Antonio, TX	21	-9	23		0	-100	1		0		0		0		0		113	
Providence-New Bedford, RI	3	0	3		0	-100	2		0		0		0		0		27	
Harrsbrg-Yrk-Lncstr-Lbnon	8	-20	10		0		0		0	-100	1	0	1		0	-100	45	
Louisville, KY	7	0	7		0		0	-100	1		0		0		0		44	
Birmingham, AL	23	109	11		0		0	-100	2	100	1		0		0	-100	98	
Charlesbro-Huntington, WV	8	0	8	700	1		0		0	-100	2		0		0		39	
Greensbro-WnstnSalm-HiPnt	11	83	6		0	-100	2		0		0		0		0		46	
WstPImBch-FrtPerc-VeroBch	7	-22	9		0	-100	1		0		0		0		0		33	

Track Title Report: DMA Sales									
Title:DANCING SHOES	2011 YTD:7946	RTD Units	% TOT						
Artist:GREEN RIVER ORDINANCE		Total:10341							
Format:Tracks	Wks Top 200 RK:	Digital:10341	100						
Label:TCRE	TW Rank:								
ISRC:TCAAR1046657	LW Rank:								
	2W Rank:								
Week Ending:11/13/2011	Config: Digital	Weeks: 4	Display: %CHG						
DMA	Week End 11/13/11	% CHG	Week End 11/06/11	% CHG	Week End 10/30/11	% CHG	Week End 10/23/11	% CHG	92 TD Total
Total	1616	13	1426	29	1105	999	58	-3	10341
New York, NY	72	18	61	9	56	999	4	33	432
Los Angeles, CA	38	-12	43	23	35	999	2	100	322
Chicago, IL	36	-18	44	47	30	999	2		285
Philadelphia, PA	32	19	27	35	20	900	2	100	197
SF-Okland-San Jose	22	144	9	-25	12	500	2		136
Boston, MA	35	119	16	-6	17	467	3	-57	216
Dallas-Ft. Worth, TX	72	33	54	4	52	999	2	100	651
Detroit, MI	21	11	19	6	18	999	1	0	127
Washington, DC	50	43	35	46	24	999	1		268
Houston, TX	60	11	54	80	30	999	1	0	324
Cleveland, OH	12	20	10	43	7	600	1		83
Atlanta, GA	50	52	33	-15	39	999	2	100	296
Minneapolis-St. Paul, MN	23	64	14	8	13	550	2	-50	199
Tampa-St. Petersburg, FL	12	20	10	0	10	900	1		77
Seattle-Tacoma, WA	13	86	7	0	7		0	-100	111
Miami, FL	7	-30	10	100	5	400	1		54
Pittsburgh, PA	11	-21	14	56	9		0		81
St. Louis, MO	12	33	9	-10	10	400	2		109
Denver, CO	29	16	25	9	23	999	1	0	221
Phoenix, AZ	20	122	9	-10	10		0		117
Sacramento-Stockton, CA	15	67	9	-10	10	900	1		73
Baltimore, MD	16	23	13	30	10		0	-100	94
Hartford-New Haven, CT	13	30	10	-9	11		0		70
San Diego, CA	13	225	4	-64	11		0		81
Orlando-Daytona Bch-Mlbrne	17	89	9	29	7	600	1	0	68
Indianapolis, IN	10	-52	21	250	6	200	2	100	94
Portland, OR	6	-40	10	100	5		0		75

Milwaukee, WI	8	167	3	-50	6		0	69	
Kansas City, KS-MO	22	144	9	125	4		0	88	
Cincinnati, OH	7	-36	11	10	10		0	-100	91
Charlotte, NC	17	-15	20	11	18		0	-100	121
Nashville, TN	24	26	19	27	15	650	2	100	150
Raleigh-Durham, NC	29	32	22	100	11	999	1	0	136
Columbus, OH	6	-57	14	75	8		0	-100	70
Greenville-Sprtnbrg-Ashvll	11	0	11	10	10		0		98
New Orleans, LA	10	67	6	50	4		0		51
Grnd Rpds-Klmzo-Bttle Crk	3	-25	4	-33	6		0		55
Buffalo, NY	4	-50	8	300	2		0		27
Memphis, TN	13	-19	16	45	11		0		96
Oklahoma City, OK	33	32	25	14	22	999	1		138
Salt Lake City, UT	9	-36	14	180	5	67	3	50	105
Nrflk-Prtsmth-NwptNws-Hmp	8	-11	9	29	7		0	-100	55
San Antonio, TX	23	10	21	-9	23		0	-100	136
Providence-New Bedford, RI	8	167	3	0	3		0	-100	35
Harrsbrg-Yrk-Lncstr-Lbnon	7	-12	8	-20	10		0		52
Louisville, KY	11	57	7	0	7		0		55
Birmingham, AL	11	-52	23	109	11		0		109
Charlesbro-Huntington, WV	2	-75	8	0	8	700	1		41
Greensbro-WnstrnSalm-HiPnt	6	-45	11	83	6		0	-100	52
WstPlmBch-FrtPerc-VeroBch	7	0	7	-22	9		0	-100	40
Albuquerque, NM	9	-18	11	83	6		0		40
Dayton, OH	6	-14	7	600	1	0	1		36
Albany-Schnctady-Troy, NY	2	-67	6	500	1	0	1		33
Wilkes-Barre-Scranton, PA	6	100	3	-57	7		0		35
Mobile-Pensacola, AL-FL	6	0	6	50	4		0		54
Jacksonville, FL	1	-88	8	60	5		0		36
Little Rock, AR	12	0	12	33	9		0		77
Tulsa, OK	10	-33	15	88	8	700	1	0	86
Flint-Saginaw-BayCity, MI	5	25	4	33	3		0		28
Richmond, VA	16	100	8	14	7		0		57
Wichita-Hutchison, KS	4	-50	8	167	3		0		46
Fresno-Visalia, CA	5	25	4	-20	5		0	-100	38
Toledo, OH	9	350	2		0		0		29
Knoxville, TN	9	29	7	40	5		0		68

Shrvport-Txrcana, AR-LA-TX	9	-10	10	-38	16	999	1		60
Des Moines, IA	8	33	6	100	3		0		38
Green Bay-Appleton, WI	1	-67	3	200	1		0		22
Syracuse, NY	4	0	4	33	3		0		21
Roanoke-Lynchburg, VA	10	43	7	133	3		0	-100	54
Lexington, KY	14	133	6	0	6		0		50
Austin, TX	27	29	21	40	15		0	-100	151
Rochester, NY	0		0	-100	3		0		16
Omaha, NE	3	-62	8	100	4		0		34
Portland-PolandSpring, ME	1	-75	4		0		0		29
Sprngfld-Decatr-Chmpgn, IL	6	0	6	50	4		0		29
Pdch-CpGrdu-Hrsbg-Mrion, KY-IL	9	350	2	-50	4		0		37
Spokane, WA	7	17	6	500	1	0	1		38
Davnprt-Rcklslnd-Molin, IL	2	-50	4	0	4		0		19
Tucson, AZ	4	100	2	100	1		0		22
Hntsvlle-Decatr-Flornc, AL	6	-33	9	80	5		0	-100	55
CdarRpds-Wtrloo-Dubuqu, IA	4	0	4	300	1		0		42
Columbia, SC	9	-31	13	550	2		0		43
Springfield, MO	2	-67	6	100	3		0		29
Chattanooga, TN	5	0	5	67	3		0		31
Southbend-Elkhart, IN	3	200	1	-50	2		0	-100	15
Jackson, MS	8	0	8	60	5		0		43
Brstl-Kngsprt-JhnsnCty, TN	2	-60	5	400	1	0	1		31
Johnstown-Altoona, PA	7	250	2		0		0		19
Youngstown, OH	4	33	3	0	3		0		22
Madison, WI	4	100	2		0		0		30
Las Vegas, NV	6	100	3	-40	5		0		40
Brngtn-Plattsbrgh, VT-NY	6	50	4	-43	7		0	-100	30
Evansville, IN	0	-100	4	300	1		0	-100	23
Baton Rouge, LA	5	-50	10	150	4		0		35
Lincoln-Hastings-Kearney	5	0	5	25	4		0		43
Ft. Myers-Naples, FL	4	100	2	0	2		0		18
Waco-Temple-Bryan, TX	9	0	9	29	7		0	-100	61
Springfield, MA	3	50	2		0		0		14
Colorado Sprngs-Pueblo, CO	2	-75	8	60	5		0		39
Hawaii, HI	1	-50	2		0		0	-100	22
Puerto Rico & VI	0		0		0		0		2

Other	320	18	271	29	210	999	10	11	1640
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Albuquerque, NM	11	83	6		0			0			-100	1		0		0		31
Dayton, OH	7	600	1	0	1			0			0			0				30
Albany-Schnctady-Troy, NY	6	500	1	0	1			0	-100	1				0				31
Wilkes-Barre-Scranton, PA	3	-57	7		0			0	-100	1			-100	1				29
Mobile-Pensacola, AL-FL	6	50	4		0			0		0				0				48
Jacksonville, FL	8	60	5		0			0		0				0				35
Little Rock, AR	12	33	9		0			0	-100	1				0				65
Tulsa, OK	15	88	8	700	1	0	1	0	-100	1				0				76
Flint-Saginaw-BayCity, MI	4	33	3		0			0	-100	1				0				23
Richmond, VA	8	14	7		0			0	-100	1				0				41
Wichita-Hutchison, KS	8	167	3		0			0		0	-100	1		0	-100	1	-50	42
Fresno-Visalia, CA	4	-20	5		0	-100	1	0		1				0				33
Toledo, OH	2		0		0			0		0				0				20
Knoxville, TN	7	40	5		0			0		0				0				59
Shrvport-Txrcana, AR-LA-TX	10	-38	16	999	1			0		0	-100	1		0				51
Des Moines, IA	6	100	3		0			0		0				0				30
Green Bay-Appleton, WI	3	200	1		0			0		0				0				21
Syracuse, NY	4	33	3		0			0		0				0				17
Roanoke-Lynchburg, VA	7	133	3		0	-100	1			0				0	-100	1		44
Lexington, KY	6	0	6		0			0		0				0				36
Austin, TX	21	40	15		0	-100	2	100		1				0	-100	1		124
Rochester, NY	0	-100	3		0			0		0				0				16
Omaha, NE	8	100	4		0			0		0				0				31
Portland-PolandSpring, ME	4		0		0			0		0				0				28
Sprngfld-Decatr-Chmpgn, IL	6	50	4		0			0		0				0				23
Pdch-CpGrdu-Hrsbg-Mrion, KY-IL	2	-50	4		0			0		0				0				28
Spokane, WA	6	500	1	0	1			0	-100	1	0	1		0				31
Davnprt-RckIsInd-Molin, IL	4	0	4		0			0		0				0				17
Tucson, AZ	2	100	1		0			0		0				0				18
Hntsvlle-Decatr-Flomc, AL	9	80	5		0	-100	1			0				0	-100	1	-67	49
CdarRpds-Wtrloo-Dubuqu, IA	4	300	1		0			0		0			-100	1				38
Columbia, SC	13	550	2		0			0		0				0				34
Springfield, MO	6	100	3		0			0		0			-100	1				27
Chattanooga, TN	5	67	3		0			0		0	-100	1		0				26
Southbend-Elkhart, IN	1	-50	2		0	-100	1			0				0				12
Jackson, MS	8	60	5		0			0		0				0				35
Brstl-Kngsprt-JhnsnCty, TN	5	400	1	0	1			0		0				0				29
Johnstown-Altoona, PA	2		0		0			0		0				0				12
Youngstown, OH	3	0	3		0			0		0				0				18
Madison, WI	2		0		0			0		0			-100	1	0	1		26
Las Vegas, NV	3	-40	5		0			0	-100	1				0				34
Brngtn-Plattsbrgh, VT-NY	4	-43	7		0	-100	1			0				0				24
Evansville, IN	4	300	1		0	-100	1			0				0				23
Baton Rouge, LA	10	150	4		0			0		0				0				30
Lincoln-Hastings-Kearney	5	25	4		0			0		0				0				38
Ft. Myers-Naples, FL	2	0	2		0			0		0				0				14
Waco-Temple-Bryan, TX	9	29	7		0	-100	1			0			-100	1	-50	2	100	52
Springfield, MA	2		0		0			0		0				0				11
Colorado Sprngs-Pueblo, CO	8	60	5		0			0	-100	1				0				37
Hawaii, HI	2		0		0	-100	2			0				0	-100	1		21
Puerto Rico & VI	0		0		0			0		0				0				2
Other	271	29	210	999	10	11	9	0	9	0	9	125	4	-20	5	-29	1320	

January, 2011 through December, 2011														
BOMBAY BICYCLE CLUB	Shuffle	A&M/Octone												
Station	Market	Format	Total Spins	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan	First Played This Year
WFNX-FM	Boston	Alternative	33	6	17	8	2	0	0	0	0	0	0	7/25/2011
Alt Nation	>SiriusXM	Alternative	26	26	0	0	0	0	0	0	0	0	0	10/6/2011
KROX-FM	Austin	Alternative	8	0	3	3	2	0	0	0	0	0	0	7/24/2011
wxpn-fm	Philadelphia	Triple A	3	0	1	2	0	0	0	0	0	0	0	8/16/2011
KTCL-FM	Denver	Alternative	2	0	2	0	0	0	0	0	0	0	0	9/11/2011
WRZX-FM	Indianapolis	Alternative	1	1	0	0	0	0	0	0	0	0	0	10/11/2011
KQRA-FM	Springfield, MO	Active Rock	1	0	0	0	1	0	0	0	0	0	0	7/24/2011
KDGE-FM	Dallas	Alternative	1	1	0	0	0	0	0	0	0	0	0	10/2/2011
XTRA-FM	San Diego	Alternative	1	1	0	0	0	0	0	0	0	0	0	10/13/2011
Spectrum	>SiriusXM	Triple A	1	1	0	0	0	0	0	0	0	0	0	10/7/2011

Track Title Report: DMA Sales									
Title:SHUFFLE	2011 YTD:2660	RTD Units	% TOT						
Artist:BOMBAY BICYCLE CLUB		Total:2660							
Format:Tracks	Wks Top 200 RK:	Digital:2660	100						
Label:HIPD	TW Rank:								
ISRC:GBUM71104663	LW Rank:								
	2W Rank:								
Week Ending:10/16/2011	Config: Digital	Weeks: 4	Display: %CHG						
DMA	Week End 10/16/11	% CHG	Week End 10/09/11	% CHG	Week End 10/02/11	% CHG	Week End 09/25/11	% CHG	92 TD Total
Total	451	122	203	25	163	-10	182	-38	2660
New York, NY	44	159	17	-6	18	-10	20	-62	326
Los Angeles, CA	32	68	19	533	3	-82	17	0	207
Chicago, IL	27	238	8	-27	11	83	6	-54	124
Philadelphia, PA	11	175	4	33	3	-67	9	-31	84
SF-Okland-San Jose	12	20	10	67	6	20	5	-67	96
Boston, MA	16	33	12	-8	13	30	10	0	124
Dallas-Ft. Worth, TX	17	143	7	133	3	-25	4	0	62
Detroit, MI	4	100	2	0	2	0	2	-67	28
Washington, DC	21	40	15	67	9	12	8	0	134
Houston, TX	13	160	5	67	3	50	2	-67	51
Cleveland, OH	5	25	4	0	4	33	3	-25	35
Atlanta, GA	15	114	7	600	1	-67	3	-70	55
Minneapolis-St. Paul, MN	5	25	4	33	3	50	2	-80	75
Tampa-St. Petersburg, FL	5	150	2	100	1	-200	-1	-133	19
Seattle-Tacoma, WA	10	900	1	-67	3	50	2	0	37
Miami, FL	7	40	5	0	5	-17	6	20	49
Pittsburgh, PA	3	50	2	100	1		0	-100	17
St. Louis, MO	6	200	2		0	-100	1	0	19
Denver, CO	9	350	2	-60	5	67	3	-25	48
Phoenix, AZ	10	233	3		0	-100	2	-60	35
Sacramento-Stockton, CA	3	200	1	-50	2	100	1		28
Baltimore, MD	7	133	3	50	2	-33	3	-25	45
Hartford-New Haven, CT	4		0	-100	3	50	2	-33	23
San Diego, CA	11	450	2	-33	3	-62	8	167	38
Orlando-Daytona Bch-Mlbrne	3	200	1	-50	2	100	1	-67	17
Indianapolis, IN	5	150	2	100	1	0	1	-50	19
Portland, OR	2		0	-100	2		0	-100	18

Milwaukee, WI	3	200	1		0	-100	2	-33	19
Kansas City, KS-MO	0	-100	1	0	1	-50	2	100	10
Cincinnati, OH	6	500	1		0	-100	4	100	16
Charlotte, NC	1	-50	2	100	1	0	1	0	18
Nashville, TN	6	200	2	100	1		0	-100	22
Raleigh-Durham, NC	5	150	2	100	1	0	1	-50	26
Columbus, OH	2		0		0	-100	3	0	28
Greenville-Sprtnbrg-Ashvll	1	-67	3	50	2		0	-100	11
New Orleans, LA	2	100	1		0	-100	2	-33	12
Grnd Rpds-Klmzo-Bttle Crk	-1	-200	1	0	1	0	1	-50	7
Buffalo, NY	3	50	2	-50	4	0	4	33	22
Memphis, TN	2	100	1	0	1		0		8
Oklahoma City, OK	1	0	1		0	-100	1		5
Salt Lake City, UT	2	100	1	-50	2	-60	5	150	24
Nrflk-Prtsmth-NwptNws-Hmp	5	67	3		0		0	-100	18
San Antonio, TX	2		0	-100	1	-67	3	0	13
Providence-New Bedford, RI	0		0		0		0	-100	10
Harrsbrg-Yrk-Lncstr-Lbnon	1	0	1		0	-100	1	-67	16
Louisville, KY	2	100	1	0	1	0	1	0	8
Birmingham, AL	4	33	3		0		0	-100	13
Charlesbro-Huntington, WV	0		0		0		0		1
Greensbro-WnsthSalm-HiPnt	1		0		0	-100	2	-33	10
WstPlmBch-FrtPerc-VeroBch	1		0		0		0	-100	10
Albuquerque, NM	2	100	1	-200	-1	-133	3	0	18
Dayton, OH	0		0	-100	1		0		1
Albany-Schnctady-Troy, NY	3		0	-100	1	0	1	0	10
Wilkes-Barre-Scranton, PA	3		0		0	-100	1	0	8
Mobile-Pensacola, AL-FL	1		0		0		0		2
Jacksonville, FL	4		0	-100	2	0	2		13
Little Rock, AR	1		0		0		0		7
Tulsa, OK	3	50	2		0	-100	1	0	8
Flint-Saginaw-BayCity, MI	3		0		0		0	-100	4
Richmond, VA	3		0	-100	1	-67	3		12
Wichita-Hutchison, KS	0		0		0		0	-100	7
Fresno-Visalia, CA	1	0	1	-50	2		0		16
Toledo, OH	0	-100	1		0		0	-100	6
Knoxville, TN	3	50	2	100	1		0	-100	13

Shrvport-Txrcana, AR-LA-TX	0		0		0		0		0
Des Moines, IA	2		0		0		0		6
Green Bay-Appleton, WI	0		0		0	-100	1		5
Syracuse, NY	0		0		0		0	-100	2
Roanoke-Lynchburg, VA	0		0		0		0		1
Lexington, KY	1		0	-100	2		0	-100	5
Austin, TX	3	200	1	-50	2	100	1	-75	30
Rochester, NY	0	-100	1	0	1	0	1	-50	8
Omaha, NE	2		0		0		0		2
Portland-PolandSpring, ME	2		0		0	-100	1		4
Sprngfld-Decatr-Chmpgn, IL	0		0	-100	1		0		3
Pdch-CpGrdu-Hrsbg-Mrion, KY-IL	0		0	-100	1		0		2
Spokane, WA	1		0	-100	1	0	1		5
Davnprt-RcklsInd-Molin, IL	1	0	1		0		0		6
Tucson, AZ	2	100	1	-200	-1		0	-100	6
Hntsvlle-Decatr-Flornc, AL	2		0	-100	2		0	-100	12
CdarRpds-Wtrloo-Dubuqu, IA	0	-100	1		0		0		4
Columbia, SC	0		0	-100	1		0		4
Springfield, MO	0		0		0		0		2
Chattanooga, TN	1		0		0		0	-100	3
Southbend-Elkhart, IN	0		0	-100	1		0		4
Jackson, MS	1		0	-100	1		0		2
Brstl-Kngsprt-JhnsnCty, TN	0		0		0		0		0
Johnstown-Altoona, PA	1		0	-100	1		0		5
Youngstown, OH	0	-100	1		0		0	-100	6
Madison, WI	2		0		0		0	-100	9
Las Vegas, NV	4	300	1	-50	2	100	1	0	12
BrIngtn-Plattsbrgh, VT-NY	1	-50	2		0		0		8
Evansville, IN	0		0		0		0		1
Baton Rouge, LA	0	-100	2		0	-100	1		6
Lincoln-Hastings-Kearney	1		0		0		0		2
Ft. Myers-Naples, FL	0		0		0		0	-100	4
Waco-Temple-Bryan, TX	0		0		0		0		2
Springfield, MA	0	-100	1		0		0		7
Colorado Sprngs-Pueblo, CO	0		0	-100	1		0		6
Hawaii, HI	2		0	-100	1	0	1	-50	10
Puerto Rico & VI	0		0		0		0		1

Other	39	129	17	21	14	40	10	-17	200
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Before the
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LIBRARY OF CONGRESS
Washington, D.C.

In the Matter of)
)
)
Adjustment of Rates and Terms for)
Preexisting Subscription and Satellite)
Digital Audio Radio Services)
_____)

Docket No. 2006-1 CRB DSTR

WRITTEN DIRECT TESTIMONY OF STEVEN BLATTER

(On Behalf of Sirius)

Background and Experience

1. My name is Steven Blatter, Senior Vice President of Music Programming, at Sirius Satellite Radio Inc. ("Sirius"). My whole 20+ year career has been in radio, primarily in programming, but also in marketing, promotion and online. I have worked as a Program Director for local terrestrial radio stations in New York and Los Angeles, as well as in national syndication and network operations. For the last three years I have been employed by Sirius, beginning as a Vice President and moving up to Senior Vice President approximately two years ago. As I will explain below, Sirius is not just radio, but we are a special form of radio that offers a great deal more than traditional radio, adding enormous value for both listeners and record companies and providing access to creative works not otherwise available.

2. I am responsible for the content of all 64 of the Sirius music channels created in the United States and my testimony will focus on them. Sirius also carries five

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music channels created in Canada, but my testimony focuses on the area where my knowledge is greatest. I supervise approximately 200 employees, including two senior directors, each of whom is responsible for about half the music channels, several directors who each handle a genre or two, format managers who handle one to three channels, and coordinators who put the music into playable form for our operation. I also supervise a team of producers who create all the interstitial elements heard between the songs on each of our channels, as well as our talent and industry relations group, whose primary function is to work with the music community to arrange artist interviews and live performances that typically originate from our broadcast studios in New York. I also work with agents, managers, and the Sirius human relations department in recruiting our on-air talent, producers, programmers and other creative staff.

3. In addition to my supervisory role, I am responsible for determining the formats for each of our music channels, the creation of new radio formats, as well as channels and programs we co-produce with recording artists such as Eminem, 50 Cent, Little Steven Van Zandt, Jimmy Buffett, The Rolling Stones and The Who. The channels and programs we co-produce with these artists contribute greatly to the Sirius listening experience and give our listeners access to music not available on terrestrial radio.

4. My entire career has required me to deal directly and extensively with recording companies and their executives and radio promotion teams. It has been important for me to understand their motivations and business models, as well as those of my employers in terrestrial radio. At Sirius I have continued to interact directly with the record labels and also to supervise persons who interact with record labels on a daily

basis. I have directly observed what does and does not motivate the labels and have participated in two decades of discussions with them. I also pay close attention to label activities by regularly reading trade press.

5. My career has required me to understand how Americans use the radio medium. The appeal of radio stations, including Sirius', is measured by the popularity of a station with its targeted audience. The job of a radio programmer is to identify the target audience of a particular channel, understand what attracts them, and develop a full experience that engages that audience. Again, I have observed the process for two decades, seeing what does and does not work for my own employers and for competitors. I have also paid close attention to the trade press over the years where the actions of Programmers are closely monitored and documented. I also supervise and work with the extensive listener research we conduct to evaluate new formats and identify the most attractive music for those formats.

Summary of Testimony

6. Each of Sirius' 64 music channels offers a listening experience that is designed to create a highly satisfactory listening experience for the intended audience of the channel. We put enormous resources, effort, and creativity into crafting each of our 64 music channels. Creating the experience that a Sirius channel delivers is a demanding and expensive task. Beyond the huge investment in technology, physical infrastructure, and financing lies the creative input of dozens of radio professionals, ranging from those who develop the basic channel concept, to the channel programmers that select and, for most channels, direct the hosts or DJs who provide commentary, and select and sequence

the music for each hour of the day. There are also producers who write and create all the interstitial material heard between songs that help create the attitude for each channel. In addition, promotions are developed on the appropriate channels to further enhance the listening experience. We make this enormous effort because we are acutely aware that music, as such, is widely available for free, particularly on terrestrial radio. The value created in producing our music channels is critical to our ability to attract and retain subscribers.

7. The distinctive music formats for each of our 64 music channels are determined through proprietary research and the past experiences of our expert programmers. Our research uses both on-line and in-person survey formats, as well as review of the trade press and other public sources. Each radio station is built by populating a library of music for the channel. This library is maintained and updated using our own listener research as well as public sources such as the trade press and information from record company promoters, as I discuss below. Criteria such as tempo, texture, loudness/softness, familiarity, popularity and compatibility are used to determine the viability of each song being considered for airplay.

8. The music library for each channel is actively managed and modified by a music programmer on a daily basis. Within the station's music universe, programmers arrange particular pieces with an eye to the characteristics of each (e.g. tempo, era, gender, and lyrical content), along with special programs (such as artist interviews, live performances and countdown shows), so the DJ/host can develop the specific listening experience that attracts subscribers to that station. Importantly, the Sirius experience can

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be sustained and intensified because, in contrast to terrestrial radio, it is not interrupted by commercials. This also creates greater listener satisfaction and helps us attract and retain subscribers even though music is available for free on terrestrial radio.

9. Airplay on radio has continually proven to be the biggest driver of record sales. As a result, record companies have large operations specifically charged with obtaining radio airplay, typically organized with regional operations under national direction. They also use independent promoters to encourage radio programmers to play their music. Record companies give Sirius and other broadcasters their recordings for free, often weeks before public release, in hopes of generating pre-release demand. The labels know from experience that it is incredibly difficult to break a new album without extensive airplay. Many of the most influential executives at the major labels tend to be those who have demonstrated an ability to get music played on the radio. In my career in radio programming, culminating in my position in charge of programming the 64 U.S. Sirius music channels, the drive of record labels for airplay has been a constant theme.

10. Satellite radio is, of course, a form of radio. Sirius competes for listeners with and is directly comparable to terrestrial radio. We do everything terrestrial radio does and more. The major record labels rely on their radio promotion operations to work with Sirius, typically from their national office or as part of their New York regional effort. Both listeners and the labels think of Sirius as a form of radio. Sirius airplay now is reflected in chart positions in Billboard, its sister publication Radio and Records, and Mediabase. In trade advertising created by many record companies that target terrestrial radio programmers, airplay on Sirius is now expressly noted.

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11. Although Sirius is a form of radio, it offers significant additional promotional benefits to record companies that terrestrial radio cannot provide.

- Unlike most terrestrial radio, as each song plays, Sirius continuously displays the title and the artist on its digital display. This makes it easier for a listener to remember the song and artist that is playing. Over the years the record labels have expressed their concern with traditional radio's inability to provide such information for each song played. In addition to not having the technical capabilities to display such information, traditional radio DJs often strive for pace and tend not to verbally identify the music they play.
- All music radio stations strive for a distinct "stationality" that adds to the listening experience. Because Sirius has many channels, stationality can be much more targeted than traditional radio. Also, the absence of commercials means the Sirius aesthetic experience is more sustained and fully developed. Music heard in this context allows us to create an even more satisfying listening experience. The greater listener satisfaction explains why subscribers are willing to purchase Sirius radios and pay subscription fees when music can be heard for free on terrestrial radio.
- Sirius' 64 music channels include specialized formats that let us play new or emerging artists that are not yet popular enough to be included on the playlists of terrestrial radio stations that cover relatively broad formats. Record company promoters are very aware of our specialized channels and systematically attempt to place emerging artists on more specialized channels, long before they might appear on terrestrial radio.
- Sirius gets much deeper into the catalog than terrestrial radio. With 64 channels of music, each channel can be more specialized and dig down to music terrestrial radio would never use. This exposure is to persons who have selected that specialized channel and, hence, are most likely to appreciate and purchase that music.
- Because our music stations are supported by subscription fees, not advertising, we can serve listener interests, providing mixes of music that often do not fit with the advertising interests of banks, automobile dealerships, supermarkets, and other businesses that provide the core advertising for local terrestrial radio stations. Our music channels are listener driven, not advertiser driven.
- The availability of 64 distinct stations seems to encourage an active process of listener choice, perhaps because the choice is more meaningful. One of the 64 Sirius channels is more likely to satisfy a particular

listener's interests than one of a half-dozen ordinary formats. As a result, Sirius listeners seem to be more engaged, and they more quickly become familiar with the music Sirius plays.

12. Because of my job and experience, my testimony will focus on the Sirius music channels and on dealings with the record companies. I will discuss how developing and presenting those channels is, in itself, a highly creative, demanding, and expensive process. Importantly, however, that is just a part of our overall business. To make music channels possible, enormous technical, regulatory, and financial challenges must be overcome. And to make music channels feasible, a large pool of subscribers must be developed, requiring extensive and expensive marketing efforts and a huge investment in the kinds of distinctive and exclusive non-musical features, such as Howard Stern and the NFL, that drive subscriptions. In short, as shown in the web pages that are SIR Ex. 28, musical recordings are just one component of the value we deliver, and our contribution is just one part of the whole.

The Sirius Music Channels

13. Sirius has 69 are music stations without commercials (64 are produced by Sirius in the US; the other five are produced by our Canadian affiliate). Printouts of the web pages of some of these channels are found at SIR NSS Ex. 3.

14. Of those music stations, some are devoted exclusively or almost so to music recorded before 1972. These include Sirius Gold and 60s Vibrations.

15. Other music stations make substantial use of pre-1972 recordings (approximately 50% or more of the recordings played). These include:

- Classic Vinyl
- The Vault
- Rolling Stones Radio
- The Who Channel
- Sirius Blues
- Standard Time
- Broadway's Best.

16. Additional Sirius music channels use a significant amount of pre-1972 recordings (approximately 25% or more of the recordings played). These include:

- Movin' Easy
- Underground Garage
- The Roadhouse
- Soul Town

17. Our music channels are not limited to recorded music. We have studios for live performances, and hundreds of such performances are broadcast each year.

18. We also have developed channels and programs in conjunction with well known artists such as Jimmy Buffett, Eminem, 50 Cent, Steven Van Zandt, the Who, and the Rolling Stones, as well as the Metropolitan Opera. In addition to bringing their creative talents to bear on shaping the overall listening experience, these artists also make available a range of unreleased recordings that listeners otherwise could not access. For example, The Who channel broadcasts two hours per day of live music that is not

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commercially available; Met Opera Radio broadcasts about 12 hours per day of pieces that are either live or recordings exclusive to radio on Sirius, and Radio Margaritaville airs about three hours per day of live songs.

19. Sirius has carefully chosen the formats of its 64 U.S. music channels to provide a breadth and quality of musical choice that is not and inherently cannot be provided by traditional radio.

20. A given station or channel must have enough listeners to be economically viable on a local market level. (Even public radio faces funding constraints.) Sirius can reach millions of subscribers with its national signal, and that number is growing. Our national audience is large enough to support many different musical channels with distinctive formats.

21. By contrast, the audience in typical local markets for terrestrial radio is much smaller, so that only a few channels and formats can be supported. The tendency is for each market to sustain several stations with formats intended to appeal to large audience segments, perhaps with a few specialty formats supported by institutions such as colleges or by local ethnic concentrations. Even in a major urban area such as Washington, D.C., it is difficult for most listeners to terrestrial radio to receive more than 15 different music formats, and the selections in much of the country can be far fewer.

22. Some of the omissions forced by the constraints on terrestrial radio are striking. For example, the two largest local markets in the U.S., New York and Los Angeles, lack any country music format. Eight of the ten largest U.S. markets lack a dance music format. Of the ten largest markets, only New York and San Francisco have

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dance stations. Five of the ten largest markets now lack an oldies format. Finally, four of the top ten markets (Philadelphia, Houston, Detroit, and Atlanta) do not have a classical music station. One can readily imagine the situation in the great majority of traditional U.S. radio markets where there may be only four to ten quality music channels versus the 69 available on Sirius.

23. The constraints imposed by the limited number of signals interacts with the constraints imposed by the fact that terrestrial radio is advertiser driven. The types of businesses that provide the revenue backbone for terrestrial radio are led by the demographics of their best customers and by considerations of image to focus on certain music formats. For example, a single format focused on playing both alternative rock and hip-hop will likely produce listeners who are 16 to 24 year old males. In most markets, it is extremely difficult to find enough local advertisers interested in that demographic to support a financially viable local radio station. Further, music tastes for most consumers are defined during teen years and terrestrial radio is losing this audience during this critical period. This is clearly demonstrated by the declining usage of terrestrial radio by younger demographics across America. Sirius currently dedicates 10 of its music channels to younger demographics, including Sirius Hits-1, Octane, Alt Nation, Hard Attack, Faction, Hip Hop Nation, Shade 45, Hot Jamz, Revolution and Kids Stuff.

24. In all markets, and particularly in smaller markets, satellite radio provides access to music that listeners would otherwise never encounter and, hence, would have no opportunity to come to like or to purchase. Sirius thus greatly expands the musical

opportunities of its listeners. In addition to the “young demographic” channels described above, Sirius offers numerous channels dedicated to styles of music that are typically not available on terrestrial radio, including: Classical, Reggae, Standards, Dance, Classic Country, Outlaw Country, New Age, Jazz, Jam bands, Garage Rock, Heavy Metal, Electronic, Gospel, Broadway/Show Tunes, Blues, Christian Pop and Rock, and Bluegrass. By expanding the musical opportunities of listeners in this way, Sirius provides airplay (and ultimately, sales and resulting royalty payments) for artists who likely would not be heard on terrestrial radio.

Creating and Maintaining a Sirius Music Channel

25. Each Sirius music channel starts with a distinctive format developed to attract and hold the loyalty of a viable audience segment. The format may be a particular musical era (e.g. the 50’s), genre (e.g. opera or hard rock), artist (e.g. The Who, Rolling Stones), or a desired mood (e.g. romance, relaxation, or party time). In each case there is a clearly defined format, which shapes the channel in multiple ways.

- The format defines the universe of music the programmers will draw upon, for example, opera, hard rock, or show tunes.
- The format also helps define the overall energy level of the channel – whether it is edgy and energetic or laid back and mellow.
- The format suggests the appropriate hosts or DJs for the channel and guides their style of announcing. An alternative rock station calls for different personalities and styles than standards from the 40s. Sirius makes a major investment in identifying and recruiting top quality and highly experienced on-air talent, and our programmers and other creative workers support that talent.
- With two exceptions, the format of a Sirius music channel also includes production elements or interstitial pieces heard between the songs that further position and image the channel for the intended audience.

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Channels have their own station voice and slogans, while others also employ custom singing jingles that help enhance the mood of the channel.

- The format for a channel also guides the types of special programming that may be created and scheduled. Artists often participate in interviews and host special programs such as countdown shows on our more foreground formats like Top 40, modern rock, new country and hip-hop. A station with an edgy or party persona can use contests that would not work as well on a classical station.
- All of these factors work together to enhance the stationality of each station, make the listening experience more attractive to the target audience, and permit meaningful and satisfactory channel choices by the listener.

26. Selecting music to implement the format is a difficult and ongoing task carried out by our music programming specialists. It is not enough just to rotate down an alphabetical list of pieces that are within the universe defined by the concept. Nor will random play work. Instead, programmers who are deeply familiar with the universe of music bring both scientific and artistic judgment to bear to create a musical flow and mood.

- For example, tempo is important. Too many slow or fast pieces in a row often may be boring, though sometimes may create and sustain a mood. Rapid alteration may be jarring.
- Other qualities of the music also must be considered. It may be undesirable to string together a series of artists with a given characteristic – male, female, group, duets.
- The themes and story lines of songs also must be considered. Putting the wrong songs in sequence may produce unintended effects ranging from jarring to humorous.
- We utilize software called MusicMaster that helps in the rotation and sequencing of songs for each music channel. While this software helps programmers manage their music libraries and facilitates the music scheduling process, it is no substitute for the informed judgment of programmers with in-depth knowledge of the genre. In fact, every hour of music scheduled across all 64 Sirius music channels is carefully reviewed and hand massaged by a Sirius programmer before it airs.

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- We also do substantial listener research in an effort to understand how our formats are perceived and what appeals to various listener groups. For example, we regularly conduct surveys, either on-line or in person. We back that effort up with research into what is working in terrestrial radio. This includes our own review of publicly reported charts and airplay information from sources such as Mediabase. And, as I discuss below, record company promoters provide airplay and other information to our programmers on a regular basis.

27. Hosts or DJs must understand the music, the audience, and the flow of the program. Sometimes humor is called for, sometimes not. Often the needed humor is a light quip, sometimes it is a raucous rant. Some channels call for an emphasis on facts; on others the host must emote. Everything that is said must implement the format of the channel and enhance the overall listener experience. As already noted, Sirius hires top quality on-air personalities to present music and provide our listeners with additional information about each artist and song played in a passionate and engaging manner. We also give our on-air personalities extensive direction and other support to help them best communicate to their audience.

28. Special programming such as live performances, interviews, contests, and the like can be important, but must be carefully tailored to the channel and its format. Artist interview bookings and on-air promotions are handled by two distinct departments with approximately ten employees who are charged with creation and development of such programming.

29. A channel must be promoted, both to current listeners and to others who may become regular listeners if they sample the channel. This requires a variety of tactics.

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- The channel must have a short name that captures its format. For example, “Hard Attack,” or “Chill.”
- Typically a distinctive logo is developed that must be associated with the name so as to permit instant visual identification.
- The name and logo must be supported by additional catch phrases or similar items that are used repeatedly and that become associated with the channel. Some of these may remain in use for years. Others may become stale and be rotated out.

30. Sirius devotes resources to all of these matters because experience has shown that they are critical to satisfying listeners, and they fundamentally shape how listeners perceive and respond to the music. In the right restaurant, with the right ambiance and menu, a diner may find escargot delicious and even be motivated to try serving it at home. But in other situations, the same diner might find the same snail unappetizing or even revolting. Much the same is true of music. Sirius works with music, but that is just a small part of the experience a Sirius channel delivers.

How Sirius Benefits Recording Sales

31. Most consumers typically do not decide to purchase music based on a story in a newspaper or magazine; the music industry understands that radio airplay is the number one driver of recording sales. Of course, some artists have established followings that wait for their next release. It is also possible to sample CDs at record stores and online. Still, the simple fact is that radio airplay sells music. Certainly the record labels believe this, leading to their extensive efforts to obtain airplay that I discuss later.

32. Sirius provides all of the promotional benefits of terrestrial radio exposure, but even more so. For example:

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- Sirius displays the name of the artist and song continuously during play. If the listener is interested, he or she does not have to try to remember what the DJ said before play began or hope that it is mentioned after play ends. The information is immediately available when desired.
- Because Sirius offers 64 music channels with distinct and defined formats, it is much more likely that a listener who has chosen a given channel will be attracted to music played on that channel. By contrast, terrestrial radio typically offers fewer and less defined choices, so listeners may be much less attracted to music the station plays.
- Music within a given format is presented in an optimum setting in terms of surrounding pieces, hosting, and overall station personality. The experience will also not be preceded or followed by jarring commercials. This gives the music the best possible opportunity to appeal to the listener. Thus, the value we add provides a direct promotional benefit to the record companies, as well as to our listeners.
- Sirius' 64 different and distinct music channels allow us to go much deeper into the music catalog. A terrestrial station with a broad format has to look for material that will appeal to a relatively broad audience. By contrast, the self-selected group listening to a more focused Sirius channel is more likely to appreciate music within the format that has less general appeal.
- Similarly, our specialized channels allow us to play up and coming artists who are often not receiving airplay on terrestrial radio stations with broader formats. This exposure can give impetus to the emerging artist and lead to broader exposure. There have been situations in which Sirius airplay of an unsigned artist has led to a contract with a major recording company. For example, the band Evans Blue was signed by a major label after their self created album received airplay on Sirius' Octane channel. In such a situation, the recording company gets an artist that has already proven itself on the radio and increases the likelihood of the band receiving airplay elsewhere.
- The care and resources we devote to programming, and the specialized nature of many of our channels, augment the reputations of our DJs or hosts. As they become opinion leaders for their audiences, their favorable views of an artist or song can be very influential in motivating sales. Approval from such an opinion leader provides promotion that is likely to be more effective than paid commercial advertising by the record labels.
- Ratings by third party providers do not drive our music programming decisions, so that Sirius is free to take more chances with new music, emerging and unknown artists, and music that has not yet climbed the national music charts.

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- A Sirius subscriber typically will be someone who values Sirius broadcasts enough to pay for them and, moreover, will have money to spend for music entertainment. Such a person is an attractive potential customer.

33. Chart position has an important effect on music sales. Some customers are directly motivated to purchase highly charted music. But beyond that, many terrestrial radio stations rely on chart position to select the universe of music their station will play. The most obvious is a “Top 40” station, but other types of station formats focus on music that presently is relatively highly charted.

- Airplay on Sirius now is taken into account when weekly charts are compiled by Billboard/Radio & Records and Mediabase, the two primary sources for chart information used by record labels and radio programmers. When Sirius plays a song, its spin count increases and chart position is affected. When a song’s spin count and chart position increase other programmers are more easily encouraged to play the song, and that ultimately drives greater record sales.
- Also, Sirius is recognized as a leader in music selection. SIR NSS Ex. 2 contains examples of record company advertising that emphasizes airplay on Sirius as a reason that other programmers should expose the work or artist. When our leadership causes terrestrial radio stations to play a particular song, the result is higher chart position for that song.

Promotional Efforts By Record Companies

34. Record companies are acutely aware of how important airplay is to generating record sales, and they go to great lengths to seek it. This has been going on since long before I became involved in radio. Efforts directed at Sirius have continued and intensified during my time at Sirius as our listener base expands and as the record companies become more aware of the unique benefits Sirius offers.

35. To begin with, the record companies consistently provide music recordings to Sirius for free, in the obvious hope that we will play and thereby promote

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what we have been provided. In fact, we often receive songs weeks before public release in the hope that airplay on Sirius will generate interest and demand before the album is commercially released.

36. Recording companies have divisions devoted to obtaining radio airplay for their releases. Typically these divisions are organized by region with a national operation to supervise and assist as needed. Some companies have separate “new media” promotional groups, but Sirius now is virtually always the responsibility of the radio promotion departments. Either Sirius is assigned to the national group or to the New York regional promotion person.

37. Record industry promoters aggressively communicate to our programmers their desire for us to play their music. These efforts are part of carefully calculated promotional efforts. The promoters will promote particular songs for particular channels, making a case that a given song will succeed with the channel’s audience. The record company promotional representatives are under tremendous pressure to seek airplay on radio. When a radio programmer does not agree with a record label promotion person, it is not unusual for the promotional rep to escalate the call to the programmer’s supervisor and at times to me as the head of music programming. On occasion these calls can get contentious, reflecting the high value the record companies place on radio airplay and the pressure their promoters are under to get music played on Sirius.

38. [[As an experiment, I asked the programmers for six of our music channels (Left of Center, Alt Nation, The Spectrum, Octane, Hard Attack and Faction) to keep a record of promotional contacts from record companies during the week of October

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16-20. As indicated on the following table, in just one week we received 170 label promotional contacts (calls, e-mails and instant messages) and 108 mailings (consisting substantially of free CDs and singles) with respect to these six channels alone:

	10/16	10/17	10/18	10/19	10/20	Week
E-mail/Instant Message	22	25	33	28	28	136
Calls	4	8	10	9	3	34
Promo Mail (incl. CDs/Singles/Concert Tickets)	19	29	19	23	18	108

Thus, in this one week period – which I believe to be typical in all material respects –

Sirius received nearly ten promotional contacts from the record labels per day for each of these channels.]]

39. Record companies often complain that terrestrial radio stations have very limited playlists. But terrestrial radio, which has to play music that appeals to relatively broad audiences, typically cannot afford to play pieces with narrow appeal. The record companies know, however, that many of our channels are more specialized. They initially will promote newer artists for more specialized stations, hoping that they will generate interest in their most likely audience and, perhaps, eventually graduate to broader formats and terrestrial radio.

40. In an effort to gain airplay, record company reps will often make their artists available to participate in special programming that will air exclusively on Sirius and also provide prizes for use in on-air promotions. For example:

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Order in Docket No. 2006-1 CRB DSTRA**

- Sirius adds value by arranging for artist interviews and live performances from our studios. The record companies regularly arrange for appearances by artists we are willing to play. For example, from January 1 through October 18 of this year, over 800 record company artists visited our studios for interviews and/or performances. These events add value for our listeners, but also gave promotional value to the record companies.
- On some stations Sirius conducts contests. Record companies will regularly provide prizes to support such contests, including CDs and concert tickets.

41. Record companies are so strongly motivated to obtain play on Sirius that we have to set limits on what is acceptable. For example, I will not approve accepting free travel to view artists in concert. In fact, over the years record companies have pushed so hard for radio airplay that legal restrictions have been adopted. The New York Attorney General, Eliot Spitzer, has recently obtained consent decrees from major labels restricting some of their promotional practices directed toward obtaining air time. On October 20, 2006, the *New York Times* carried an article entitled “CBS Radio Tightens Policies in Settlement Over Payola” that briefly summarizes some recent developments, noting that such issues arise as “music executives compete fiercely to land their songs on limited radio station playlists.”

42. Record companies typically focus their promotional efforts on new music, rather than their existing catalog. As a result, a vast array of older music is unknown, and thus effectively unavailable, to many listeners. Our specialized formats dig much deeper into the catalog, exposing older songs to the public. And, of course, the record companies benefit from resulting sales on which they expended no promotional effort.

43. The labels explicitly recognize our promotional contributions. Sirius frequently receives thanks from record companies and their artists for our contributions to

their success. Indeed, when record companies issue gold or platinum records to recognize sales milestones, they sometimes send them to radio stations, and we regularly receive such gold or platinum records at Sirius.

Conclusion

44. In short, developing and implementing a unique and compelling radio format for all 64 commercial-free Sirius music channels is a highly creative and demanding process, even after the many technical, promotional, and financial challenges have been overcome. Our expert music programmers, celebrity hosts and DJs, producers, and on-air promotion and talent executives add enormous value to our music offerings. This added value both provides our subscribers with the reason to pay our fees and makes us a tremendously valuable marketing tool for the recording industry, as evidenced by the record companies' constant and increasing promotional efforts.

Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 In the matter of: °
 Adjustment of Rates and Terms ° Docket No.
 for Preexisting Subscriptions ° 2006-1
 Services, ° CRB DSTR
 and °
 Satellite Digital Audio Radio °
 Services °
 Room LM-408
 Library of Congress
 First and Independence
 Avenue, S.E.
 Washington, D.C. 20540
 Monday,
 June 11, 2007

The above-entitled matter came on for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES: (cont'd)
 On Behalf of Music Choice:
 PAUL M. FAKLER, ESQ.
 of: Moses & Singer LLP
 406 Lexington Avenue
 New York, New York 10174-1299
 (212) 554-7800
 pfakler@mosessinger.com

APPEARANCES:

On Behalf of SoundExchange:
 DAVID A. HANDZO, ESQ.
 MICHAEL B. DeSANCTIS, ESQ.
 JARED O. FREEDMAN, ESQ.
 THOMAS J. PERRELLI, ESQ.
 MARK D. SCHNEIDER, ESQ.
 of: Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 (202) 639-6060
 dhandzo@jenner.com
 On Behalf of XM Satellite Radio Inc.:
 BRUCE RICH, ESQ.
 JONATHAN BLOOM, ESQ.
 TODD LARSON, ESQ.
 BRUCE S. MEYER, ESQ.
 of: Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 (212) 310-8238
 On Behalf of Sirius Satellite Radio Inc.:
 BRUCE G. JOSEPH, ESQ
 KARYN K. ABLIN, ESQ.
 MATT J. ASTLE, ESQ.
 JENNIFER L. ELGIN, ESQ.
 THOMAS W. KIRBY, ESQ.
 MICHAEL L. STURM, ESQ.
 of: Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 (202) 719-7528
 b joseph@wileyrein.com

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1 sports channels to single digit channels. So
2 in meetings that I've been present in, it's
3 never come up that this has been an issue.
4 What I can tell you that has come up is the
5 fact that we would like to be able to
6 channelize our sports channels and that means
7 put them in succession, especially when we
8 have preemptions so it's easier for the
9 listener to find games.

10 JUDGE ROBERTS: I know you're the
11 Director of Sports Programming, Mr. Cohen, but
12 do you know when Howard Stern negotiated his
13 deal, was he promised a particular channel?

14 THE WITNESS: I'm not aware of
15 that, your Honor. If he was promised a
16 channel or channels during the negotiation, I
17 wasn't part of the negotiation.

18 JUDGE ROBERTS: Well, I hope that
19 there's somebody that is able to answer that
20 question.

21 CHIEF JUDGE SLEDGE: Any follow-up
22 questions from counsel?

1 please be seated.

2 MR. KIRBY: Good morning, Mr.

3 Blatter.

4 THE WITNESS: Good morning.

5 DIRECT EXAMINATION

6 BY MR. KIRBY:

7 Q What is your full name?

8 A My name is Steven Gary Blatter.

9 Q And where are you employed, Mr.

10 Blatter?

11 A I'm employed at Sirius Satellite
12 Radio.

13 Q And what is your position there?

14 A I am the Senior Vice President of
15 Music Programming.

16 Q What did you do professionally
17 before you came to Sirius?

18 A Immediately prior to Sirius, I was
19 the Chief Strategist for a media consulting
20 company called Sabo Media.

21 Q All right, and before that?

22 A Prior to that, I spent all of my

1 MS. ELGIN: No.

2 MR. DeSANCTIS: No, your Honor.

3 CHIEF JUDGE SLEDGE: Thank you,
4 sir.

5 THE WITNESS: Thank you.
6 (The witness was excused.)

7 JUDGE ROBERTS: Mr. DeSanctis,
8 have you rethought your desire to make a
9 statement?

10 MR. DeSANCTIS: I think everything
11 is sufficiently covered, thank you, your
12 Honor.

13 MR. JOSEPH: Your Honor, Mr. Kirby
14 will call our next witness.

15 MR. KIRBY: Your Honor, I would
16 call Mr. Steven Blatter.
17 Whereupon,
18 STEVEN BLATTER
19 was called as a witness and, having been first
20 duly sworn, was examined and testified as
21 follows:

22 CHIEF JUDGE SLEDGE: Thank you,

1 career as a programmer in terrestrial radio.

2 Q Okay, did you specialize in any
3 particular format?

4 A Unlike most radio programmers that
5 I've come in contact in my 20 years, I
6 actually -- who typically specialize in one
7 format, I've actually had the opportunity to
8 program in a number of formats particularly
9 country music and rock music.

10 Q When did you join Sirius?

11 A I joined Sirius just about four
12 years ago.

13 Q Okay. And what are your
14 responsibilities as the Senior Vice President
15 of Music Programming?

16 A I'm responsible for the music and
17 non-music content, including approximately 150
18 on air host plus all the interstitial pre-
19 produced elements you might hear in between
20 the songs as well as the overall packaging
21 each of our 64 commercial-free music channels.

22 Q You mentioned you have 150 music

1 hosts. Are there other people that work for
2 you or under you, I guess I should say?

3 A Yes, there are.

4 Q How many and what do they -- just
5 in general terms, what are their functions?

6 A Yeah. Well, immediately below me,
7 there's a tier of Senior Directors of
8 Programming, two of which essentially split
9 the 64 commercial-free channels among
10 themselves and they're responsible for the
11 day-to-day programming of those channels.
12 There's also a third Senior Director who
13 operates more in an operational capacity and
14 reports directly into me.

15 Below the Senior Directors are
16 Directors of Programming and they each are
17 specialists in a particular genre of music,
18 whether it be country, jazz, rock and so on.
19 And reporting into each of those Directors of
20 Programming are what we refer to as Format
21 Managers who typically oversee the programming
22 of anywhere from one to three channels.

1 Sirius, they would call the Artist and Talent
2 Relations Department and they would refer them
3 to the appropriate cohort.

4 MR. KIRBY: Your Honor, since I
5 mentioned the witness' direct testimony, I'd
6 like to have that passed out at this point and
7 if I heard correctly, and I'm looking to Mr.
8 Joseph to correct me here, I believe this
9 would be Exhibit -- Sirius Exhibit 36, Sirius
10 Exhibit 36, your Honor.

11 (Sirius Trial Exhibit 36
12 marked for identification.)

13 BY MR. KIRBY:

14 Q Mr. Blatter, do you recognize
15 Sirius Exhibit 36 as your written direct
16 testimony in this proceeding with attached
17 exhibits?

18 (Witness proffered document.)

19 A I'm sorry, could I have the
20 exhibit number again?

21 Q It should be on the cover, I
22 believe. It's Exhibit 36.

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1 There's also a team of coordinators who
2 support all the programmers in the department,
3 who are responsible for handling some of the
4 nuts and bolts of producing each of our
5 commercial-free music channels.

6 Q And then is there a group -- I
7 think you mentioned in your direct testimony
8 which we'll get to in just a second, of talent
9 and industry relations.

10 A Yes, there's a separate group
11 called the Talent and Industry Relations
12 Department that is primarily responsible for
13 working directly with the music community
14 which, you know, I'm defining as consisting of
15 the record companies, the artist management
16 companies and publicity people to handle the
17 booking of artists, interviews and live
18 performances at Sirius and in some cases if
19 somebody were to call Sirius and not know who
20 a particular specialist was for a format,
21 let's say it's an independent artist who
22 wasn't familiar with the inner workings of

1 A Yes.

2 Q All right, and that is your direct
3 testimony, correct? You can trust me.

4 A Yes, it is.

5 Q If you look from the back of the
6 last tab, you will see that I believe what you
7 can identify as your signature.

8 A Yes, it is.

9 Q And that indicates that you
10 executed this document on October 30; is that
11 correct?

12 A That is correct.

13 Q Mr. Blatter, one of the trues of
14 life is that time passes and I'd like you to
15 help me perhaps bring this statement up to
16 date a little bit. Turn first, if you would,
17 to page 2, the second line down in paragraph
18 2, up at the top of the page. Now, you were
19 just testifying as to the number of employees
20 that you supervise and it says there that you
21 supervise approximately 200 employees. What
22 is the approximate number today?

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1 A The approximate number today is
2 250 employees.
3 Q And that's just the result of --
4 what caused that difference in the number?
5 A Actually two things. One is
6 we've, you know, added additional staff to
7 support our growth. We've also converted a
8 number of outside contractors to become part
9 time employees over the last several months.
10 Q All right. Turn, if you would, to
11 page 7, paragraph 14, please. And paragraph
12 14, Mr. Blatter, you're listing music stations
13 devoted exclusively or almost so to music
14 recorded before 1972. Should there be -- and
15 you mention two, Sirius Gold and 60s
16 Vibrations. Should there be any additional
17 channel identified there?
18 A Yes, there's one additional
19 channel called Elvis Radio which is a channel
20 that plays all Elvis Presley.
21 Q All right, and turning over --
22 actually, beginning at the bottom of that page

1 Who?
2 A Well, both of those -- the Rolling
3 Stones channel and the Who channel were meant
4 to be limited run channels from the get-go.
5 Those channels were developed in conjunction
6 with the artists as a way to work with them to
7 promote at the time -- both bands had released
8 new albums and were touring the US and they
9 felt that having their own radio station on
10 Sirius that there were some, you know,
11 promotional benefits to that and so these
12 channels were put on the air to sync up with
13 their albums releases and US tours.
14 Q And eventually that rationale
15 evaporated?
16 A Well, their tours ended. Their
17 new releases had kind of run their course and
18 as did the channels.
19 Q All right. Moving down if you
20 would, to paragraph 18 on the same page where
21 you're talking about that Sirius has developed
22 channels and programs in conjunction with

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1 in paragraph 15, we have a list appearing at
2 the top of page 8 of other music stations that
3 make substantial use of pre-'72 recordings.
4 Do you see that list?
5 A Yes, I do.
6 Q Is that list current?
7 A There are three channels listed
8 there that are actually no longer available on
9 Sirius.
10 Q Which channels are those?
11 A They're Rolling Stones Radio, the
12 Who Channel and Standard Time.
13 Q All right. Starting from the
14 bottom there, what happened to the Standard
15 Time slot?
16 A The Standard Time slot recently
17 was converted into a channel we call Siriusly
18 Sinatra, which is a Frank Sinatra branded
19 radio station that plays a substantial amount
20 of Frank Sinatra's music.
21 Q All right, and then what in the
22 world happened to the Rolling Stones and the

1 well-known artists, we talked about the Who
2 and Rolling Stones that those channels are no
3 longer functioning. Should anything be added
4 to that paragraph to bring it current?
5 A Yes, we recently announced that we
6 were going to be co-developing a radio station
7 with a band, the Grateful Dead, so a Grateful
8 Dead channel will actually be launching later
9 this summer on Sirius.
10 Q All right. And then the last of
11 these updates, if you'll take a look at page
12 9 over to page 10, paragraph 22, and there
13 you'll see you're talking about omissions
14 forced by the constraints on territorial
15 radio. Do you see that paragraph?
16 A Terrestrial radio, yes.
17 Q Terrestrial, excuse me,
18 terrestrial radio, I'm sorry. The next few
19 sentences --
20 CHIEF JUDGE SLEDGE: Are you
21 suggesting that terrestrial radio is
22 territorial?

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1 MR. KIRBY: I'm suggesting, your
2 Honor, that these glasses may not be exactly
3 what I need. I'll have to think through the
4 implications of the question.

5 BY MR. KIRBY:

6 Q While I'm doing that, Mr. Blatter,
7 do any changes need to be made in the next few
8 sentences to make this paragraph current?

9 A Yes, since this testimony was
10 written, there is actually a country radio
11 station in Los Angeles now. New York remains
12 without a country radio station.

13 Q What about the classical -- work
14 your way through the programming.

15 A Also, in the classical genre,
16 Philadelphia, Houston and Atlanta remain
17 without a classical station but one was
18 recently added in Detroit.

19 Q All right.

20 A Otherwise the remainder of that
21 paragraph is correct.

22 Q And I'm hoping with those changes,

1 Q I would ask you, sir, Mr. Blatter,
2 to turn to page 17, paragraph -- I will see
3 what paragraph it is, paragraph 38.

4 MR. KIRBY: Your Honor,
5 originally, all of paragraph 38 had been
6 designated as confidential but at this point,
7 I'd like to focus attention simply on the
8 first sentence of paragraph 38 in which the
9 witness identifies six channels that kept
10 track of the information involving contacts
11 with the record labels that then appear in the
12 chart on the next page.

13 The witness has indicated that the
14 numbers on the chart need not be preserved.
15 This is on page 17 and 18, your Honor. The
16 witness has no -- I proffer, your Honor, that
17 the witness does not have confidentiality
18 concerns with respect to the contents of the
19 chart itself, but he believes it would be
20 competitively disadvantageous to identify the
21 particular channels that kept track of this
22 information as appears in the first sentence

1 we believe that this written direct testimony
2 is true as of today?

3 A Yes, it is.

4 Q All right.

5 MR. KIRBY: Your Honor, I would
6 move that admission of Sirius Exhibit 36
7 consisting of his written direct testimony
8 with exhibits.

9 CHIEF JUDGE SLEDGE: Any objection
10 to Exhibit 36?

11 MR. HANDZO: No, your Honor.

12 CHIEF JUDGE SLEDGE: Without
13 objection, it's admitted.

14 (Sirius Trial Exhibit 36
15 marked for identification was
16 received in evidence.)

17 MR. KIRBY: And your Honor,
18 various parts of this had been designated as
19 confidential but I think we're going to pare
20 that down substantially.

21 //

22 BY MR. KIRBY:

1 of paragraph 38, both because it would
2 interfere with relations between those
3 programmers and the record label people that
4 they deal with and because it would open the
5 door for XM to exploit the fact that Sirius
6 has been recording and making use of these
7 contacts in their context with these record
8 labels.

9 So, your Honor, we would move that
10 the first sentence of paragraph 38 be
11 identified as confidential under the Court's
12 order. And that is the only portion of this
13 Exhibit.

14 CHIEF JUDGE SLEDGE: Any objection
15 to applying the protective order to the first
16 sentence?

17 MR. HANDZO: No, your Honor.

18 CHIEF JUDGE SLEDGE: Without
19 objection, the motion is granted. Mr. Kirby,
20 that's the kind of precision on the protective
21 order that we've been seeking all along.
22 Thank you.

1 MR. KIRBY: Thank you.

2 BY MR. KIRBY:

3 Q Mr. Blatter, what qualified you to
4 be Senior Vice President of Music Programming
5 at Sirius Satellite Radio?

6 A What qualified me is not only my
7 experience in multiple numbers of music
8 formats, but also my background. For a few
9 years during my career, I was the head of
10 programming for a national radio network
11 called MJI Broadcasting which gave me exposure
12 to pretty much every genre of music, much like
13 we have at Sirius where we offer, you know, a
14 number of genres in music as part of our
15 service. And also, you know, I had an
16 excellent track record in my time in
17 terrestrial radio and a proven ability to, you
18 know, create compelling radio stations.

19 Q Well, do you think that your
20 experience in terrestrial radio translates
21 into what you're doing at Sirius?

22 A I think my experience in

1 of all the major record labels as well.

2 Q Are there particular components or
3 units within the labels that you tend to have
4 dealings with?

5 A Typically, most of the major
6 record labels have separate departments that
7 are staffed with radio promotion executives
8 that either work in the three locations we
9 just talked about and they also have regional
10 promotion executives located throughout the
11 country calling upon radio stations within a
12 particular region.

13 Q And what are they trying -- I'm
14 sorry.

15 A And I've dealt with all types.

16 Q All right, I didn't mean to step
17 on your answer there. What are these
18 promotional executives trying to get radio
19 stations to do?

20 A Typically, one thing and one thing
21 only and that is they're seeking air play on
22 these radio stations for the artists that

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1 terrestrial radio and also the relationships
2 that I've developed over the years with the
3 record industry is very helpful to me. Many
4 of the principles that I learned as a
5 programmer in terrestrial radio are applied in
6 our day-to-day programming at Sirius.
7 However, at Sirius we are able to clearly
8 offer a much greater variety of music channels
9 than what we were able to, you know, offer at
10 terrestrial radio and the mere fact that our
11 radio stations at Sirius are commercial-free
12 as well, I think, differentiate them.

13 Q All right. You mentioned your
14 dealings with the record labels. Have you
15 dealt with representatives at the record
16 labels over the years?

17 A I've had extensive relationships
18 throughout my career with record company
19 executives, both at, you know, New York based
20 record labels, Los Angeles based record labels
21 and because of my experience in country music,
22 I've dealt with the national based operations

1 they're promoting at that time.

2 Q Do these same units within the
3 record labels continue to deal with the people
4 you supervise at Sirius?

5 A Absolutely. The typical promotion
6 person that calls Sirius are the same radio
7 promotion people that are calling terrestrial
8 radio stations.

9 Q And what are they asking Sirius to
10 do?

11 A The same thing they ask
12 terrestrial stations, which is, you know,
13 "Would you be interested in playing this
14 particular artist's song", that they're
15 promoting at that time.

16 Q Now, are they primarily calling
17 you directly?

18 A No, if they were to call me
19 directly, I probably wouldn't have much time
20 to manage my staff and lead the department,
21 but I do delegate that responsibility to each
22 individual programmers that work for me.

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1 Q Okay. Well, that leads me then to
2 suggest that we turn back to that paragraph 38
3 where we marked the first sentence as
4 confidential. That would be -- that first
5 sentence was on page 17, but I actually want
6 to direct your attention to the chart
7 contained within that paragraph that appears
8 on page 17. Are you there, Mr. Blatter?

9 A Yes.

10 Q All right. Mr. Blatter, what is
11 this chart -- what does this chart displaying?

12 A Well, I asked the programmers of
13 the channels mentioned there to record the
14 number of times they were contacted by a radio
15 promotion person at the labels that have
16 called upon us and you can see for this given
17 week which began October 16th of last year,
18 there were approximately 170 promotional
19 contacts for that week, plus another 108
20 mailings which included CDS and other
21 promotional materials that were sent to us by
22 the record companies.

1 sent to the programmers for their
2 consideration for air play. There also are
3 other mailings we might receive that would in
4 some cases be advertisements for the songs
5 that the record labels are promoting at that
6 time. And then as one way to garner interest
7 of our programmers, the record companies will
8 often invite myself or my programmers to see
9 artists perform live the songs that they're
10 seeking air play on the radio.

11 Q All right. So when you say they
12 might invite you, that's the reference to
13 concert tickets down there?

14 A That's correct.

15 Q Is there another reason why record
16 companies sometime provide concert tickets to
17 Sirius?

18 A Yeah, there is. Sometimes the
19 labels will supply us with concert tickets to
20 give away on the air to our listeners as a way
21 to further engage them in that artist's music.

22 Q All right. Do artists ever appear

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1 Q Now, how did this particular week
2 -- was there something special about this
3 particular week?

4 A No, nothing special about that
5 week at all. In fact, the amount of
6 promotional activity between the record
7 companies and Sirius has only increased since
8 this sample was done.

9 Q Okay, and how do you know that?

10 A That's been reported to me by my
11 programmers who keep me abreast of the
12 activities between themselves and the record
13 companies.

14 Q All right, now the third -- if you
15 look at the left-hand column, you talk about
16 e-mail and instant messages and then calls and
17 then you see something called promo mail and
18 CDS, singles, concert tickets. Explain what
19 that entry means, if you would, please?

20 A Well, it includes -- you know,
21 Sirius doesn't or rarely would ever pay for
22 music. CDS or sometimes MP3 files will be

1 live on Sirius?

2 A Yeah, rather often.

3 Q Okay. Do the record labels play
4 any role in that?

5 A Typically, they do. You know,
6 like I said earlier, you know, the record
7 labels will sometimes invite the programmers
8 out to see these bands perform live. Other
9 times they'll ask the programmer, "Hey, would
10 you be interested in having this artist come
11 up to your studios and perform live for the
12 listeners of your channel and you know, they
13 typically view that as another way to draw
14 attention to their artists on Sirius besides
15 just playing the recorded music.

16 Q From your dealings with the record
17 company representatives and the reports you
18 get now from the people underneath you, do you
19 have any understanding as to why the record
20 companies are approaching Sirius in the ways
21 that they do?

22 A Yes, I do. Having, you know,

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1 spent over 20 years in radio, it's become
2 almost conventional wisdom in radio and the
3 record industry that the most effective way to
4 sell recorded music to consumers is through
5 receiving air play on the radio.

6 Q Okay, and do you have any
7 understanding as to why -- strike that.

8 Okay. Have you received any
9 feedback through the contacts with artists or
10 the record industry as to whether the air play
11 by Sirius is effective in its -- in promoting
12 record sales?

13 A Yes, I have and that feedback,
14 particularly I think over the last six to 12
15 months has increased pretty significantly but
16 on a fairly regular basis now, we'll receive -
17 - we'll have either verbal communication with
18 record promotion people who are thanking us
19 for their air play or they'll sometimes e-mail
20 us with a thank you and "Without your help it
21 wouldn't have been possible for this band to
22 have had the success they've had to date".

1 started playing at Sirius before they had been
2 signed to a major record label and we were
3 told by the major label that one of the major
4 reasons that they signed that band is because
5 the band had already proven itself on the
6 radio on Sirius and they felt that, you know,
7 there was less risk in signing this band
8 because they had already been proven to be
9 successful for Sirius on its channels.

10 Q In the music industry we sometimes
11 hear reference to charts or to Top 40 which I
12 think is a reference to a chart. What are
13 those charts?

14 A Those charts are a reflection of
15 what a particular trade paper, in this case
16 it's probably Radio and Records/Billboard or
17 the Mediabase Monitoring Service. Those
18 charts that are compiled by those companies
19 are a reflection of what the most influential
20 radio stations in America are doing in a
21 particular format and the chart reflects the
22 success of a particular song within that

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1 And at times, the programmers will
2 even receive gold and platinum records for the
3 artists that they were supportive of and as a
4 result of the air play and the effect we had,
5 the record companies would sometimes reward
6 the individual programmers of those channels
7 with, you know, gold and platinum records.

8 Q Okay, those are those plaques that
9 I see all around your office when I'm
10 visiting, right?

11 A Yes.

12 Q All right.

13 A My office and pretty much the
14 offices of all the programmers now at Sirius.

15 Q Right. Can you think of any
16 specific examples of where air play on Sirius
17 has had a promotional benefit to an artist?

18 A Yeah, there are a number of
19 examples.

20 Q Give us one, if you will.

21 A One particular example is the band
22 Evans Blue, which is one that we actually

1 format.

2 Q Okay. Now, you said it reflects
3 what's happening on the most influential radio
4 stations in America, I believe you said. So
5 not every radio station is included in the
6 data on the chart.

7 A No, not every radio station is
8 included. The charts only represent what the
9 -- typically the editors at these trade
10 publications believe to be the most
11 influential stations in America.

12 Q Is air play on Sirius included in
13 those charts now?

14 A Air play on Sirius is included on
15 those charts and it has been now for I think
16 approximately a year and I should add to that,
17 that those decisions by the editors of these
18 trade publications are very much influenced by
19 the record companies and their desire to want
20 to see air play on particular channels. And
21 I do know that the decision by the trade
22 publications to include Sirius' air play in

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1 their charts was driven, from what I was told
2 by the trade papers, primarily by the record
3 companies.

4 Q Okay. And how does chart position
5 translate to the objectives of the promotional
6 units in the various record companies? Are
7 the promotional units and the record companies
8 concerned about chart position?

9 A Absolutely. In fact, you know,
10 having spent, you know, much of my career
11 working with these promotion executives at the
12 major labels, their -- A, their performance in
13 most cases is judged more on air play than it
14 is for record sales in the promotion
15 departments, but also at least the major label
16 executives and promotion who I've come into
17 contact in my 20 years and all my colleagues
18 would say the same thing, the record
19 companies' promotion people acknowledge that
20 radio air play translates into more record
21 sales.

22 Q Now, do the record labels use play

1 of the channel on Sirius that is playing that
2 new piece of music as well as some of the
3 other terrestrial stations that might be
4 playing it as well.

5 Q Okay, and you attribute this --
6 the label's use of Sirius air play to Sirius'
7 reputation; is that right?

8 A Yeah.

9 Q Okay. Are there any other reasons
10 besides Sirius' reputation why the labels you
11 air play on Sirius is particular promotional?

12 A Well, the air play, you know, they
13 receive on Sirius, I think that is sometimes
14 used -- for instance, if we're playing a new
15 song by an artist and we're one of the earlier
16 stations on that record, that information, you
17 know, Sirius Hits 1, for instance is playing
18 this song 50, 60 times a week. That
19 information is they used by record promotion
20 people to inform other programmers around the
21 country that, "Hey, look Sirius Hits 1 has
22 jumped out. They're playing this thing 50 or

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1 on Sirius for any purpose other than building
2 up their chart position and reviewing the
3 success of their promotional crews? What
4 other uses do record labels make of air play
5 on Sirius?

6 A I'm not sure, can you repeat that?

7 Q Yeah, you attached several
8 industry ads to your direct testimony as one
9 of the exhibits. What were we showing through
10 those industry ads?

11 A Right, well, you know, over the
12 years now, Sirius has built up a reputation as
13 being an outlet that has an ability to break
14 new music. I've also recruited a number of
15 fairly successful programmers in their
16 particular genres of music and as a result
17 now, Sirius playing a new song from an artist,
18 labels will often buy ads in trade
19 publications and in those ads they will list
20 some of the radio stations that have recently
21 added music from that particular artist, and
22 in many cases now they're including the name

1 60 times a week. You might want to play it,
2 too".

3 Q Do the record -- in your
4 experience, do the record labels encourage the
5 on-air host to be sure to identify the artist
6 and song when they play a song? Is that a
7 source of friction sometimes between the
8 record labels and the hosts?

9 A Well, over the years, in
10 terrestrial radio, the record companies would
11 be particularly frustrated with terrestrial
12 radio and its inability to identify the music
13 that's being played. Sometimes it's been
14 referred to in the record and radio industries
15 as "back announcing". And it's something that
16 terrestrial radio just doesn't do a very good
17 job of. Because we're a digital service, back
18 announcing not only happens on Sirius but
19 because we're a digital service, we're able to
20 display the artist and title of any song
21 that's playing on the actual screen while it's
22 playing.

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1 Q So I don't have to sit there and
2 hope the DJ mentions the artist again at the
3 end of the song.

4 A Sometimes they will but if you
5 didn't happen to catch it or you wanted to
6 know what that song was immediately, you don't
7 want to wait for the DJ to announce what that
8 song was, you can see it right on the screen
9 as you're hearing it.

10 Q Does Sirius have any --

11 JUDGE WISNIEWSKI: Did it ever
12 cause any auto accidents?

13 THE WITNESS: Not that I'm aware
14 of.

15 MR. KIRBY: That's the cell phone,
16 your Honor, our competitor is the cell phone.

17 BY MR. KIRBY:

18 Q Does Sirius have any competitive
19 advantages with respect to developing new
20 artists, baby artists?

21 A Well, because of the number of
22 channels that we offer at Sirius we're able to

1 Q And I think I skipped over this at
2 the very beginning, I apologize. How many
3 such commercial free music channels does
4 Sirius have?

5 A Well, there are 64 that we produce
6 here in the US.

7 Q All right, and are there others?

8 A There are five additional
9 channels, bringing the total to 69 that are
10 produced by our partners in Canada, Sirius
11 Canada.

12 Q Okay, of that total, which ones
13 are you responsible for?

14 A I'm responsible for the 64
15 channels that originate here in the US.

16 Q Now, when you say these channels
17 are commercial free, what do you mean by
18 commercial free?

19 A By commercial free, I mean, there
20 is absolutely no commercials or any
21 sponsorships or underwriting something, you
22 know, you might hear on MPR Outlet sometimes,

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1 A, devote certain music channels within a
2 particular genre, whether it be country or
3 rock, where those channels would play almost
4 all new music. So for instance, in the rock
5 genre, our Left of Center channel plays almost
6 entirely, you know, new alternative rock that
7 in most cases isn't heard you know, on
8 terrestrial radio at that stage.

9 Also because of the commercial-
10 free nature of our channels, we just
11 essentially have more time in a particular
12 hour to fill up. Terrestrial radio, as you
13 probably know, plays anywhere from, you know,
14 12 to in some cases 17, 18 minutes of
15 commercials an hour and we're able to take
16 that time and be able to play on stations that
17 play a lot of new music even more new music
18 than you might hear on terrestrial radio.

19 Q You mentioned the concept of being
20 commercial-free. Are all of the Sirius music
21 channels commercial free?

22 A Yes, they are.

1 that this hour of programming is underwritten
2 by such and such. Sirius' music channels are
3 clean. There's no commercials, no
4 sponsorships, no underwriting.

5 Q All right, and you indicated that
6 one result of that is you have more time
7 available to devote to the music and the play
8 list. Does the lack of commercials have any
9 other benefit for Sirius programming?

10 A Yes, it does. I believe that not
11 having jarring commercials come on every 15 or
12 20 minutes allows us to create a more
13 immersive experience for our subscribers and
14 further engages them in -- and garners even
15 more interest in the artists that we're
16 playing and the songs that we're playing and
17 creates more passion and ultimately, I
18 believe, you know, it results in more records
19 being sold as a result of the air play on
20 Sirius.

21 Q Does the fact that Sirius has 64
22 music channels under you and a few more from

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1 Canada have any effect on Sirius' ability to
2 reach music listeners with particular or
3 narrow interests?

4 A Yes, it does. Sirius is able to
5 take a genre of music and carve it up, you
6 know, a number of different ways so for
7 instance, in the -- I'll just use the rock
8 genre as an example, there are rock channels
9 on Sirius that are -- play much harder rock
10 music and are more aggressive in sound, but we
11 also have a second rock channel, in this case,
12 I'm referring to Octane, which is the harder,
13 more aggressive rock channel.

14 Then we have another rock channel
15 which is a little bit softer in sound and not
16 quite as aggressive called All Nation, which
17 targets an audience that wants to hear a
18 little, you know -- still wants to hear new
19 music but in a much more mellower environment.
20 And as a result of that, I think that we're
21 able to better serve the particular audiences
22 for those two channels and further engage them

1 music station?

2 A We actually have three classical
3 stations or three stations that we would
4 classify as classical. One of them is a
5 symphonic classical channel but there are also
6 two others. One is a pops channel with, you
7 know, stuff like from the Boston Pops and such
8 and then the third channel is an opera channel
9 which in the case of Sirius is a channel that
10 we co-produce with the Metropolitan Opera in
11 New York City and that channel consists
12 primarily of live recordings or live
13 performances directly from the Metropolitan
14 Opera in New York.

15 Q I grew up in Lake Charles,
16 Louisiana, which is over on the western border
17 next to Texas. What do you think the chances
18 are that when I got up on a Monday morning, I
19 could find a heavy classical or light
20 classical and a full time opera channel on
21 terrestrial radio?

22 A Slim to none.

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1 in the kind of music that we're playing.

2 Q Does Sirius have classical
3 programming?

4 A Yes, it does.

5 Q Okay, is that something that's
6 generally available to most Americans over
7 terrestrial radio?

8 A Not particularly. It is
9 available. I think I mentioned in my
10 testimony in, I guess it would be seven of the
11 top 10 markets, but as you start to get out
12 into the medium and more smaller and rural
13 sized markets, it is often difficult to find
14 a full time classical station. You might have
15 a weekend program dedicated to classical music
16 for you know, blocks on the weekends but
17 that's a genre of music that once you get
18 outside of the big markets, it's very
19 difficult to find on the radio today.

20 Q And classical music, I guess is
21 one of those terms. You have a classical
22 music station. Do you also have an opera

1 Q On the other end of life --

2 JUDGE WISNIEWSKI: You could get
3 Houston stations, couldn't you?

4 MR. KIRBY: Sometimes, your Honor,
5 it is pretty flat, but if you were getting
6 Houston stations, how much -- I won't go
7 there.

8 BY MR. KIRBY:

9 Q But talking about the other end of
10 the spectrum, perhaps, Mr. Blatter, what about
11 Bluegrass, does Sirius have a Bluegrass
12 channel?

13 A Sirius does have a full time
14 Bluegrass channel. That's another, you know,
15 niche style of music that really isn't
16 supported by terrestrial radio. There might
17 be, you know, a few Bluegrass stations located
18 around the country but for the most part,
19 that's a genre of music that just does not get
20 air play on radio.

21 Q All right.

22 CHIEF JUDGE SLEDGE: Are you

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1 considering the small AM stations?

2 THE WITNESS: Well, I think there
3 are a few small stations, yes, I think there
4 are some of those, you know, in Kentucky and
5 wherever that play Bluegrass full time but
6 that's the extent of it.

7 CHIEF JUDGE SLEDGE: Probably not
8 full time but --

9 THE WITNESS: Not even full time.

10 CHIEF JUDGE SLEDGE: -- they
11 include a lot of Bluegrass with their country
12 music.

13 THE WITNESS: It's usually
14 relegated as a speciality show on a country
15 channel in the South.

16 BY MR. KIRBY:

17 Q And since country came up, how
18 many country channels does Sirius have?

19 A Sirius has about five country
20 channels.

21 Q All right, why? Isn't country,
22 country?

1 markets?

2 A Well, having spent, you know, most
3 of my career in terrestrial radio, the goals
4 are a bit different at Sirius. At terrestrial
5 radio, the goal is to create a radio format
6 that will reach a number -- enough listeners
7 to make the station attractive to advertisers.
8 Without advertisers at terrestrial radio, you
9 don't have a business. At Sirius because our
10 music channels are commercial free, we're not
11 really concerned about what advertisers think
12 about our music channels, so we're able to
13 offer channels on Sirius that we know would
14 never -- would be very difficult to have a
15 successful business at terrestrial radio, for
16 instance with a Bluegrass channel or a reggae
17 channel or, you know, a classical jazz
18 channel, but on Sirius, like I said because we
19 don't have to meet the needs of advertisers,
20 we can offer a lot of styles of music in
21 different formats that would just never be
22 successful at terrestrial radio.

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1 A No, country is not country. I
2 mean, country is a huge format. I think as
3 far as sheer number of stations, it's actually
4 the most popular format at terrestrial radio,
5 although those terrestrial stations are all
6 essentially programmed the same. At Sirius we
7 not only have a new country channel which
8 would be a similar format to what you get on
9 terrestrial radio but we also have two kind of
10 gold-based is what we refer to in the
11 industry, country channels that are more era
12 based. You know, one of them plays country
13 music from the `80s and `90s and the other
14 gold-based channel plays classic country which
15 also is a format that you probably won't find,
16 you know, the old Whalon Jennings records on
17 the radio much on terrestrial radio any more
18 but we're able to serve that audience with a
19 classic country channel.

20 Q Why is Sirius able to maintain
21 five country channels when you don't find
22 anything like that in those terrestrial radio

1 JUDGE ROBERTS: Mr. Blatter, are
2 there non-music channels offered by Sirius
3 that are commercial free?

4 THE WITNESS: Not that I'm aware
5 of.

6 BY MR. KIRBY:

7 Q Are you responsible for the non-
8 music channels, Mr. Blatter?

9 A No, I am not responsible for those
10 channels.

11 Q Okay.

12 A I should, to be correct, there is
13 one non-music channel that I do oversee called
14 Maxim Radio which is a station that we do with
15 the Maxim magazine. It's a talk station that
16 I am responsible for.

17 Q And does it have commercials?

18 A That does have commercials.

19 Q All right. Mr. Blatter, your
20 written direct talks a lot about the
21 programming process at Sirius and I'm not
22 going to go through all of that but one of the

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1 terms you use there is stationality. What is
2 stationality as Sirius uses that term?

3 A Stationality is an industry term
4 that we use in the radio business to define
5 what we believe to be the overall personality
6 of that station. And when I say personality,
7 what I mean is the combination of the music
8 that that station plays but even more
9 importantly, the style of the on-air host and
10 how they communicate directly with their
11 audience. The interstitial pre-produced kind
12 of station ID's that we play in between the
13 songs, how they're written and produced, as
14 well as on the appropriate channels we may be
15 doing certain contests, the types of contests
16 we might do on a certain channel, so all of
17 that kind of wraps in -- wraps up into what we
18 refer to as the stationality for a particular
19 station.

20 Q Okay. Now, is music selection and
21 music sequencing part of what contributes to
22 stationality?

1 compatible songs within that body of music
2 that we think that audience might want to
3 hear.

4 Q And ultimately you put together
5 something called a play list; is that right?

6 A Ultimately, that body of music
7 actually is then hand-coded by the individual
8 programmers of a particular channel by
9 different characteristics such as era, the
10 gender of the person singing the song, the
11 texture of the song, and a number of other
12 characteristics that might be specific to a
13 particular genre of music.

14 Once each song is fully sound-
15 coded, is what we refer to it in the industry,
16 then those songs are put into our music data
17 base and we do use a system called music
18 master to help the programmers schedule the
19 music on a particular channel, and that system
20 really just -- you know, the programmer gives
21 it a certain set of rules to apply and the
22 computer system essentially just takes a first

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1 A It's one part of it. If the
2 station is a very aggressive hard rocking
3 channel or if it's very mellow soft rock type
4 channel, the way in which we would sequence
5 and schedule those songs would be different
6 and that ultimately, yes, does contribute to
7 the overall stationality.

8 Q Well, let's start first with music
9 selection and then we'll talk about music
10 sequencing. How does Sirius go about
11 selecting the music that's going to form the
12 library for a particular channel?

13 A Well, the first thing we do is
14 first define who it is we're trying to reach
15 with that particular channel. Once we define
16 that, sometimes, we'll, you know, we'll write
17 it up on paper, you know, very specifically as
18 to who it is we're trying to reach. But once
19 we do that, we would then look at the total
20 available body of music and then from that,
21 depending on the format but in most cases, we
22 would identify the most familiar, popular and

1 swipe at sequencing the songs for a particular
2 day's worth of music but it is far from done.
3 In fact, it typically takes an average
4 programmer anywhere from you know, 45 minutes
5 to upwards of a couple of hours to hand-
6 massage the music before it actually is then
7 sent to the DJ's assuming it's not a channel
8 where the DJ's are picking their own music.

9 Q Okay, now I don't want to go into
10 great detail on this but what sort of factors
11 do you take into consideration in sequencing
12 the music?

13 A Well, when it comes to sequencing,
14 I'll just use the country format as an example
15 in this case, but in the country format there
16 are a lot of artists that tend to have slow
17 songs, you know, ballads which often do very,
18 very well, but I know from experience as a
19 country programmer, that you want to make sure
20 that if you're going to play a lot of ballads,
21 that those ballads don't play back to back and
22 there's a nice flow of music.

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1 So when we sequence it, we're
2 controlling for the flow, whether it be on
3 tempo or if there are country artists, for
4 instance, that have had big successes, pop
5 artists as well, you might not want to play
6 those two kind of artists back to back because
7 the country artist is sometimes -- the country
8 listener is sometimes sensitive to hearing,
9 you know, a Shania Twain type artist or Rascal
10 Flats who now are big pop artists as well,
11 they don't like -- the country artists tell us
12 they don't like when those artists come up too
13 much together. So we'll in the hand massaging
14 process a lot separate those artists better to
15 make the station more appealing.

16 Q But why do you need all the fru-
17 fru? Isn't a record song pretty much a
18 recorded song? Why can't you just play it?

19 A Well, you can't just play it. A
20 recorded song is not just a recorded song.
21 It's important that our programmers stay very
22 close in touch with what their audiences want

1 A I think it's on page 8 at the
2 bottom.

3 Q Okay, yes, it is, paragraph 18,
4 page 8 at the bottom. Looking at that
5 paragraph where you talk about having
6 developed channels and programs in conjunction
7 with well-known artists, describe what Sirius
8 is doing there.

9 A Well, what we've done and I'll use
10 the most recent case of the Grateful Dead
11 channel, because we did just announce that
12 channel and it will be airing later this
13 summer as I mentioned, but the Grateful Dead
14 is collaborating with Sirius to create their
15 own Grateful Dead brand of channel as a way to
16 promote the band's music and kind of keep
17 their music alive on the radio, whether it be
18 their recorded music or live recordings that
19 the band has accumulated over the years.

20 On the Sirius side, we believe the
21 artists' channels are important to us because
22 they -- the artists' channels provide us with

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1 and I found over the years as a terrestrial
2 programmer, that when you go through and
3 diligently code the songs as we do at Sirius
4 and you go in and hand massage the music as we
5 do at Sirius that you're able to provide a
6 much more satisfactory listening experience
7 for the intended audience of that channel.

8 Q Now, the last topic I would like
9 to explore with you briefly, your direct
10 testimony mentions that Sirius maintains some
11 artists' channels; is that correct?

12 A Yes, it does.

13 Q What are the artists' channels?

14 A Can I turn to that page in the
15 testimony? Is that okay?

16 Q Yes, you can, except I don't know
17 which one it is but let me see if I can find
18 it for you.

19 A I can't figure it out off the top
20 of my head.

21 Q I wrote down paragraph 18. I
22 wonder if that's where we have it.

1 more exclusive content that you're not going
2 to get anywhere else. So there's no other
3 place on the radio that you can hear an all
4 Elvis channel other than on Sirius radio,
5 called Elvis Radio. The same would go for a
6 channel that we co-produce with Eminem called
7 Shade 45 and Jimmy Buffet is another example
8 of an artist that co-produces a channel with
9 us called Radio Margaritaville.

10 Q And this also is done, for example
11 with the Metropolitan Opera?

12 A Yes, it is. We have partnered
13 with the Metropolitan Opera and have created
14 an opera channel that when the Metropolitan
15 Opera is live in New York, we broadcast those
16 performances live on Sirius and when the opera
17 is not live, we're typically playing live
18 performances that were recorded at the
19 Metropolitan Opera, dating back, you know, to
20 50 -- dating back to up through 50 or 60 years
21 ago.

22 Q Okay, so does the fact that the

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1 Rolling Stones and the Who channel went away,
2 mean that Sirius is giving up on this concept
3 of artists' channels?

4 A No, absolutely not. I mean, the
5 Who channel and the Rolling Stones channel
6 were always intended to be limited run
7 channels and we've been told by both artists
8 that when they have something else to promote,
9 whether it's another tour or a new album
10 coming out, that they'd love to do it again.

11 MR. KIRBY: Your Honor, I don't
12 recall exactly when we typically take the
13 morning break. I'm very nearly through but if
14 we were to take a break now, perhaps, I could
15 let Mr. Joseph remind me of all the subjects
16 I've overlooked and then we could continue.

17 CHIEF JUDGE SLEDGE: All right.
18 We'll recess for 10 minutes.

19 MR. KIRBY: Thank you, your Honor.

20 (A brief recess was taken at 11:02
21 a.m.)

22 CHIEF JUDGE SLEDGE: We'll come to

1 just seemed to make the most sense that if we
2 were going to add a new channel, that was non-
3 music, that we shouldn't disrupt the order and
4 sequencing of all the music channels to put a
5 non-music channel within that tier.

6 Q The believe is that subscribers
7 aren't interesting in relearning the line-up?

8 A Yes, and the subscribers become,
9 you know, they create certain habits and they
10 start to know certain channel members, so if
11 we were to start putting non-music channels in
12 the music section, that would cause a rather
13 large disruption and would potentially have a
14 pretty material effect on the satisfaction of
15 our service.

16 JUDGE WISNIEWSKI: Would you talk
17 to our local cable TV about that?

18 (Laughter.)

19 THE WITNESS: I can try.

20 MR. KIRBY: Your Honor, that
21 concludes my direct examination.

22 CHIEF JUDGE SLEDGE: One follow-up

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1 order.

2 Mr. Kirby?

3 BY MR. KIRBY:

4 Q Just one more short subject. Mr.
5 Blatter, during the previous witness'
6 testimony, the question was asked if Sirius is
7 adding all this exciting new non-music
8 content, how come your channels get all the
9 great numbers down at the bottom of the dial?

10 Do you have any understanding of
11 why that's so?

12 A Well, first off, I was not with
13 the company when the decision was made to put
14 the music channels where they are today
15 starting at channel 1 and going up.

16 But I can say that first off, it
17 does make sense when you have some decades
18 type channels like 60s, 70s and 80s to put
19 them on channels 6, 7, and 8. But with that
20 said, I have been part of some discussions
21 that have come up as to where we might place
22 certain non-music channels on the dial and it

1 to what you just said. You've got 69 channels
2 and is your bandwidth completely -- well, you
3 said you had to pre-empt for sports
4 programming, you haven't said, but the
5 testimony is you have to pre-empt for extra
6 sports programs. So all your bandwidth is
7 used up.

8 THE WITNESS: I'm not responsible
9 for the actual bandwidth allocations. So to
10 the best of my knowledge, we're pretty close
11 to maximizing --

12 CHIEF JUDGE SLEDGE: Let me just
13 get to my question. You're not able to use
14 the other 30 channels that haven't been used?

15 THE WITNESS: Not right now, no.

16 CHIEF JUDGE SLEDGE: Okay, thank
17 you.

18 (Pause.)

19 CHIEF JUDGE SLEDGE: While I've
20 interrupted, a little test. Are you familiar
21 with the song Daniel's Parade?

22 THE WITNESS: I am not.

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1 CHIEF JUDGE SLEDGE: It's an old
2 country song. Waylon Jennings. Wondered
3 where that would be in your five channels.

4 THE WITNESS: That would be in our
5 classic country channel.

6 CHIEF JUDGE SLEDGE: Any questions
7 by XM?

8 MR. RICH: No questions.

9 CHIEF JUDGE SLEDGE: Music Choice.

10 MR. FAKLER: No, Your Honor.

11 CHIEF JUDGE SLEDGE: Cross by
12 SoundExchange?

13 MR. HANDZO: Thank you, Your
14 Honor.

15 CROSS EXAMINATION

16 BY MR. HANDZO:

17 Q Good morning, Mr. Blatter.

18 A Good morning.

19 Q We haven't met before, but my name
20 is Dave Handzo and I represent SoundExchange.

21 Now Mr. Blatter, I'm going to
22 start by asking you to turn to paragraph five

1 A Yes, they do.

2 Q Is that survey work done under
3 your supervision?

4 A It would depend on the listener
5 survey itself. There are certain surveys that
6 yes, I do oversee the administration of those
7 surveys. There are others that collectively
8 among myself and the other heads of
9 programming of Sirius, along with the research
10 department would be responsible for those
11 studies.

12 Q And what's sort of topics do those
13 studies explore?

14 A Which studies are you referring
15 to?

16 Q Well, let's start with the ones
17 that are done under your direction?

18 A Well, the ones that are under my
19 direction are typically researching the
20 audience for a particular channel on Sirius,
21 for instance, we'll just stick with the
22 country audience as an example. So we would

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1 of your written testimony which we put in the
2 record as Sirius Exhibit 36. And at the end
3 of that paragraph you say that you supervise
4 and work with extensive listener research that
5 you conduct to evaluate new formats and
6 identify the most attractive music for those
7 formats.

8 Do you see that?

9 A Yes, I do.

10 Q Who conducts that survey research
11 or listener research?

12 A Well, there are many different
13 types of listener research that we conduct and
14 there are a number of companies that we use
15 third parties to conduct that research for us.

16 Q Does that research typically
17 result in written reports to you?

18 A Sometimes it does, but not always.
19 It would depend on the nature of the study
20 itself.

21 Q Are those studies, do those
22 studies include formal listener surveys?

1 find a representative sample of a particular
2 country channel. Let's say our new country
3 channel and we would do one of two things.
4 One is we would research the entire potential
5 body of music that we might play on that
6 particular channel with that representative
7 sample, or we might take a much more narrower
8 view of things and just research the newer
9 songs played on that channel which is
10 something we actually do now on a weekly basis
11 for any of our new music-oriented channels.

12 Q Is there any other subject that
13 you research in the research done under your
14 direction?

15 A Solely under my direction, those
16 are the only types of studies that come to
17 mind right now.

18 Q I take there is research one under
19 the direction of others that you receive in
20 the ordinary course of business?

21 A There are other surveys which I
22 have seen, yes.

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1 Q And I take it those surveys might
2 address things like customer satisfaction and
3 how customers respond to the various offerings
4 of Sirius?

5 A Some of those surveys have
6 attempted to measure customer satisfaction and
7 the value of certain other types of content
8 that we offer.

9 Q Okay. Now you did not attach to
10 your written statement any of that survey
11 research, did you?

12 A I don't believe I did.

13 Q And you don't cite to any of that
14 survey research in support of the opinions
15 that you offer in your written testimony, do
16 you?

17 A I don't think directly I did, but
18 I think I did say in my written testimony that
19 we do use that research and it's just one of
20 many tools that we use to guide our instincts
21 as programmers.

22 Q Okay, but in your written

1 record sales for the artists that we play.

2 Q But you can't quantify how much,
3 can you?

4 A It's difficult for me to quantify
5 how much and I think it would be for most
6 radio programmers in America to quantify
7 exactly how much music they're selling as a
8 result of the airplay on that channel.

9 I think it's important to mention
10 that as a radio programmer, I'm judged by the
11 satisfaction and to a certain extent the
12 listenership on our channels. My performance
13 isn't necessarily judged by how many records
14 we're selling. It's something that we'll keep
15 an eye out for, but it's not something that we
16 would closely follow in the normal course of
17 business as a radio programmer.

18 Q Okay, so because you're judged by
19 consumer satisfaction with the channels that
20 you're responsible for, you're not going out
21 and trying to figure out how many CDs or how
22 many downloads are sold as a result of

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1 testimony, you don't point to any particular
2 research that supports the opinions that you
3 offer, do you?

4 A I'd have to read through the
5 entire thing to give you a total positive
6 answer, but I don't think I cited any specific
7 studies in this testimony.

8 Q Now Mr. Blatter, you don't track
9 how many CDs or downloads are sold as a result
10 of airplay on Sirius, do you?

11 A I don't. I don't regularly track
12 that, no.

13 Q Are you able to say how many CDs
14 or downloads are sold as a result of airplay on
15 Sirius?

16 A It would be difficult for me to
17 give you specific numbers. But having spent
18 my entire career in radio as well as what my
19 colleagues tell me at Sirius and even the
20 conversations I have with the record community
21 on a regular basis, it is my opinion that
22 radio airplay on Sirius does result in more

1 programming on Sirius, are you?

2 A Not necessarily trying to figure
3 it out, but we do have very close
4 relationships with the record company
5 promotion executives and work very closely
6 with them to help them rate new artists and
7 further established, more familiar artists
8 that maybe have a track record already, but
9 they're looking to take their career to the
10 next level.

11 We spend an inordinate amount of
12 our time actually working with those promotion
13 executives to see how we can work, collaborate
14 together to help further the careers of these
15 artists.

16 Q But you can't translate any of
17 that into numbers, can you?

18 A I don't actively track SoundScan
19 data to measure how many records are being
20 sold as a result of airplay on Sirius.

21 Q So the answer to my question is
22 no?

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1 A Well, it would be difficult for me
2 to say no, only because when I talk to record
3 executives, you know, they regularly thank us
4 for the airplay on Sirius and I received an
5 email just a week or so ago saying look,
6 without your support, this band wouldn't have
7 had the success that it had. So and they are
8 ultimately measure success by the record,
9 number of records that they're selling.

10 So if a high-level executive is
11 thanking me for the airplay on Sirius because
12 they're selling more records, then I'd have to
13 believe that our airplay is contributing to
14 the success of that band.

15 Q I may not have been clear in my
16 question, Mr. Blatter.

17 My question is you can't translate
18 any of that into dollars and sales or numbers
19 of CDs sold, can you?

20 (Pause.)

21 A I think that's a very difficult
22 thing for me to quantify right now.

1 that radio airplay is a driver and is the
2 primary and number one driver of record sales.

3 Q Can you tell us what survey you've
4 seen?

5 A One survey that I recall offhand
6 and I have seen a number over the years, but
7 one survey I recall offhand is a survey that
8 was conducted by Edison Research several years
9 ago that asked that question.

10 Q That survey doesn't address
11 whether airplay or whether Sirius might also
12 have the result of causing people to buy fewer
13 CDs or fewer downloads, right?

14 A Well, I believe that survey was
15 conducted prior to Sirius being commercially
16 available, so it wouldn't be a fair question
17 to ask if it weren't available.

18 Q So the survey that you're
19 referring to doesn't address Sirius at all, is
20 that right?

21 A It asked people, you know, what
22 influenced them most and the number one

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1 Q Mr. Blatter, you haven't seen any
2 survey research which supports your view that
3 consumers who get Sirius spend more money on
4 CDs or downloads, have you?

5 A There might have been some
6 research surveys in the past that have touched
7 on this area, but I don't really recall the
8 specifics of it.

9 Q So there's nothing as you sit here
10 today that you can point us to as a survey
11 that supports your opinion that airplay on
12 Sirius generates record sales?

13 A I can only say that in 20 years in
14 radio I've never come across a radio
15 programmer in my 20 years or for that matter
16 a radio promotion or even a record executive
17 that doesn't believe that radio airplay
18 translates into record sales.

19 Q And again, let me just be clear
20 with my question. You haven't seen a survey
21 which supports that, have you?

22 A I have seen surveys that support

1 influencer of record sales was radio airplay.

2 Q That's terrestrial radio airplay?

3 A I don't think it was defined as
4 one or the other, it was just defined as radio
5 airplay.

6 Q But you're saying the survey was
7 done before Sirius was commercially available?

8 A It might have been just becoming
9 available at that time.

10 Q And the survey did not explore
11 whether satellite radio caused an off-setting
12 effect of causing people to buy fewer CDs or
13 downloads, correct?

14 A I'm sorry, can you restate that?

15 Q Sure. The survey that you are
16 referring to didn't address whether
17 subscribing to satellite radio would cause
18 people to buy fewer CDs or downloads, isn't
19 that right?

20 A Well, considering we weren't
21 really commercially available at that time, I
22 don't think that they'd really have any reason

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1 to research that at the time.

2 Q So the survey that you're talking
3 about would have been addressing the affected
4 terrestrial radio airplay, is that right?

5 A No, it wasn't specific to any type
6 of radio airplay that I'm aware of. But it
7 just --

8 Q That's all there was at the time,
9 it sounds like, right?

10 A I couldn't speak with certainty on
11 that. I'm not sure of the exact dates of the
12 survey.

13 Q And to the best of your
14 recollection, all the survey did was ask
15 people where they heard the music they just
16 bought?

17 A I'm not sure of the precise
18 question itself, but I know that it was
19 looking to demonstrate what has the most
20 influence on the buying decision.

21 Q Okay, so the survey that you've
22 referred me to, you're not sure whether it was

1 to ask the question in a vague enough manner
2 that it didn't call for any restricted
3 information.

4 MR. KIRBY: Your Honor, I think
5 when you start describing certainly with any
6 detail the kind of music that particular
7 channels on Sirius play, it tends pretty
8 quickly to identify what channel.

9 CHIEF JUDGE SLEDGE: Objection
10 overruled.

11 BY MR. HANDZO:

12 Q Mr. Blatter, can you describe to
13 me what kinds of music these channels play?

14 A They play rock music.

15 Q Have these channels typically
16 played more recent rock music?

17 A Generally speaking, yes.

18 Q So these are not classic rock
19 channels, right?

20 A Well, one of them might play class
21 rock.

22 Q Might? You're not sure?

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1 done when Sirius was even in existence and
2 you're not sure what the question was that
3 they asked, right?

4 A I didn't say I wasn't -- I said
5 that the question that was asked, I don't
6 remember specifically how it was worded, but
7 I do know what they were intending to do was
8 to demonstrate the influence that radio
9 airplay has on record sales.

10 Q Mr. Blatter, let me ask you to
11 look at paragraph 38 of your written
12 testimony.

13 (Pause.)

14 And the first sentence there you
15 list six channels, do you see that?

16 A Yes, I do.

17 Q Can you tell me what kind of music
18 those channels play?

19 A Sure.

20 MR. KIRBY: Excuse me. This is
21 the one sentence in the whole thing.

22 MR. HANDZO: I specifically tried

1 A I'm just a little uncomfortable
2 getting into the specifics of these channels
3 because I'm trying to protect the integrity of
4 my own programmers.

5 In fact, I'm not really
6 comfortable really -- I already mentioned it,
7 but I'm not comfortable even giving the genre.

8 MR. KIRBY: Your Honor, if we
9 could enforce the protective order at this
10 point and ask people that aren't entitled to
11 hear confidential information to leave.

12 CHIEF JUDGE SLEDGE: Motion is
13 denied.

14 BY MR. HANDZO:

15 Q Mr. Blatter, these are channels
16 that play a lot of new releases, right?

17 A Can you define "a lot" for me?

18 Q General play 50 percent of new
19 releases?

20 A Roughly, yes.

21 Q Maybe a little more. Some of the
22 channels play more than 50 percent new

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1 releases?
 2 A Yes. I think that would also
 3 define how you're defining a new release.
 4 Q Generally, Mr. Blatter, what the
 5 record companies are trying to promote is new
 6 releases, correct?
 7 A ON these particular channels, they
 8 are typically looking to promote newer
 9 releases.
 10 Q But generally, new releases are
 11 what the record companies try and promote,
 12 right?
 13 A Generally, but not in all cases.
 14 Q Well, and in fact, in paragraph 32
 15 of your written testimony, Mr. Blatter, you
 16 say record companies typically focus their
 17 promotional efforts on new music rather than
 18 existing catalog, do you see that?
 19 A Yes, typically. I say generally.
 20 Q And so the channels that you chose
 21 to survey here are the kinds of channels that
 22 are playing new releases which is what the

1 music on internet radio, right?
 2 A I've heard about that, but I
 3 actually haven't come into contact with too
 4 many people that have learned about new music
 5 through internet radio.
 6 Q You're familiar with internet
 7 radio, aren't you?
 8 A I'm familiar with music that's
 9 delivered over the internet. I'm not so sure
 10 I would actually categorize is as radio.
 11 Q Well, there are various types of
 12 music services that operate over the internet,
 13 right?
 14 A Yes.
 15 Q And that's another way for
 16 consumers to find out about new music, right?
 17 A Potentially, sure.
 18 Q There are music services that
 19 stream music over cell phones, right?
 20 A There are some services that I've
 21 become aware of. I have never come across
 22 anyone that pays for that, but yes.

1 record companies would most want to promote,
 2 right?
 3 A Yes.
 4 Q Are you the person who chose these
 5 six channels to survey for the purposes of
 6 your testimony in paragraph 38?
 7 A I believe I was, yes.
 8 Q Mr. Blatter, turning to paragraph
 9 31 of your testimony, you say that most
 10 consumers typically do not decide to purchase
 11 music based on a story in a newspaper or
 12 magazine, do you see that?
 13 A Yes.
 14 Q Isn't it true, Mr. Blatter, that
 15 there are lots of ways for consumers to sample
 16 music and learn about music?
 17 A How are you defining "lots"?
 18 Q Let's go through some. People can
 19 go to a store, a * (11:34:51) and sample the
 20 music there, right?
 21 A Yes, they could.
 22 Q People learn about music from

1 Q That's another way for consumers
 2 to find out about new music?
 3 A I'm not familiar enough with most
 4 of the offerings that are out there to know
 5 how much new music they're playing, so I can't
 6 really comment on that.
 7 Q There are internet circle networks
 8 like MySpace that people use to discover new
 9 music, right?
 10 A People could come across a new
 11 band on MySpace, yes.
 12 Q People learn about new music from
 13 their friends, true?
 14 A They could.
 15 Q People learn about new music by
 16 going to concerts, right?
 17 A Not typically, but you could in
 18 certain cases.
 19 Q People learn about new music from
 20 television, right?
 21 A At times that could happen, yes.
 22 Q So there are at least all of these

1 other ways for people to discover music beyond
 2 listening to Sirius satellite radio, correct?
 3 A There are other ways to discover
 4 new music, but what I've learned in my 20
 5 years in programming and radio, the number one
 6 driver by far of people not only learning
 7 about music, but then actually going out and
 8 buy the records is through radio airplay.

9 CHIEF JUDGE SLEDGE: Mr. Handzo,
 10 was your question about television directed to
 11 video transmissions or audio transmissions?

12 MR. HANDZO: Fair question, Your
 13 Honor. Let me go back over that.

14 BY MR. HANDZO:

15 Q You actually could learn about new
 16 music through audio transmissions over
 17 television, right? There are services that
 18 provide music over the television?

19 A Yes.

20 Q But you could also learn about it
 21 through video transmissions like some time
 22 ago, maybe still, MTV?

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1 A It MTV happens to be playing music
 2 video which they don't do much of these days,
 3 you might learn about something new.

4 Q There are other channels that play
 5 music videos?

6 CHIEF JUDGE SLEDGE: That's why I
 7 asked the question. I can't think of any.

8 THE WITNESS: There is one other
 9 one that I'm aware of called Hughes, but it
 10 reaches a very, very small --

11 BY MR. HANDZO:

12 Q Mr. Blatter, you are --

13 CHIEF JUDGE SLEDGE: The Dinah
 14 Shore Show is gone.

15 (Laughter.)

16 MR. HANDZO: So is Ed Sullivan, I
 17 believe.

18 CHIEF JUDGE SLEDGE: But
 19 apparently not forgotten.

20 BY MR. HANDZO:

21 Q Well, Mr. Blatter, your background
 22 is in programming, not in marketing or selling

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1 music, right?

2 A My background is in programming,
 3 but I am responsible for how each of our
 4 channels or any channel I've been responsible
 5 before is marketed on air.

6 Q But in terms of marketing and
 7 selling music, selling CDs, selling downloads,
 8 that's certainly not been something that
 9 you've ever done, right?

10 A No, I haven't been involved in the
 11 commercial aspects of selling music in my
 12 career.

13 Q Mr. Blatter, turning to paragraph
 14 32 of your testimony --

15 A Can I just go back for one second
 16 actually to add something to my response?

17 Q I'm tempted to say no, but I'm
 18 sure your counsel would bring it out on
 19 redirect anyway. So go ahead.

20 A Yes, I mean there was an instance
 21 I want to say about a year and a half or so
 22 ago where we were approached by one of the

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1 major record companies to -- where they were
 2 going to create a CD which was actually more
 3 for promotional value but we did get involved
 4 with the record company in selecting songs to
 5 put on the CD that were all, I think on
 6 Universal artists and that CD was packaged as
 7 an Outlaw Country which is the channel on
 8 Sirius CD which then was included for sale in
 9 a magazine. I think it was called Paste.

10 And the label was looking to work
 11 with us because they knew the association and
 12 the promotional benefit they would receive on
 13 Sirius would be a benefit to those artists.

14 Q So that's your one experience with
 15 selling CDs?

16 A There might have been others in my
 17 career. That's one that comes to mind right
 18 now. But there have been times where radio
 19 stations have collaborated with the record
 20 labels to actually sell recorded music.

21 Q Let me take you to paragraph 32 of
 22 your written testimony, Mr. Blatter. And that

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1 paragraph, as I understand it, addresses why
2 in your view terrestrial radio, I'm sorry, why
3 Sirius would have advantages over terrestrial
4 radio with respect to promotion, is that
5 right?

6 A Yes, it is.

7 Q Okay, now most of what you say
8 there with respect to satellite radio would
9 also be true with respect to internet radio or
10 internet music services, right?

11 A Not all internet radio services,
12 no.

13 Q Well, let's take a look, for
14 example, of the first bullet point, where you
15 say that Sirius displaced the name of the
16 artist and song continuously?

17 A Yes.

18 Q Internet radio services do that as
19 well, do they not?

20 A Not all internet radio services.
21 I know by law I think they're supposed to,
22 but I've come across a number of internet

1 question assume services that are transmitting
2 under the license?

3 MR. HANDZO: Yes, I'm sorry.

4 CHIEF JUDGE SLEDGE: Statutory
5 license?

6 MR. HANDZO: Yes.

7 CHIEF JUDGE SLEDGE: That's a big
8 assumption, other than what your question
9 included.

10 BY MR. HANDZO:

11 Q Let me put it to you this way, Mr.
12 Blatter, you are aware that there are internet
13 radio stations for internet music services
14 that do display artists and song, right?

15 A I'm aware of them. I can't speak
16 to how many people are actually listening to
17 that, but I'm aware that there are services
18 out there.

19 Q And with respect to your second
20 bullet point, you say that Sirius offers 64
21 music channels, do you see that?

22 A Yes.

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1 radio services over the years that do not
2 display artist and title.

3 Q In fact, the ones that abide by
4 the law and do what they're supposed to,
5 display artist and song and album, right?

6 A I'm not sure if they display
7 album.

8 Q You don't know?

9 A I don't think they do, actually.
10 There might be some that do. The ones that
11 I've had experience with, I don't recall
12 seeing album there.

13 Q But you know that internet radio
14 stations are required to display the same
15 information you're talking about here?

16 A Yes.

17 CHIEF JUDGE SLEDGE: Why did you
18 say they're required?

19 MR. HANDZO: Your Honor, I believe
20 the performance complement does require the
21 display of that information.

22 CHIEF JUDGE SLEDGE: Did you

1 Q There are internet radio services
2 that offer far more music channels than 64,
3 right?

4 A There might be. I don't really
5 follow closely what's going on internet radio
6 space because I don't think that any one
7 internet radio service has reached a critical
8 mass, per se, that it's something that we
9 would watch that closely from a competitive
10 standpoint.

11 Q In your fifth bullet point, you
12 talk about having different and distinct
13 channels that allow you to go deeper into the
14 music catalog. The same is true of internet
15 radio services, correct?

16 A Like I said, I really don't follow
17 internet radio all that closely because they -
18 - I wouldn't actually, you know -- my primary
19 competitor is terrestrial radio today, so
20 while I watch what's happening on internet
21 radio passively, my primary focus is learning
22 what's happening on terrestrial radio more so

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1 than anything else that is out there.

2 Q Okay so you can't speak, for
3 example, to the care and resources that
4 internet radio services devote programming or
5 how deep into play lists they go?

6 A Well, it has been my experience
7 and it is why I hesitate to call these radio
8 stations on the internet, internet radio
9 because it's in my professional opinion that
10 those services that are available are not
11 really radio stations. They're nothing more
12 than on-line jukeboxes where there is not much
13 care given and thought given to the actual
14 selection and sequencing of the songs.

15 Q But I think you just said that you
16 don't pay that much attention to them?

17 A Well, that's one of the reasons
18 that I don't. Not only do I not feel that
19 they are reaching enough audience, but when I
20 have listened, it's just not a -- I don't
21 believe it is even a close to competitive
22 product to what we offer on Sirius.

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1 Q Now are you aware that there are
2 internet radio stations that allow the
3 consumer to click on a buy button and
4 immediately buy the music that they are
5 hearing?

6 A I think I've seen that when
7 listening to internet radio, certain internet
8 radio outlets before.

9 Q That is a benefit that Sirius does
10 not offer to record companies, correct?

11 A I don't think it is a benefit that
12 we offer today. No.

13 Q And are you aware that there are
14 internet radio services that allow listeners
15 to actually rate the song that they are
16 hearing at the time of their hearing it?

17 A Yes, and I've explored that rather
18 extensively myself and don't see much value in
19 that kind of information.

20 Q Are you aware that there are
21 record companies that do value that
22 information?

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1 A I'm not. I've never in my
2 conversations with record company promotion
3 executives have had them cite to me research
4 data provided to them by some internet radio
5 outlet that gives the consumer the ability to
6 rate a song on a certain scale.

7 Q In any event, that sort of rating
8 data is not something that Sirius can supply,
9 correct?

10 A I don't think that it is something
11 that we can supply today. I will say that we
12 are asked by, and this is typically how it
13 happens in the terrestrial radio world and in
14 the world of Sirius satellite radio is the
15 radio promotion executives that call upon
16 Sirius. They are always very interested to
17 know how a certain song might be performing.
18 And the kind of research that I have described
19 earlier where we will measure the appeal of
20 certain newer songs, what the intended
21 audience of that channel. And that is
22 information that the record companies, if we

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1 disclose it to them. And a lot of times we
2 choose not to for confidentiality purposes,
3 but if we disclose it to them, they are
4 usually quick to share that with other radio
5 outlets as a way to influence them to get them
6 to play this new artist as well. That
7 information I hear shared and talked about a
8 lot by the record companies. I've never once
9 heard them talk about any sort of rating on an
10 internet radio outlet.

11 Q Now Mr. Blatter, the last bullet
12 point, going over to the next page, talks
13 about who values Sirius broadcasts enough to
14 pay for them. It's true, of course, that
15 consumers don't pay out of pocket for FM
16 radio, correct?

17 A No, they don't. FM radio is free.

18 Q And in many cases people don't,
19 excuse, pay money out of pocket for internet
20 radio services, right?

21 A Again, I really can't speak to
22 internet radio. I know that there are many

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1 pay internet radio services. I'm sure there
2 are many free ones, too, but I don't think you
3 can make a blanket statement about that
4 segment as a whole.

5 Q Isn't it entirely logical to
6 expect that having paid \$12.95 a month out of
7 pocket to subscribe to Sirius, a consumer may
8 have already spent some or all of their budget
9 on music for the month?

10 A I don't think so. I mean, if you
11 break down the \$12.95 to, you know, 50 cents
12 a day, I don't think the cost of a local
13 newspaper is going to really have that much of
14 an impact on somebody's ability to buy more
15 music.

16 Q Are you suggesting that you think
17 Sirius could raise its subscription price and
18 have no effect on the number of subscribers?

19 A I didn't state that.

20 Q Well, in fact, there is some price
21 sensitivity by consumers with respect to how
22 much they're willing to spend on music,

1 as not being available for other music
2 purposes, right?

3 A I've never heard that concern
4 voiced by any of our existing subscribers that
5 I've come into contact with and that's never
6 been a concern that's been expressed to me by
7 anybody I've come into contact with either in
8 radio or the record industry.

9 Q Don't you think that's an entirely
10 logical possibility?

11 A No, I actually believe that the
12 radio airplay on Sirius will only generate
13 more awareness for the artists that we're
14 playing on Sirius and results in more record
15 sales for those artists.

16 Q So it is your opinion, as I
17 understand it that spending \$12.95 a month
18 isn't going to have any effect on how much
19 people are willing to spend on music
20 otherwise, is that right?

21 A That's correct.

22 Q In your testimony orally today,

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1 correct?

2 A Can you restate that?

3 Q Sure. How much consumers have
4 available to spend on music is going to be --
5 well, actually, let me state it a different
6 way. Isn't it reasonable to expect that if
7 consumers have already spent \$12, \$13 in a
8 month on music, on music through Sirius or XM,
9 that's that much less they're going to be
10 willing to spend on buying CDs or downloads?

11 A No, I don't believe it is and I
12 think it's important to note that many of our
13 subscribers, I don't have the specific
14 numbers, choose to not pay for the service on
15 a monthly basis. They're paying either on an
16 annual basis or on a quarterly basis. So I
17 don't think they're looking at it in terms of
18 the \$12.95 or as I put it earlier, the 50
19 cents a day.

20 Q But whether they're paying
21 monthly, semi-annually, annually, that's that
22 much money out of their pockets that they view

1 Mr. Blatter, you mentioned on terrestrial
2 stations you sometimes have DJs who talk about
3 the music that they're playing. Do you recall
4 that?

5 A Yes, I do.

6 Q And you use the phrase which I now
7 forget, back --

8 A Back announcing.

9 Q Back announcing. Thank you. One
10 of the things that terrestrial stations can do
11 because they're local is to do back announcing
12 that promotes a particular concert that's
13 coming to a particular city or a visit by an
14 artist to that city, correct?

15 A I've heard them do that before,
16 but not always.

17 Q So that it's possible for record
18 companies, for example, to build a promotion
19 in a local market around a concert announcing
20 by the local DJ in that area, get the artist
21 into that local station and build a promotion
22 locally, is that right?

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1 A It's possible on terrestrial
2 radio, but that happens on Sirius radio as
3 well. I think I had mentioned in my oral
4 testimony that the Rolling Stones channel was
5 developed in conjunction with the Rolling
6 Stones to coincide with their tour as a
7 promotional vehicle to help sell concert
8 tickets for that tour.

9 Q Let me, actually that raises
10 something I wanted to ask you about. The
11 Rolling Stones channel that you talked about
12 before, I think you said was a limited-run
13 channel?

14 A Yes, it was.

15 Q And that was a limited run in
16 connection with some promotions that the
17 Rolling Stones were trying to do, is that
18 right?

19 A Yes, but I should define that the
20 limited run was initially, I think supposed to
21 be three or four months in cooperation with
22 The Band. It was extended, I think just over

1 Q Was there any agreement in that
2 between the Rolling Stones or the record
3 company and Sirius with respect to royalties
4 that would be paid for the use of the music?

5 A No, there was not other than the
6 royalties they would normally receive under
7 their current agreement.

8 Q So they weren't willing to waive
9 royalties in order to put together this
10 promotional channel, is that right?

11 A Can you be more specific? I'm not
12 sure that I follow you.

13 Q Sure. As part of the agreement to
14 put together this promotional channel for the
15 Rolling Stones, the Rolling Stones were not
16 willing to waive the royalties that they would
17 get paid for the use of that music, were they?

18 A This kind of goes a little bit out
19 of my area of expertise, but I'll try to
20 answer you. We -- they did receive or would
21 ultimately, I would hope, receive or imagine
22 that they would receive their royalties

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1 a year, 12 or 13 months.

2 Q Was there an agreement entered
3 into with the Rolling Stones to put that
4 channel together?

5 A There was an agreement, I believe,
6 and I did not do the specific negotiations on
7 that deal, but I believe the agreement was
8 with the Rolling Stones, who gave us their
9 approval, as well as Virgin Records, who was
10 putting out their -- I believe owns their
11 masters now, was putting out their current
12 release at the time.

13 Q So there was an agreement with the
14 entities that were trying to promote the
15 Rolling Stones, the Rolling Stones and the
16 record company that was promoting them, right?

17 A Yes.

18 Q Was there any payment to the
19 Stones or to the record company for this
20 channel?

21 A Not that I'm aware of. I don't
22 think there was.

1 through SoundExchange as they normally would
2 for an airplay on Sirius. We did receive a
3 waiver from their record company, you know,
4 Virgin EMI, that allowed us to play an
5 unlimited amount of Rolling Stones music on
6 that particular channel, and I don't believe
7 that it was at any cost to Sirius.

8 Q So as I understand the agreement,
9 you could play as much Rolling Stones music as
10 you wanted, but they then got the royalties
11 for the playing of that music, right?

12 A Well, as would any other artist on
13 Sirius, you know, who when we play their music
14 they would get the royalties through
15 SoundExchange.

16 Q The Rolling Stones were not
17 willing to waive their royalties in return for
18 whatever promotional benefit they were getting
19 from this channel, correct?

20 A I couldn't speak to that. I
21 wasn't involved at that level of negotiation.

22 Q Okay, but you know they didn't

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1 waive the royalties?

2 A I don't think they did, but I
3 don't

4 --

5 JUDGE WISNIEWSKI: Mr. Blatter,
6 your attorney can't answer the question for
7 you.

8 THE WITNESS: No, I saw him move.
9 I thought he was going to stand up. I didn't
10 think he was going to answer for me.

11 BY MR. HANDZO:

12 Q Now Mr. Blatter, you would agree
13 with me that Sirius competes for listening
14 time with other audio entertainment services,
15 right?

16 A Primarily terrestrial radio, but I
17 believe we compete with all forms of
18 entertainment for listening time.

19 Q So to the extent that somebody is
20 listening to Sirius in the car, they're not
21 listening to a CD or a download, right?

22 A Typically not. That would be

1 wanted to listen to country music, before
2 Sirius or XM, I would have had to put a CD or
3 a cassette in the stereo, right?

4 A That would be one way to listen to
5 country music, sure.

6 Q But now with Sirius I've got a
7 choice of five country music channels, right?

8 A With Sirius, you have the choice
9 of five country channels and another 100 and
10 some odd channels of a lot of other things.

11 Q Right, but if I want to listen to
12 country while I'm stuck at West 57th, I don't
13 need a CD anymore, do I?

14 A No, of course you still would want
15 a CD.

16 Q I don't need it for listening in
17 my car, do I, because I've got five country
18 music channels on Sirius?

19 A I don't believe that radio is a
20 replacement for the CD. I've never seen any
21 evidence of that either.

22 Q Well, you know that Sirius

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1 difficult to listen to two sources at the same
2 time.

3 Q And isn't it just logical, Mr.
4 Blatter, that to the extent that listening to
5 Sirius displaces time that might have been
6 spent listening to CDs or downloads, people
7 are going to buy fewer CDs or downloads?

8 A If I understand what you mean,
9 Sirius listening might replace listening to
10 something else. What sort of impact it has on
11 the actual cell of recorded music, I can't
12 speak to that. It actually could still
13 contribute to more record sales as a result of
14 that airplay, regardless of how much time
15 they're listening to it.

16 Q Well, I think you mentioned before
17 that there is still no country station in New
18 York, right?

19 A No. There's no country music
20 outlet in the New York market.

21 Q So if I were driving in New York
22 and I was stuck in traffic on West 57th and I

1 replaces time spent listening to CDs, right?

2 A It could very well.

3 Q You just don't think there is a
4 connection between time spent listening and
5 the number of CDs that you buy?

6 A I do not.

7 Q And you don't think it's
8 reasonable to expect that if people are
9 listening to CDs less, they're going to buy
10 less?

11 A I do not.

12 (Pause.)

13 Q You were asked a couple of
14 questions on direct, Mr. Blatter, about pre-
15 1972 music, do you recall that?

16 A Yes.

17 Q Now some of the pre-1972 music
18 that Sirius plays has been digitally
19 remastered, right?

20 A Some of it probably has been
21 remastered, yes.

22 Q And you don't know how much of the

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1 pre-1972 music has been remastered, do you?
 2 A I've never quantified that, no.
 3 Q Do you know the extent to which
 4 sound recordings are played on kids' channels?
 5 A Excuse me?
 6 Q On kids' channels?
 7 A The extent of which?
 8 Q Yes.
 9 A I can only speak to the -- we have
 10 two kids' channels on Sirius. I'm only
 11 responsible for the programming on one of them
 12 which is on Kids Stuff channel. The other is
 13 Disney Radio which is supplied to us from a
 14 third party and is not one of our commercial-
 15 free music channels.
 16 Q Are there sound recordings played
 17 on the kids' channel that you're responsible
 18 for?
 19 A Yes, there are.
 20 Q Do you know whether there are
 21 sound recordings played on some of the talk
 22 shows like Howard Stern?

1 Q Haven't you seen emails to Sirius
 2 saying they want -- consumers want less DJ
 3 chatter, not more?
 4 A I've seen those same comments
 5 consistently for my entire 20-year career as
 6 a radio programmer. What I've learned over
 7 the years, when I see that comment is when you
 8 dig further with that person that makes that
 9 comment, what they really mean is the DJ on
 10 that particular channel is not relating and
 11 communicating to me in the way I'd expect them
 12 to. So in their words, they're saying there's
 13 too much DJ chatter, but what they really mean
 14 is hey, I like this channel, but the DJ is not
 15 talking about things I want to hear about.
 16 Q But in fact, Mr. Blatter, in terms
 17 of the emails that Sirius gets from consumers,
 18 you get emails from consumers that say I want
 19 less DJ talk, I want less DJ chatter, right?
 20 A I personally get very few, if any,
 21 emails like that.
 22 Q Sirius gets such emails?

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1 A I'm responsible for the 64
 2 commercial-free music channels. I can't speak
 3 too knowledgeably about how much music is
 4 played on the Howard Stern show. To the best
 5 of my knowledge, he doesn't play much music,
 6 if any at all.
 7 Q But I take then you wouldn't know
 8 how much music might be played on other
 9 channels that you're not responsible for?
 10 A If I'm not responsible for it, I
 11 wouldn't be comfortable going on record
 12 telling you how much they're playing.
 13 Q Mr. Blatter, you talked a little
 14 bit in your testimony, I believe, about the
 15 use of on-air personalities and DJs, do you
 16 recall that?
 17 A Yes.
 18 Q Now is it fair to say there are
 19 some subscribers to Sirius who don't like the
 20 DJ chatter, right?
 21 A Generally speaking, I don't think
 22 that's an issue for us, no.

1 A Like I said like any radio outlet
 2 in America, you're going to get -- if you have
 3 DJs on a channel, you're going to get certain
 4 people that might say hey look, I want less DJ
 5 chatter. But what I've learned is that --
 6 what that really means is hey look, the DJ on
 7 when I listen doesn't really relate to me. So
 8 what we do is we take that information and my
 9 programmers then coach and direct the talent
 10 to better communicate with the intended
 11 audience for that channel.
 12 When we do that, we see that the
 13 number of emails you might get about too much
 14 DJ chatter declines dramatically.
 15 Q Let me mark this as SoundExchange
 16 Trial Exhibit 37.
 17 (Whereupon, the above-
 18 referred to document was
 19 marked as SoundExchange
 20 Trial Exhibit 37 for
 21 identification.)
 22 (Pause.)

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1 Mr. Blatter, this is an email to
 2 you from Darren Smith, is that correct?
 3 A Yes, it is.
 4 Q And for the record it starts with
 5 Sirius Bates Number 22992.
 6 Mr. Blatter, who is Darren Smith?
 7 A Darren is one of the three senior
 8 directors of programming that I had mentioned
 9 earlier in my testimony.
 10 Q So he reports to you?
 11 A Yes, he does.
 12 Q And did it appear to you what Mr.
 13 Smith was doing in this email to you was
 14 giving you information on responses to a
 15 survey?
 16 A It appears as such, although it is
 17 very difficult for me to say what survey this
 18 is from and when it was conducted.
 19 Q I'm going to ask you to turn to
 20 the second to last page. Do you see there
 21 there is an email that says "attached are the
 22 verbatim response to foreclosed and

1 questions"?
 2 A Yes.
 3 Q So does it appear --
 4 A Sorry to have a random response to
 5 a closed-ended question, but go ahead.
 6 Q But in any event, this appears to
 7 you to be a breakdown of the responses to a
 8 survey or surveys that Sirius conducted,
 9 correct?
 10 A Yes.
 11 Q And it breaks down what
 12 subscribers like most about Sirius and what
 13 their complaints about Sirius are, right?
 14 A Yes.
 15 Q This was provided to you in March
 16 of 2006, right?
 17 A Yes, it was.
 18 MR. HANDZO: Your Honor, I would
 19 move the admission of Sound Exchange Exhibit
 20 37?
 21 CHIEF JUDGE SLEDGE: Any objection
 22 to the Exhibit No. 37?

1 MR. KIRBY: No.
 2 CHIEF JUDGE SLEDGE: Without
 3 objection, Exhibit No. 37 is admitted.
 4 (The document, having
 5 been marked previously
 6 for identification as SX
 7 Exhibit No. 37, was
 8 received in evidence.)
 9 BY MR. HANDZO:
 10 Q Mr. Blatter, looking at the first
 11 page --
 12 CHIEF JUDGE SLEDGE: Mr. Kirby?
 13 MR. KIRBY: Yes, Your Honor. This
 14 is relatively current research data concerning
 15 what our customers like and don't like about
 16 our service, at least that's what I understand
 17 it to be., Such information, of course,
 18 obviously is highly competitively sensitive
 19 and I would move that it be protected under
 20 the Court's confidentiality procedure.
 21 CHIEF JUDGE SLEDGE: It is not
 22 highly sensitive in my experience. Do you

1 want to pursue that further?
 2 MR. KIRBY: May I voir dire the
 3 witness, please, Your Honor?
 4 CHIEF JUDGE SLEDGE: Yes.
 5 VOIR DIRE
 6 BY MR. KIRBY:
 7 Q Mr. Blatter, is this information
 8 the type of information that Sirius would
 9 typically make available to XM?
 10 A We typically, you know, in our
 11 normal course of business, do not make any of
 12 our internet research available to XM.
 13 Q I understand. Would there be --
 14 do you believe that there would be competitive
 15 consequences if this information were made
 16 available?
 17 A Absolutely.
 18 Q If you had this kind of
 19 information about XM, would it help you in
 20 making programming choices against XM's
 21 program?
 22 A I would love to get my eyes on

1 it,if I could do it legally.
 2 Q Do you know of any legal way that
 3 you could get this kind of information about
 4 XM?
 5 A No, I do not.
 6 CHIEF JUDGE SLEDGE: An objection
 7 to applying the protective order?
 8 MR. HANDZO: No, Your Honor.
 9 CHIEF JUDGE SLEDGE: Without
 10 objection, the motion is granted.
 11 BY MR. HANDZO:
 12 Q Mr. Blatter, turning to the first
 13 page of this Exhibit No. 37, if you see two
 14 thirds of the way down the page there's a line
 15 for DJs?
 16 A Yes, I do.
 17 Q And those numbers there state the
 18 number and the percentage of people who said
 19 they liked the DJs?
 20 A I'm not sure if that's people who
 21 mentioned DJs as a descriptor for them or they
 22 mentioned individual DJ names.

1 sure if that DJ's total number there includes
 2 individual DJ mentions or DJ mentions just as
 3 a whole.
 4 Q Well, if you go to the next page
 5 of this, do you see down the page there's a
 6 line that says "less DJ chatter"?
 7 A Yes, I do.
 8 Q So there's people who think the
 9 best thing of Sirius has less DJ chatter?
 10 A Yes, 8 out of the 2048 said they
 11 want less DJ chatter, statistically
 12 meaningless number.
 13 Q Now if you turn to the fourth
 14 page.
 15 A Yes.
 16 Q Do you see the category that says
 17 "complaints, Sirius complaints"?
 18 A Yes, I do.
 19 Q And there's a list of complaints
 20 that runs on for one, two, three, four,
 21 carrying over to the fifth page?
 22 A Yes.

1 Q Which ever one it is, this appears
 2 to be people who like either DJs generally or
 3 specific DJs?
 4 MR. KIRBY: Your Honor, that
 5 misstates the exhibit. The question appears
 6 is what do they like most about Sirius,
 7 instead of this response would be people who
 8 liked DJs most. CHIEF JUDGE SLEDGE: Mr.
 9 Handzo?
 10 MR. HANDZO: I'm happy to rephrase
 11 the question, Your Honor.
 12 CHIEF JUDGE SLEDGE: All right.
 13 BY MR. HANDZO:
 14 Q Let me just ask this, Mr. Blatter.
 15 The one that says DJs, you understand that to
 16 be a reference either to DJs on Sirius
 17 generally or specific DJs, right?
 18 A No, I'm not sure if it includes
 19 specific DJs rolled up into that number or
 20 not. I do notice at the bottom here there is
 21 a DJ mentioned, Pat St. John, and there are
 22 other DJs scattered throughout here. I'm not

1 Q And it appears to be the -- the
 2 responses appear to be ranked in order of the
 3 number of people who made that complaint?
 4 A Well, I'm not so sure if these are
 5 necessarily all complaints because as I look
 6 at the bottom, some of these -- while they're
 7 classified as complaints, they're just asking
 8 for more of something else, so more classic
 9 rock or more dance channels and so on. I'm
 10 not sure if complaints, I know that's the way
 11 it's referred to in this document, but they're
 12 not necessarily all complaints.
 13 Q Okay. There's a line in the
 14 fourth page of this document which says "DJs
 15 talk too much"? Do you see that?
 16 A Yes, that's actually what I
 17 believe to be a remarkably low percentage
 18 based on what I've seen in my 20 years as a
 19 radio programmer having researched this
 20 subject before.
 21 Q It's actually one of the top
 22 complaints that is listed here, isn't it?

1 A At two percent, I wouldn't
2 consider it to be a top complaint, no.
3 CHIEF JUDGE SLEDGE: You have not
4 responded to the question.
5 THE WITNESS: Well, can you
6 explain to me what you mean by top complaint?
7 BY MR. HANDZO:
8 Q Well, just looking at the list, we
9 agreed that the complaints are ranked in order
10 of the number of people who responded with
11 that complaint, right?
12 A Yes, I mean they're ranked in
13 order.
14 Q And DJs talk too much is ranked
15 very much near the top, isn't it?
16 A Well, there's a huge disparity
17 between one reception of 19 percent and DJs
18 that talk too much at 2 percent. So I think
19 it's a little bit misleading to say it's a top
20 complaint.
21 Q But it is ranked near the top,
22 right?

1 a DJ on Sirius.
2 JUDGE WISNIEWSKI: What does that
3 have to do with it being a passive media?
4 THE WITNESS: People sometimes
5 have a hard time recollecting what they heard
6 because it is a passive media.
7 BY MR. HANDZO:
8 Q Mr. Blatter, I'm going to show you
9 what was marked as SoundExchange Trial Exhibit
10 38.
11 (Whereupon, the above-
12 referred to document was
13 marked as SoundExchange
14 Trial Exhibit No. 38.)
15 (Pause.)
16 Do you recognize this document as
17 an email to you from Steve Leeds?
18 A Yes, I do.
19 Q Who is Mr. Leeds?
20 A Mr. Leeds is my Vice President of
21 Artist and Talent Relations.
22 Q What is his job? What does he do?

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1 A It's ranked number six, yes, out
2 of a number of things, but like I said, to me,
3 as an industry veteran and done nothing my
4 entire career but programmed radio, two
5 percent is a remarkably low number.
6 Q And if you flip to the next page
7 you'll see a line that says "Jim Brewer"? Is
8 he a DJ?
9 A He's a talk show host. Also
10 former cast member of Saturday Night Live and
11 has appeared in a bunch of movies.
12 Q And the next page you'll see a
13 line for Rick Dees, is that a DJ?
14 A He's a DJ, but he's not on Sirius.
15 (Laughter.)
16 I think it's important to mention
17 as well that radio is generally a passive
18 medium. And when you go back and ask people
19 to respond to these types of questions, they
20 often don't give you accurate responses,
21 particularly when it comes to DJ names.
22 That's a good example. Rick Dees isn't even

1 A He's responsible for the group of
2 people I mentioned earlier in my testimony
3 that work closely with the record companies to
4 have them participate in our programming or
5 artist interviews and special programming that
6 we might be doing in some cases enhance the
7 programming of the channel. In other cases it
8 is to help that artist get some additional
9 promotion for what it is they are promoting at
10 that time.
11 Q So he is somebody who works with
12 the record companies a lot?
13 A Yes, he is.
14 Q This email was sent to you by Mr.
15 Leeds on April 9, 2006. Is that right?
16 A Yes, it is.
17 MR. HANDZO: Your Honor, I move
18 the admission of SoundExchange Trial Exhibit
19 38.
20 CHIEF JUDGE SLEDGE: Any objection
21 to Exhibit 38?
22 MR. KIRBY: No, Your Honor.

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1 CHIEF JUDGE SLEDGE: Without
 2 objection, Exhibit 38 is submitted.
 3 (The document, having
 4 been marked previously
 5 for identification as SX
 6 Exhibit No. 38, was
 7 received in evidence.)
 8 MR. KIRBY: May I have one moment,
 9 Your Honor, on the confidentiality issue I
 10 might explore?
 11 (Pause.)
 12 Thank you, Your Honor. I have no
 13 motion with respect to this document.
 14 BY MR. HANDZO:
 15 Q Now in this email to you, Mr.
 16 Blatter, Mr. Leeds refers to the tried and
 17 true avenues of exposure. Do you see that?
 18 That's near the top of the email?
 19 A Yes.
 20 Q And what he is talking about there
 21 is the tried and true avenues for exposure for
 22 new music, right?

1 A Not right there, no.
 2 Q In fact, when he does talk about
 3 satellite radio down below, what he says is
 4 right now we are offered the more newer baby
 5 acts. Do you see that?
 6 A Yes, I do.
 7 Q And what he's telling you there is
 8 that in terms of getting artists to perform
 9 live on Sirius, the only things that you were
 10 being offered were the baby acts, right?
 11 A That was his opinion at that time.
 12 Q Okay, and you weren't getting the
 13 A level acts, right?
 14 A That was his opinion at that time.
 15 Q But he is your guy who deals with
 16 the record companies, right?
 17 A No, my entire programming team
 18 deals with the record companies. He's one of
 19 many.
 20 Q But it is his job to go out and
 21 get artists to perform on Sirius, isn't it?
 22 A That's part of his job, but his

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1 A Well, he doesn't appear to be
 2 specific to new music.
 3 Q Well, he is talking about in the
 4 previous sentence the labels. Do you see
 5 that?
 6 A Yes.
 7 Q And that is a reference to the
 8 record companies, right?
 9 A Right.
 10 Q And in that context, you
 11 understand him to be talking about the tried
 12 and true avenues of exposure for the record
 13 companies?
 14 A Appears to be, yes.
 15 Q Okay, and he is saying that the
 16 tried and true avenues for exposure are
 17 television, cable, print, retail exposure, and
 18 websites, right?
 19 A That appears to be his opinion,
 20 yes.
 21 Q And he doesn't say anything about
 22 satellite radio though, does he?

1 department does act more as a facilitator. In
 2 a lot of cases, it is the programmers
 3 themselves where the requests come in through
 4 and then they are then referred to the talent
 5 department or the talent department will
 6 sometimes initiate that request as well. It
 7 doesn't all fall on the artists and talent
 8 department.
 9 Q I think you told us at the outset
 10 of your oral testimony, Mr. Blatter, that
 11 there is a group under your supervision called
 12 the talent and industry relations group, is
 13 that right?
 14 A Yes.
 15 Q Is that the group that Mr. Leeds
 16 runs?
 17 A Yes, and I think I've stated that
 18 group works very closely with my programmers
 19 to conduct their activities.
 20 Q In terms of bringing in talent to
 21 do live concerts on Sirius, it is Mr. Leeds
 22 group, talent and industry relations group,

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1 that deals with the record companies, right?
 2 A No, that is not correct. They
 3 work very closely with my programmers to book
 4 those interviews or live performance or
 5 whatever it might be.

6 Q But Mr. Leeds is talking to the
 7 record companies about those subjects?

8 A He does as well as all of my
 9 programmers.

10 CHIEF JUDGE SLEDGE: When you were
 11 responding to talent and industry, I thought
 12 you said earlier it was artist and talent.

13 THE WITNESS: Yes, they get used
 14 somewhat interchangeably or have in the past.
 15 I'm actually trying to clean that up a little
 16 bit internally in the industry. We're now
 17 referring to the department as the artist and
 18 talent relations department.

19 BY MR. HANDZO:

20 Q Now with respect to getting
 21 artists to do live concerts on Sirius, having
 22 those live concerts is a benefit to Sirius, is

1 artists to come on and do live concerts for
 2 Sirius is a two-way street. There's some
 3 benefit to the artists and there's some
 4 benefit to Sirius from that?

5 A Yes, but there are many instances
 6 where there actually is very little benefit to
 7 us, but we do it to help further our
 8 relationship with the record companies.

9 Q And there are situations where you
 10 think there is very real benefit to Sirius,
 11 correct?

12 A I don't think any one concert
 13 performance has a real benefit to Sirius. I
 14 think in aggregate, if we do a lot of live
 15 performances that our subscribers want to
 16 hear, then it is a benefit to us, but I think
 17 it's important to note that a lot of times we
 18 do these live performances, in a lot of cases
 19 it's actually a turnoff to our subscribers,
 20 but we're doing it to help the record company
 21 establish that new artist.

22 JUDGE WISNIEWSKI: Why? Are you

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1 it not?

2 A In some cases it's a benefit to
 3 Sirius. In other cases, it's more of a
 4 benefit to the artists themselves.

5 Q But certainly there are well-known
 6 artists with respect to whom it is very
 7 beneficial to Sirius to have an exclusive live
 8 concert from that artist, right?

9 A I'm sorry, can you restate that?

10 Q Sure. For more popular artists,
 11 it is very beneficial to Sirius to have that
 12 artist come on Sirius and do a live, exclusive
 13 concert, right?

14 A I wouldn't say it's more
 15 beneficial to Sirius. I mean --

16 Q I didn't mean to put it in terms
 17 of relative importance. It is helpful to
 18 Sirius to have those artists come on and do
 19 concerts for you, right?

20 A We think that's something our
 21 subscribers like hearing, yes.

22 Q So is it fair to say that getting

1 just good hearted?

2 THE WITNESS: Well, it's not that
 3 we're good hearted, but we're in some ways in
 4 this for the music too and certain channels
 5 that are music oriented, we do like to take
 6 risks and work with the record companies to do
 7 whatever we can to help them break a band and
 8 sometimes having them come up to our studios
 9 and perform live while the audience for that
 10 channel might not have ever heard of this
 11 artist before, we're saying hey, check this
 12 out. We think it's good. You might like it
 13 too. A lot of times when we do that, the
 14 listeners of the channel are saying who is
 15 this new act? I don't even like them and now
 16 they're playing live on your air? Why are you
 17 doing this? We say, you know, it's a risk we
 18 take, but we do it to further our
 19 relationships with the record companies.

20 JUDGE WISNIEWSKI: When you
 21 mentioned that before -- and pardon me for
 22 interrupting Mr. Handzo, you talked about

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1 spending a lot of time working with record
2 companies to break new artists. That puzzled
3 me. If you get no benefit out of it, why
4 would you do it?

5 THE WITNESS: We get no benefit
6 out of the actual recorded sale of the music.

7 JUDGE WISNIEWSKI: I understand
8 that part, but do you get some benefit? Do
9 you feel you get some benefit?

10 THE WITNESS: Well, on certain
11 channels that are new music intensive, I think
12 it's important for those channels to continue
13 to sound fresh and bring new artists into the
14 fold that we think the listeners to that
15 channel might find interesting.

16 Most new artists that we actually
17 play don't ever actually become successful, so
18 in a given week a typical channel has three or
19 four new songs, when the year is done, if we
20 added 150 new songs a year on that particular
21 channel, if ten of them really stuck and
22 became big successes, that would be a good

1 will find that the satisfaction to that
2 channel and ultimately the service as a whole
3 could go down. So it's a very fine line that
4 we tread as programmers trying to figure out
5 how much new music to play on a particular
6 channel. If it's not a channel that plays
7 nothing but new music and even on there you
8 have to have some boundaries and some limit to
9 the amount of new music that you play, but on
10 most of the channels that we offer, there is
11 I guess a diminishing return when it comes to
12 satisfaction which is ultimately what we're
13 judged by, depending upon how much new music
14 you play.

15 JUDGE ROBERTS: So some music is
16 good, that drives the satisfaction level up,
17 but there's some point out there that it
18 starts to go down?

19 THE WITNESS: Well, if we play too
20 much new music on a particular channel, then
21 satisfaction could come down. Yes. And where
22 that line is is different by channel.

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1 year.

2 JUDGE WISNIEWSKI: I understand
3 that you take a risk. That's what all
4 businesses do. They take a risk, don't they,
5 in order to eventually have some success and
6 get some benefit out of taking those risks?
7 Isn't that a fair statement?

8 THE WITNESS: There is risk in
9 playing these new artists.

10 JUDGE WISNIEWSKI: Doesn't that
11 work here too that you get some benefit out of
12 if if they succeed?

13 THE WITNESS: We don't get a
14 direct financial benefit of their success, but
15 I think it is helpful to the radio station to
16 help contribute to the success of that
17 artist's career.

18 JUDGE ROBERTS: Mr. Blatter, you
19 used the word "risk" several times. What
20 risk?

21 THE WITNESS: Well, if we play too
22 many new songs on a particular channel, you

1 CHIEF JUDGE SLEDGE: While we're
2 all jumping in, the responses to Judge
3 Roberts' questions makes me curious why you
4 add the qualifier to Judge Wisniewski's
5 questions that it's a benefit to have new
6 artists if they're successful. If what the
7 ultimate result of their career, why is that
8 important as to whether it adds freshness to
9 a channel and make a channel more satisfying?

10 THE WITNESS: Why is that
11 important to us?

12 CHIEF JUDGE SLEDGE: Yes, why is
13 it important to you?

14 THE WITNESS: Well, I think, for
15 instance, in the country format, whether
16 there's actually a fair amount of stability
17 with the new artists that are exposed on
18 country radio, but every few years a couple of
19 new artists do break through and become very
20 successful and for a format not to get stale,
21 it is important to be able to introduce new
22 artists on a fairly regular basis. Like I

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1 said earlier, not all of them always stick,
2 but we do think it's important to introduce
3 new artists to keep the station sounding
4 fresh.

5 CHIEF JUDGE SLEDGE: I guess I
6 have trouble both with country artists and
7 NASCAR drivers understanding how audio helps
8 them since the decision of successful country
9 artists and NASCAR drivers depends on their
10 physical appearance more than anything else.

11 (Laughter.)

12 CHIEF JUDGE SLEDGE: And you can't
13 portray their physical appearance.

14 THE WITNESS: No, we can't. But I
15 will say in a country format, I think there
16 are plenty of artists that have been
17 successful where their physical appearance had
18 no impact on their -- it didn't hold them back
19 from being successful.

20 CHIEF JUDGE SLEDGE: In the last
21 five years?

22 (Laughter.)

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1 in any decision a programmer makes day to day,
2 is will this help further satisfy the intended
3 audience for this channel.

4 Q So the answer to my question is
5 yes?

6 A I think you only asked it specific
7 to music, but I'm saying it's -- there are a
8 number of things that contribute to the
9 satisfaction of the channel that go beyond the
10 music.

11 Q But with respect to the decisions
12 you make about what music to play and what
13 live acts to put on, that's your guiding
14 principle, right, what's going to increase
15 subscriber satisfaction?

16 A I don't think the programmers day
17 to day think of it in such terms, but
18 ultimately that is our goal is to, as a whole,
19 all of our programming should be as -- we're
20 trying to create the most satisfactory
21 experience that we can.

22 Q Thank you. That's all I have.

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1 THE WITNESS: I can't think of any
2 offhand, but I believe there have been.

3 CHIEF JUDGE SLEDGE: They appear
4 to be more pin up people than they are
5 singers.

6 Mr. Handzo?

7 MR. HANDZO: Thank you.

8 BY MR. HANDZO:

9 Q Mr. Blatter, I think you stated
10 earlier in your testimony that in your
11 position, you're judged by whether subscribers
12 to Sirius are satisfied with the music
13 channels, right?

14 A Yes.

15 Q And so when you make decisions
16 about whether to play new music or how much
17 new music to play or whether to get live acts,
18 basically what you're trying to do is as much
19 as you can increase subscriber satisfaction
20 with the music channels that you're
21 responsible for, right?

22 A I think that's the ultimate goal

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1 CHIEF JUDGE SLEDGE: We will
2 recess for the mid-day break for one hour.
3 (Whereupon, at 12:30 p.m., the
4 hearing was recessed, to reconvene at 1:30
5 p.m.)

6 CHIEF JUDGE SLEDGE: Mr. Handzo?

7 MR. HANDZO: Your Honor, I've
8 completed my cross.

9 CHIEF JUDGE SLEDGE: Okay. Any
10 redirect?

11 MR. KIRBY: Yes, Your Honor.

12 REDIRECT EXAMINATION

13 BY MR. KIRBY:

14 Q Mr. Blatter, turn back if you
15 would to Exhibit 38, the e-mail from a Mr.
16 Leeds. Do you have that in front of you?

17 A Yes, I do.

18 Q Okay. When was this e-mail sent?

19 A This e-mail was sent on April 9,
20 2006, so approximately one year and two months
21 ago.

22 Q After you received this e-mail,

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1 did you discuss it with Mr. Leeds?

2 A Yes, I do recall a discussion that
3 Mr. Leeds and I had soon after this e-mail was
4 sent to me. And we discussed what he wrote in
5 this e-mail in great detail, and I think it's
6 important to note that, like in any business,
7 certain people have really bad days. This e-
8 mail was written after Steve had a really bad
9 day. I think you can see on top there it was
10 written pretty late at night.

11 And after Steve and I had a pretty
12 in-depth conversation about what he put in
13 this e-mail, he even said to me, "You know
14 what? You're right. I think I kind of blew
15 things a little bit out of proportion, and I
16 agree with you that things in our
17 relationships with the record companies and
18 the artists they represent are a lot stronger
19 than the way they're made out to be in this
20 document."

21 Q Even though Mr. Leeds was having a
22 bad day, I direct your attention to the last

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1 paragraph there. Did what he said in that
2 last paragraph turn out to be perceptive?

3 A Yes, it was. And as I think I
4 stated earlier in my testimony, many of the
5 Sirius music channels now are reporting radio
6 stations to the major trade publications
7 within the radio industry. As a result of
8 becoming reporting stations, the cooperation
9 that we've had from the record companies and
10 management companies and publicists has
11 increased substantially since this document
12 was written over a year ago.

13 Q And when he talks in the last
14 sentence there about, "The senior promo execs
15 will be forced into treating Sirius on a level
16 playing field," have in fact you found that
17 the senior promo execs are treating Sirius as
18 the promotional equivalent to terrestrial
19 radio?

20 A Not only as an equivalent, in some
21 cases they are treating us even better than
22 terrestrial radio.

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1 Q I want to talk just very briefly
2 with you about this issue of substitution of
3 Sirius for CD sales. Just looking back over
4 your 20-plus years of experience in
5 terrestrial radio and with Sirius in the
6 programming area, has any representative of
7 any music label ever said to you, "Steve,
8 you've got to stop playing our music; it's
9 killing our sales"?

10 A That has never once happened to me
11 or any colleague that I work with at Sirius,
12 or, for that matter, I don't know of any radio
13 program in America that was ever asked by a
14 record company to stop playing a particular
15 piece of music. In fact, I don't ever recall
16 speaking to a record executive that has ever
17 told me that they've asked a radio station to
18 stop playing a particular piece of music.

19 Q And what about artists? Has any
20 artist called up and said, "Steve, you're
21 giving me too much exposure here. People are
22 listening to you; they're not buying my CDs.

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1 You've got to take me off the air"?

2 A No. Never once in my career has
3 an artist asked us to not play their music.

4 MR. KIRBY: That's all I have,
5 Your Honor.

6 CHIEF JUDGE SLEDGE: Any other
7 questions from the services? Any further
8 cross?

9 MR. HANDZO: No, Your Honor.

10 CHIEF JUDGE SLEDGE: Any questions
11 from the bench?

12 (No response.)

13 Thank you, sir. That's all.

14 THE WITNESS: Thank you, Your
15 Honor.

16 CHIEF JUDGE SLEDGE: Mr. Joseph?

17 MR. JOSEPH: Your Honor, Mr. Sturm
18 will call our next witness.

19 CHIEF JUDGE SLEDGE: All right.

20 MR. STURM: Your Honor, Sirius
21 calls Christine Heye.

22 CHIEF JUDGE SLEDGE: Ms. Heye,

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Several of my publications bear directly on the analysis that is contained in this testimony. *The Digital Dilemma*, a report for the National Academy of Sciences, deals with the implications of advances in information technology for copyright policies and the business strategies of content producers. *Bridging the Digital Divide* examines the growth in the use of the Internet among different demographic and socioeconomic groups. “ISDN and the Small User” examines the economic and regulatory implications of the first technology for providing high-speed Internet access. “The Economics of Information: A User’s Guide” explains the underlying economics of information content industries, including the relationship between advances in communications technology and the threat of piracy. “The Economics of Scholarly Publications and the Information Superhighway” examines how communications technology affects the market for scholarly publications and the design of libraries. “Intellectual Property, Antitrust and the New Economy” addresses the relationship between competition policy and intellectual property policies in biotechnology and information technology.

I have testified on numerous occasions before Congressional committees, the Federal Communications Commission and the Federal Trade Commission as an independent expert at the request of the committee or commission. I have served as a consultant for Congressional committees, the U. S. Department of Justice, the Federal Trade Commission, the Federal Communications Commission and several private litigants.

I have provided live expert testimony in the following cases that dealt with licensing broadcast or digital transmission rights.

In the Matter of Adjustment of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Service (Copyright Royalty Board, Washington, D. C.), the previous rate proceeding for Satellite Digital Audio Radio Service;

U.S. vs. ASCAP (In re Application of MobiTV) (U.S. District Court, New York City) pertaining to performance rights of musical compositions on program services that are distributed through mobile wireless devices; and

Seven Network v. News Limited (Federal Court, New South Wales, Sydney, Australia), pertaining to sports broadcasting rights.

During the week that this testimony is submitted, I am testifying in another case:

DVD Copy Control Association v. Kaleidescape (Superior Court, San Jose), pertaining to licenses for manufacturers of home video players to display programs that are recorded on digital video discs.

The cases in which I have testified that were active within the last five years and that involve other issues are the following.

In Re Tableware Antitrust Litigation (U. S. District Court, San Francisco);

Bernard Parish, et al., v. National Football League Players Association (U. S. District Court, San Francisco);

Reggie White, et al., v. NFL: Lockout Insurance & Lockout Loans (U.S. District Court, Minneapolis);

SmithKlein Beecham d/b/a GlaxoSmithKline v. Abbott Laboratories (U.S. District Court, Oakland); and

Novell v. Microsoft (U. S. District Court, Salt Lake City, Utah).

I also have submitted declarations or expert reports and/or been deposed in other matters. The cases that involve intellectual property rights are as follows.

In Re Napster Copyright Litigation (U. S. District Court, San Francisco);

Joel I. Roos and Tom Santos, et al., v. Honeywell International (Superior Court, San

Francisco);

Vincent Fagan and Anthony Gianasca v. Honeywell International (Superior Court for Middlesex County, Boston, Massachusetts);

John McKinnon v. Honeywell International (Superior Court for York County, Alfred, Maine); and

U.S. v. ASCAP (In re Applications of AT&T Mobility, Ericsson and Verizon Wireless) (U.S. District Court, New York City).

I also have submitted expert reports and/or been deposed in the following cases that are still in process or that have been concluded within the past five years.

Joe Comes, et al., v. Microsoft (District Court for Polk County, Des Moines, Iowa);

National Association of Optometrists and Opticians, et al., v. Lockyer, et al., (U.S. District Court, Sacramento);

In Re Dynamic Random Access Memory (DRAM) Antitrust Litigation (U. S. District Court, San Francisco);

Fleury v. Cartier International (U. S. District Court, San Francisco);

Eric Seiken v. Pearle Vision (Superior Court for San Diego County, San Diego);

Jason White, et al., v. National Collegiate Athletic Association (U. S. District Court, Los Angeles);

In Re Static Random Access Memory (SRAM) Antitrust Litigation (U. S. District Court, San Francisco);

Fair Isaac, et al., v. Equifax, et al. (U. S. District Court, Minneapolis);

Apple iPod iTunes Anti-Trust Litigation (U. S. District Court, San Jose);

Minority Television Project v. Federal Communications Commission (U. S. District

Court, San Francisco);

In Re Flash Memory Antitrust Litigation (U. S. District Court, Oakland);

Sarah Perez, et al., v. State Farm Mutual Automobile Insurance Co., et al. (U.S. District Court, San Jose); and

Federal Trade Commission v. Cephalon (U.S. District Court, Philadelphia).

During the past five years I also was a co-author of *amicus* submissions to the U.S. Supreme Court in the following matters.

PSEG Fossil, et al., v. Riverkeeper Inc. and

American Needle v. National Football League.

ASSIGNMENT

Sirius XM has asked me to undertake an economic analysis to determine a reasonable royalty rate for performances of sound recordings on Satellite Digital Audio Radio Service (SDARS). In undertaking this task, I have read testimony submitted by the parties and decisions by the Copyright Royalty Judges in the prior SDARS proceeding and in the two prior webcaster proceedings. I also have read the relevant statutory provisions regarding SDARS rates. I also have read publications and documents in the public record about digital technology and services for delivering entertainment to consumers. Finally, I have read the expert testimony that is being submitted in this matter on behalf of Sirius XM by John R. Hauser, William R. Rosenblatt and David P. Stowell, the testimony by Sirius XM executives Steven Blatter, David J. Frear, Mel Karmazin and James E. Meyer, and the testimony of Ronald H. Gertz, the co-founder and Chairman of the Board of Music Reports. The materials that I have relied upon in my analysis are cited in footnotes in this testimony or are listed in Appendix B. For my work on this matter I

am compensated at the rate of \$800 per hour.

Because discovery in this matter will take place after my testimony is submitted, my analysis and conclusions are preliminary. I may amend my testimony after analyzing additional material when it becomes available.

SUMMARY AND CONCLUSIONS

On the basis of the analysis in this testimony, I conclude that the range of reasonable statutory rates for SDARS during the next license term is between 5 and 7 percent of gross revenues from satellite radio services. This section provides more details about this conclusion and summarizes the economic analysis that forms the basis for my conclusion.

Reasonable SDARS Royalty Rates

The primary basis for my conclusion about a reasonable royalty rate for SDARS is the fact that Sirius XM has negotiated licensing agreements with numerous independent record companies at rates between 5 and 7 percent. These licenses were negotiated between a willing buyer and many willing sellers in a competitive market and include the same rights that are the subject of this proceeding. No evidence that is comparable to these agreements existed at the time of the previous SDARS rate proceeding. These agreements are far more relevant to determining an SDARS royalty rate than the type of evidence that was available in the last proceeding, which involved different rights for substantially different types of services.

To corroborate that the rates in license agreements between Sirius XM and independent record companies are reasonable, I examined an agreement negotiated between Last.fm and Warner Music. Last.fm offers the noninteractive customized Internet radio service for which

licensing information is available that is most like the satellite radio services that are offered by Sirius XM. After adjusting for differences between the services offered by Sirius XM and Last.fm, the most reliable SDARS rate that is implied by this agreement is 6.59 percent, which is within the range of the direct license rates.

The use of the Sirius XM and Last.fm agreements to determine a reasonable rate in this proceeding is an application of the willing buyer, willing seller method. These rates do not fully reflect adjustments for the mandatory factors from Section 801(b)(1) of the Copyright Act that must be taken into account in setting SDARS rates. The testimony submitted by Professor David Stowell presents evidence that a royalty rate substantially above 8 percent would increase the risk of disruption of SDARS. In addition, I have analyzed the implications of the 801(b)(1) requirements to take into account whether a proposed rate affects the availability of music to consumers, reflects the relative contributions of rights holders and rights users to the production of the SDARS services, and yields a fair return on investment to SDARS.

Based on my analysis of the information that is available at this time, I conclude that the range of reasonable royalty rates for Sirius XM's sound recording performance rights is between 5 and 7 percent of gross revenues from satellite radio services.

Economic Analysis Underpinning Rate Conclusions

To determine a reasonable royalty rate for sound recording performance rights requires taking into account the mandatory 801(b)(1) rate factors. In addition, I also apply the "willing buyer, willing seller" method.

Royalties for sound recording performance rights for SDARS must take into account four factors that are set forth in Section 801(b)(1) of the Copyright Act: the availability of creative

works to the public, the ability of rights holders and rights users to earn a fair return on investment, the relative contribution of rights holders and rights users to the service, and the risk of disruption to the industries involved in the statutory license. My analysis does not attempt to determine whether a proposed rate would minimize disruption of the SDARS industry. This issue is examined in the expert testimony of David Stowell. My analysis does take into account the requirement to consider the effect of a proposed rate on the availability of music to the public, the return on investment to SDARS and rights holders, and the relative contributions of rights holders and the SDARS provider.

The willing buyer, willing seller method seeks to identify the rate that would emerge in an unregulated market that is workably competitive. This approach derives a rate from actual transactions for the same or similar rights among the same or similar buyers and sellers. To meet the standards for the willing buyer, willing seller method, benchmark transactions must reflect the competitive incentive for a record company to charge a rate that encourages substitution of its sound recordings for sound recordings from other record companies. Transactions negotiated by a copyright collective such as SoundExchange do not satisfy this competitive condition because rates negotiated by SoundExchange apply to all or nearly all record companies. Thus, in negotiating rates SoundExchange ignores the competitive incentive to set rates that induce substitution among record companies.

Proper application of the willing buyer, willing seller approach requires that transactions that are used as benchmarks for setting statutory rates must involve essentially the same rights or, if not, must be adjusted to take into account differences in the rights that were transacted. The most reliable benchmark for setting a statutory rate is a rate for exactly the same right between the same rights holders and rights users for which a statutory rate is being determined. In fact,

Sirius XM has negotiated many direct license agreements with record companies that grant the rights at issue in this proceeding. These direct license agreements constitute the best possible benchmark for setting the statutory rate.

Royalty rates for other services that include public performances of sound recordings are valid benchmarks for the statutory SDARS rate only if these rates can be adjusted to take into account differences in the characteristics of these services and SDARS. The services that are most like SDARS are terrestrial radio broadcasting, which does not pay royalties for playing sound recordings, and audio entertainment services that are delivered over the Internet to mobile wireless devices. Sirius XM's satellite services differ in important ways from Internet music services. Many Internet music services are interactive, which means that they allow customers to choose the music that is delivered to them. Among noninteractive Internet music services, many are free to consumers, generating revenue from advertising, whereas Sirius XM offers only subscription services in which music channels do not contain advertising. Moreover, nearly all noninteractive subscription Internet music services, but not Sirius XM satellite radio, offer "customization," which means some degree of customer control over content.

The first step in my analysis is to identify transactions for sound recording performance rights that involve rights and services that are as similar as possible to the rights and services for SDARS. Testimony in the previous SDARS proceeding was submitted in 2007 and was based mainly on data from 2006 and earlier. In 2007 market transactions involving sound recording performance rights for a noninteractive audio service that was similar to SDARS were not submitted as potential benchmarks. The benchmark that was regarded as most relevant for setting the statutory rate for SDARS in the previous proceeding was the rate charged by a major record distribution company for an *interactive* Internet music service, with an adjustment for

interactivity that was derived from the differences in per-play rates between interactive and noninteractive *video* services.

Video services and interactive audio services differ substantially from programmed audio services like satellite radio. Interactive audio services give users full control of the music that they receive, making these services more valuable to consumers than services for which the user has no control of content. Moreover, supplying rights for interactive services is more costly to a rights holder because interactive services are a substitute for purchasing a personal copy of a sound recording, whereas programmed audio services promote sales of recordings. Video services, whether interactive or noninteractive, are a substantially different form of entertainment that is used in different contexts and for different purposes than audio entertainment. For example, video entertainment requires greater attention by the user and so is not a practical alternative to audio entertainment for the driver of a motor vehicle.

For the first time information is now available for transactions that are the most appropriate benchmarks for setting a statutory rate for SDARS: direct license agreements between Sirius XM and more than 60 independent record companies. Each of these record companies had the option to accept the statutory royalty rate but instead chose to negotiate a rate with Sirius XM. The rights that were acquired in these transactions include the same rights that are at issue in this proceeding but are more extensive and hence more valuable to Sirius XM. The royalty rates in these licenses vary between 5 and 7 percent of gross subscription revenues.

Although the rates in the direct license agreements are the most appropriate benchmark for the rates to be determined in this proceeding, I also considered other potential benchmarks. To identify potential benchmarks, I examined competitive conditions for SDARS to find services that are the closest substitutes for Sirius XM. These services are described at length in the

testimony of William Rosenblatt.

The competitive landscape for SDARS has changed dramatically since the previous SDARS rate proceeding. At that time the only close competitive substitute for SDARS was terrestrial radio. While terrestrial radio continues to be a competitive substitute for SDARS, an important change in the competitive landscape for SDARS is the development of noninteractive music services that are distributed over the Internet to mobile wireless devices such as smartphones, tablet computers and automobile audio systems with wireless connectivity. In 2007, when the evidence in the previous SDARS proceeding was submitted, noninteractive mobile Internet music services either did not exist or had minimal penetration, and the services that did exist could not be delivered over a reception system that was a close competitive substitute for a car radio.

The Internet services that are most like SDARS are noninteractive subscription programmed services without advertising that are delivered over mobile wireless devices that can be played by or through a car audio system. Examples of new competitors for satellite radio are the advertising-free subscription services offered by Pandora, Last.fm, Live365 and Slacker. These services are more like SDARS than either interactive music services or video services.

The royalty rates for nearly all noninteractive Internet music services are not usable as benchmarks in this proceeding. Most of these services operate under a statutory rate that does not reflect either the outcome in a competitive, unregulated market or the mandatory 801(b)(1) factors that must be taken into account in setting statutory rates for SDARS. For most of the remaining services, including Pandora, the most popular noninteractive Internet music service, their rates were negotiated with SoundExchange under the Webcaster Settlement Act (WSA). The WSA states that none of these agreements can be used to establish other rates unless the

parties to the agreement stipulate that they can be so used. While this provision of the WSA may have encouraged settlements, it created a bias in the rates that can be used in this proceeding. As a party to these agreements, SoundExchange can permit only the rates that are most favorable to record companies to be used as evidence in a proceeding to set a statutory rate. Consequently, even if the WSA rates otherwise were acceptable as benchmarks, the agreements reached in connection with the WSA that are available for use in this proceeding are not reliable indicators of competitive market rates.

For noninteractive music services that do not pay statutory or WSA rates, very little information is available about royalties for sound recording performance rights that were negotiated between services and record companies. Two negotiated rates for noninteractive Internet music services were made public in the *Webcaster III* proceeding. In both cases the seller was Warner Music, and the buyers were Last.fm and Slacker. Both licenses cover four service tiers, ranging from a free, advertiser-supported noninteractive customized service to a fully interactive on-demand service. The service that is described in these agreements that is most like SDARS is the subscription service that is offered by Last.fm that has the least amount of customer control of content. This service is less interactive than Slacker's least customized subscription service, which permits a subscriber to save streams for on-demand use and allows greater customization. Thus, I focus my analysis on the Last.fm service that most resembles music channels on satellite radio.

The terms of these two agreements ran from early 2007 to late 2007 (Last.fm) and mid 2008 (Slacker), with automatic month-to-month renewal thereafter if neither party opted out. Whereas both Last.fm and Slacker continue to exist and so presumably have license agreements, I have not found public information about the agreements that are now in place. I also have

found no public information about the arrangements that allowed these and other similar Internet subscription services to offer sound recordings from other record companies. Until more information about agreements between record companies and Internet subscription music services is produced during discovery, the conclusions derived from my analysis of these agreements are tentative and subject to amendment.

Noninteractive Internet subscription music services like Last.fm and Slacker, while more like SDARS than interactive Internet services, still differ from satellite radio services in ways that should be taken into account for these services to provide reliable benchmark royalty rates for SDARS. Among the important differences between Sirius XM's satellite radio services and the least customized noninteractive Internet music service offered by Last.fm and other similar Internet service providers are the following.

- (1) Sirius XM services include extensive content other than sound recordings (news, sports, talk, etc.) that Last.fm does not offer.
- (2) Sirius XM's subscription fee must recover the costs of its unique transmission and reception system, whereas customers of Internet music services pay separately for mobile receivers and telecommunications connections. The "relative contribution" Section 801(b)(1) rate factor requires that SDARS rates take into account this difference.
- (3) Last.fm, like almost all noninteractive Internet music services, gives customers some content control, whereas Sirius XM satellite services do not. The least customized Last.fm service allows users to skip songs and to build a personal channel that, within limits, is based on genres, artists and song characteristics.

To apply the willing buyer, willing seller method to calculate the SDARS royalty rate that is implied by noninteractive Internet subscription services, I use a five-step process. Step One identifies noninteractive Internet music services that are most like satellite radio services. Step Two involves finding royalty rates for these services that are publicly available and can be used as benchmarks in this proceeding – in this instance, the rate for the least customized subscription service from Last.fm. Step Three is to calculate the implicit market price of channels on Sirius XM that feature performances of sound recordings. I use three procedures to estimate this price: (1) the market price of the noninteractive Internet music services that compete most directly with SDARS; (2) the survey by Professor Hauser about the value of various types of channels to satellite radio customers; and (3) an allocation of the revenues of Sirius XM satellite radio services between sound recording content and other unique components of SDARS, including other types of content and the delivery system for satellite broadcasts. Step Four applies the royalty rate from Step Two to the value of music service on Sirius XM from Step Three, based on the assumption that Sirius XM pays the same royalty on the imputed price of its music service that Last.fm pays. Step Five uses the procedure that was adopted by the Copyright Royalty Judges in the previous SDARS proceeding to recalculate the SDARS royalty rate as the ratio of the royalty payment for sound recordings (from Step Four) to Sirius XM's gross subscription revenue from satellite radio services.

Using the assumptions that I regard as most reliable, application of this five-step procedure leads to the conclusion that the appropriate royalty rate for Sirius XM's SDARS service that is implied by the Last.fm agreement is 6.59 percent of Sirius XM's subscription revenues from satellite radio services. This calculation does not include a downward adjustment in the rate to account for customization and other valuable characteristics of the least customized

subscription music service on Last.fm. Consequently, the correct imputed price and the appropriate royalty rate for Sirius XM SDARS are less than the corresponding price and rate for the least customized Last.fm service. Notwithstanding that my analysis does not take into account all of the differences between SDARS and the Last.fm service, the rate derived from this benchmark is within the range of the rates that have been negotiated between Sirius XM and numerous record companies. Thus, I conclude that the Last.fm benchmark supports my prior conclusion that the willing buyer, willing seller method implies a range of reasonable rates between 5 and 7 percent.

The rate derived from the Last.fm benchmark does not fully reflect the mandatory Section 801(b)(1) factors. Only the “relative contributions” of the satellite delivery system and non-music content are partially taken into account in one of the Last.fm calculations. This rate does not reflect the requirement to consider the availability of creative works to the public or the ability of Sirius XM to earn a fair return on its investments. These calculations also do not take into account the risk of disruption that is discussed in Professor Stowell’s testimony. Thus, the SDARS rate implied by the Last.fm benchmark is, if anything, too generous to rights holders.

The remainder of this testimony contains the basis for these conclusions.

ECONOMIC APPLICATIONS OF RATE-SETTING METHODS

To determine a reasonable rate for SDARS sound recording performance rights requires applying the mandatory rate factors in Section 801(b)(1) of the Copyright Act. As an aid to determining the appropriate rate in prior proceedings, the Copyright Royalty Board also has applied the “willing buyer, willing seller” method, which seeks to determine the rate that would emerge in an unregulated competitive market.

Section 801(b)(1) Factors

Section 801(b)(1) of the Copyright Act contains four mandatory factors that must be taken into account in setting SDARS rates. These four factors are as follows.

“(A) To maximize the availability of creative works to the public.

(B) To afford the copyright owner a fair return for his or her creative work and the copyright user a fair income under existing economic conditions.

(C) To reflect the relative roles of the copyright owner and the copyright user in the product made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, risk, and contribution to the opening of new markets for creative expression and media for their communication.

(D) To minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices.”

(A) Availability

From an economic perspective, the availability of creative products to the public is related to both the number of creative works that are produced and the ability of the public to access these works. Availability is affected by the SDARS royalty for sound recording performance rights to the extent that it affects the number of consumers who gain access to sound recordings in their vehicles (an increase in the use of sound recordings), the ability of artists whose works are infrequently played on terrestrial radio to use satellite radio to reach their audience (an increase in the scope of works that are available to the public), or the number of

sound recordings that are produced due to the promotional effect of SDARS on the sale of sound recordings to consumers.

Usually competitive markets provide a sufficient inducement to produce creative works while simultaneously keeping prices to the public as low as possible without sacrificing this supply. Consequently, the competitive process normally can be relied upon to maximize the availability of creative works to the public. In a competitive market, the standard expectation is that if one competitor disappears, others will provide its customers with an alternative source of supply of creative works.

As discussed in detail elsewhere in this testimony, the primary competitors to satellite radio are terrestrial radio and noninteractive Internet music services that are available over mobile wireless devices that can be played in an automobile. Whereas satellite radio, terrestrial radio and mobile wireless service are available to the vast majority of consumers, none achieves complete coverage of the entire U.S. population. In some sparsely settled areas and areas with reception problems for terrestrial radio stations and wireless communications, satellite radio is the best source of high quality noninteractive music programs. While few people reside in these areas, many are located along major highways or near major tourist destinations. As a result, the lack of availability of terrestrial radio and wireless communications in these areas affects a larger proportion of the population than just the people who live in them.

Internet music services that can be received on mobile wireless devices are not available everywhere in the United States. The Federal Communications Commission (FCC) reports that in 2010 broadband wireless service was not available in 40.6 percent of the geographic area of

the U. S., an area containing 1.5 percent of the U.S. population.¹ In these areas, wireless Internet access is not a substitute for satellite radio for receiving programmed music services.

Sparsely populated areas often have few (and sometimes no) terrestrial radio stations.² A few examples illustrate the minimal availability of terrestrial radio in some remote locations.

- West Yellowstone, Montana, has two radio stations: an outlet of the public broadcasting service of Brigham Young University - Idaho and a commercial station featuring “oldies” pop music. Four other stations can be received, but one is another outlet of the same public broadcaster and two of the other three have weak signals.
- Moose River, Maine has no stations. The nearest, 43 miles away, can be received with a good signal, and one other station, 83 miles away in French-speaking Canada, can be received with a weak signal.
- Lowville, New York, has three radio stations and can receive two more from nearby towns. The formats of these stations are adult contemporary, classical, country, religious and top 40.
- Marathon, Texas, has one radio station, a noncommercial broadcaster that is owned by the town fire department. Two other stations can be received, but with weak signals – a noncommercial station (80 miles away) and a station with

¹ Federal Communications Commission, *Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless Including Commercial Mobile Services*, June 24, 2011, p. 43.

² Several web sites provide signal coverage maps of radio stations. For example, on the site <http://radio-locator.com/cgi-bin/page?p=maps> one can enter a zip code or a city name to obtain a list of stations that can be received in that area along with an indicator of each station’s signal strength. One also can click a station’s call letters to find its coverage area.

a nostalgia format (27 miles away).

- Nett Lake, Minnesota, has one radio station, a Native American community broadcaster that is owned by the Bois Forte Band of the Chippewa Nation. Two other nearby stations, one news/talk station and the other adult contemporary, can be received in Nett Lake.

- Frost, West Virginia, has one radio station, a noncommercial broadcaster.

One commercial station with an adult contemporary format, located 25 miles away, can be received in Frost.

The incomplete coverage of terrestrial radio and mobile wireless service has implications for the mandatory availability factor (A) in Section 801(b)(1). If the royalty for SDARS risks disrupting satellite radio service, it also risks reducing the availability of music in noninteractive subscription services to small, isolated communities.

Another aspect of availability is the effect of delivering sound recording performances via SDARS on the total revenue of record companies. A noninteractive subscription music service may affect total revenue by substituting for or promoting sales of hard copies (e.g., CDs) and digital downloads. The evidence indicates that playing sound recordings on satellite radio promotes the sale of sound recordings. The testimony of Steven Blatter provides many examples in which artists and record companies benefited from having their sound recordings played on Sirius XM. Many of these examples pertain to artists in less popular genres that are not played on terrestrial radio.

The examples cited by Mr. Blatter are consistent with the evidence that play time on terrestrial radio creates promotional benefits to artists and record companies. For decades record companies have encouraged terrestrial stations to play their sound recordings by giving them free

copies of recordings, providing promotional materials for new releases, and making artists available for interviews. As discussed in the testimony of Mr. Blatter, record companies also provide free sound recordings and promote new releases to Sirius XM.

Record companies also have used “payola” – cash payments and other gifts to disk jockeys and program directors – to induce terrestrial radio stations to play their recordings.³ FCC rules prohibit terrestrial broadcasters from accepting fees to promote a particular sound recording or artist, or any other product or political position, without disclosing that the promotion is an advertisement, regardless of whether the fee goes to the station owners or to an employee who can influence program content.⁴

The FCC’s rules are not mere window dressing. Enforcement actions for these rules occur regularly.⁵ In 2007 the FCC settled complaints against four large groups of radio stations (CBS, Citadel, Clear Channel and Entercom) for accepting cash and other considerations from record companies in return for playing their sound recordings.⁶ The four groups agreed to pay a total of \$12.5 million to the FCC. In 2011, the FCC settled a complaint against Emmis Austin Radio Broadcasting for accepting payola from a record store, a concert venue and a booking agent to play recordings by a heavy metal rock band that was appearing locally.⁷ Bribing radio

³ The classic scholarly work on this practice is Ronald Coase, “Payola in Radio and Television Broadcasting,” *Journal of Law and Economics* Vol. 22, No. 2 (October 1979), pp. 269-328.

⁴ The FCC’s rules are described at <http://www.fcc.gov/guides/payola-rules>.

⁵ Since 2007, the FCC has undertaken 17 enforcement actions with respect to this rule. See <http://transition.fcc.gov/eb/broadcast/sponsid.html>.

⁶ Federal Communications Commission, “Broadcasters Pay \$12.5 Million to Resolve Possible ‘Payola’ Violations,” April 13, 2007, at http://transition.fcc.gov/eb/News_Releases/DOC-272304A1.html.

⁷ Federal Communications Commission, *Order: In the Matter of Emmis Austin Radio Broadcasting Company, L.P.*, File No. EB-06-IH-2944, July 22, 2011, at <http://transition.fcc.gov/eb/Orders/2011/DA-11-888A1.html>.

station employees and risking FCC sanctions would make no sense if record companies did not believe that radio play time induced greater sales of sound recordings. Although these actions apply to terrestrial radio, they are consistent with the testimony of Mr. Blatter that play time promotes record sales on Sirius XM just as it does on terrestrial radio.

By comparison, interactive Internet services are more likely to substitute for buying hard copies and digital downloads of sound recordings. On-demand services let customers play a specific recording on request, allowing the same control over play sequence that customers have in playing recordings from personal libraries. Based on their belief that these services substitute for sales of recordings, two top-selling artists, Coldplay and Lady Gaga, refuse to allow their new releases to be offered on these services.⁸

A recent joint study by NPD Group and the National Association of Recording Merchandisers (NARM) concluded that on-demand music services detract from sales of sound recordings.⁹ The NPD/NARM study specifically mentioned Spotify, which describes its services as follows:

“Think of Spotify as your new music collection. Your library. Only this time your collection is vast: millions of tracks and counting. Spotify comes in all shapes and sizes, available for your PC, Mac, home audio system and mobile phone. Wherever you go, your music follows you. And because the music plays

⁸ Graeme MacMillan, “The Day the Music Died: Why Labels Are Abandoning Streaming Music Services,” *Time*, November 22, 2011, at <http://techland.time.com/2011/11/22/the-day-the-music-died-why-labels-are-abandoning-streaming-music-services/>.

⁹ “Study: Spotify is Detrimental to Music Purchasing,” *Digital Music News*, November 15, 2011, at http://www.digitalmusicnews.com/permalink/2011/11/15/cannibal#VIZ3-3IxRZUcRMwuQcs_9g.

live, there's no need to wait for downloads and no big dent in your hard drive.”¹⁰

In response to this study, ST Holdings, which owns about 200 record labels, notified Spotify as well as Napster, Rdio and Simfy that it no longer will allow its recordings to be included in their services due to their detrimental effect on sales.¹¹

The information about the promotional value of scheduled program services like SDARS and terrestrial radio as contrasted to the substitution of interactive services for sales of sound recordings has another important implication. This contrast provides another reason for avoiding the use of interactive services as a benchmark for setting rates for noninteractive services. Not only are interactive services more valuable to consumers, but they also are less valuable to rights holders because they detract from sales of sound recordings.

(B) Fair Return

The economic implementation of the “fair return” requirement (mandatory factor (B)) requires assessing whether rates allow both buyers and sellers to recover their costs, including the financial cost of capital that is used to make investments. From an economic perspective, this factor requires that the SDARS royalty rate be sufficient to recover the cost of reasonable investments, including the financial cost of capital, that have been made to provide satellite radio services. These costs include not only physical investments in satellites and vehicle receivers, but the research and development that was undertaken to create a satellite radio system, the costs of obtaining authorization from the FCC to launch SDARS, and the operating losses that were

¹⁰ At <http://www.spotify.com/us/about/what/>.

¹¹ Corey Tate, “Rdio, Spotify and Napster Lose 200 Record Labels Due to NARM Study,” *Spacelab*, November 19, 2011, at <http://www.thespacelab.tv/spaceLAB/2011/11November/MusicNews-064-Rdio-Spotify-Napster-NARM-NPD.htm>.

incurred in initiating the system. Setting rates so high that SDARS are unable to recover the start-up costs of entering the industry raises a serious policy concern because it deters entry by future services that would make use of sound recording performance rights but that expect to face significant early losses in building a market for their products.

The testimony by David Frear states that the cumulative operating loss of Sirius XM is \$8 billion. Dr. Michael Pelcovits, in his testimony on behalf of SoundExchange in the previous SDARS proceeding, estimated that the financial cost of capital to Sirius and XM, which is the standard measure of a fair return, was 16.7 percent. Using this rate, the excess annual operating profit that would be necessary to recover these cumulative losses, above the amount necessary to earn a fair return on the book value of existing assets, is \$1.34 billion. By comparison, the first year in which Sirius XM had a positive net income was 2010, and, from the testimony of Mr. Frear, the amount was \$43 million. Thus, if the statutory rate for SDARS is within the range of rates that were set in the previous rate proceeding and if Mr. Frear's projections turn out to be accurate, Sirius XM is unlikely to earn a fair return on its investments, including its start-up losses, during the term of the next statutory license. Meanwhile, SDARS has increased the profits of rights holders because Sirius XM pays a royalty for performances of sound recordings while terrestrial radio does not and because satellite radio promotes record sales.

(C) Relative Contributions

The economic implementation of mandatory rate factor (C) requires taking into account the cost and creative contributions of the owner and the user of sound recording performance rights. The relevant contributions of Sirius XM to satellite radio services are the innovations in satellite distribution and reception devices that were necessary to make satellite radio possible,

the subsequent investments that were required to bring this new technology to market, the effort put forth by Sirius XM personnel in programming music channels (as described in the testimony by Mr. Blatter), and the production of nonmusic programming that accounts for about half of the content that is offered by satellite radio services.

SDARS is unlike music services that are delivered over the Internet because the latter do not make the same contributions. Internet-based service providers did not create the information technology that is used to deliver Internet services to consumers. Customers of Internet music services pay separately for high-speed Internet access and the computers, smartphones and other reception devices that are used to make use of Internet music services. The vast majority of noninteractive subscription music services are customized, which means that channel content is influenced by customers based on their expressed musical preferences and the preferences that they reveal by skipping particular recordings. Internet music services also do not provide extensive nonmusic programming.

Because subscription charges for SDARS must recover the additional costs of innovation, investment and nonmusic content, the rates as a percentage of gross revenue for Internet music services must be adjusted substantially to take proper account of the relative contribution of SDARS in providing these services. I take this factor into account in the section of this testimony that deals with establishing a reasonable rate for SDARS based on the benchmark of noninteractive Internet subscription music services that are most like SDARS.

(D) Disruption

The economic implementation of mandatory rate factor (D) involving disruption requires examining the risks to Sirius XM that a proposed rate would cause a substantial curtailment or a

total loss of SDARS to the public. Disruption is discussed in the testimony of David Frear and is examined in the expert testimony of Professor David Stowell, so I do not address it here.

The Willing Buyer, Willing Seller Method and the Competitive Market Standard

The willing buyer, willing seller method has been used by the Copyright Royalty Judges in setting royalty rates for sound recording performance rights.¹² This method seeks to identify the rate that would be negotiated in an unregulated, “workably competitive” market, i.e. a market in which neither buyers nor sellers possess substantial market power. The attraction of this approach is that competitive prices are efficient, balancing the incentive to produce creative works with the goal of facilitating widespread dissemination of creative works.

Proper implementation of the willing buyer, willing seller method requires information about the terms of actual market transactions. This method normally is implemented by identifying transactions of similar products – so-called “benchmarks” – that can provide a basis for estimating a reasonable statutory rate. To provide a reliable estimate of a competitive market price, a benchmark transaction must satisfy three conditions. First, the transaction must arise in an unregulated, competitive market. Second, the transaction must involve a product that is very similar to the product for which a reasonable price is to be determined. Third, the buyer and seller in the benchmark transaction must be very similar to the buyer and seller in transactions for which a reasonable price is to be determined. The last condition requires taking into consideration whether the rights acquired in the benchmark transaction and the statutory license

¹² See “Digital Performance Right in Sound Recordings and Ephemeral Recordings,” Docket 2009-1 CRB Webcasting III, *Federal Register* Vol. 78, No. 46 (March 9, 2011), pp. 13026-58 (henceforth *Webcaster III*) for a detailed discussion of the implementation of this method in setting rates for noninteractive Internet subscription services.

are used in similar ways that incur similar costs.

The benchmark approach to identifying a reasonable price is more reliable if more benchmark transactions are available. Because individual transactions may be affected by idiosyncratic circumstances, a greater number of transactions reduces the risk that the rate derived from the benchmark is unreasonable.

The Nature of Competition in Sound Recordings

The willing buyer, willing seller method requires finding similar transactions in a competitive market in which neither the buyer nor the seller is coerced into accepting a price that normally would be unacceptable. To apply this method to identifying benchmark transactions for sound recording performance rights requires ascertaining whether these transactions truly reflect competition among record companies for the sale of these rights. Hence, determining whether a potential benchmark transaction is reasonable requires an understanding of the nature of competition among record companies. This section describes how the production process and costs of sound recordings affect competition among record companies and why, despite the uniqueness of each sound recording, record companies have an incentive to compete on the basis of price. Because record companies have a financial incentive to compete on the basis of price, transactions for performance rights for sound recordings that do not occur in a competitive market are not valid benchmarks.

A supply and demand analysis of competition in the record industry departs from the textbook model of perfect competition. A sound recording is an information good. Information goods have a substantial fixed cost – the “first-copy cost” – that must be recovered from prices

that exceed the incremental cost of duplicating the product.¹³ For sound recordings, first-copy costs include the cost of producing the original recording.

In a textbook perfectly competitive market, price equals the incremental (or marginal) cost of producing one more unit of output. The direct marginal cost to a record company of allowing a recording to be played by a radio broadcaster, whether satellite or otherwise, or an Internet streaming service, is zero. Likewise, the cost of delivering a sound recording to a customer as a digital download is close to zero (the main cost of a download is billing for it). Even the cost of making physical copies of recordings is very low. Thus, price in a perfectly competitive market is not a relevant standard for prices in the record industry because a price at or near marginal cost would not enable a record company to recover its first-copy cost.

Although a record company experiences no direct cost if a sound recording is played, the company may experience an indirect effect. As discussed above, playing a sound recording may affect its sales in other distribution channels such as CDs and permanent digital downloads. If playing sound recordings reduces their sales (as appears to be the case for fully interactive on-demand services), the drop in sales is a cost to the record company from licensing that service. If the use of a sound recording promotes its sale, as is the case for programmed noninteractive services like terrestrial and satellite radio, the net cost of licensing that use is negative – that is, allowing the service to play a sound recording creates a benefit, not a cost, for the rights holder. This phenomenon explains why occasional payola scandals occur. As an economic matter, payola is an example of a competitive market setting a negative price for the use of sound recordings on terrestrial radio.

¹³ See Roger G. Noll, “The Economics of Information: A User’s Guide,” in *The Knowledge Economy: Annual Review of the Institute for Information Studies*, Aspen Institute, 1993.

For sound recordings and other creative works, the appropriate market model is not perfect competition, but is “monopolistic competition” – *monopolistic* because each product is unique and has some market power because some buyers strongly prefer it to other products, but *competition* because entry by imperfect substitutes prevents producers of sound recordings from expecting to earn much more than the competitive return on a new product. Although some extremely popular recordings may earn excess returns, easy entry means that the expected reward from entering the sound recording business is the competitive return on investment.

Because copyright law prevents one record company from simply making copies of a recording that was produced by another company, entry in sound recordings can occur only from original recordings. Despite the prohibition against copying, entry of new recordings is easy because many artists and compositions are available for making new sound recordings. Indeed, an artist sometimes makes multiple recordings of the same song over a career, often for different record companies. Consequently, the appropriate conceptual framework for identifying the competitive price for any sound recording product (including SDARS performance rights) is a market in which products are differentiated (each has unique features), but barriers to entry are low. In this type of market, new products are introduced as long as the expected revenue exceeds the cost of duplication by an amount that is sufficient to allow the producer to expect to recover the first-copy cost of a new recording.

When a new sound recording is introduced, its sales can be divided into two components: *demand creation* (an increase in the total sales of all sound recordings that arises from the unique attributes of the recording) and *demand diversion* (substitution of sales from other recordings to the new recording).¹⁴ Demand diversion is the source of competition in sound recordings. An

¹⁴ For a discussion of the economics of imperfectly competitive markets with differentiated

essential feature of a competitive market transaction for sound recording performance right is that the transaction price must reflect the incentive of the record company to divert demand to its recordings from the recordings of its competitors.

If products are homogeneous (i.e., no product differentiation), an entrant can succeed only by offering a lower price, and almost all sales by an entrant are due to demand diversion. Product differentiation causes less demand diversion – e.g., hard-core fans of one recording artist do not regard recordings by other artists as close competitive substitutes for the latest release by their favorite. But the prospect for demand diversion provides an incentive to enter and to engage in price competition in order to capture sales from other sound recordings.¹⁵ In the case of sound recording performance rights for SDARS, the competitive incentive for record companies arising from the possibility of demand diversion is to obtain more playing time and hence a larger share of Sirius XM’s royalty payments and increased sales of their sound recordings due to the promotional effect of playing time.

The Effect of SoundExchange on Competition

The preceding analysis leads to the conclusion that a rights transaction is an appropriate benchmark according to the willing-buyer, willing-seller standard only if it reflects competition among record companies to capture revenue through demand diversion. Transactions involving SoundExchange are not reliable benchmarks because SoundExchange is a copyright collective

products and free entry, which is the relevant conceptual model for musical compositions, see Severin Borenstein, “Price Discrimination in Free Entry Markets,” *Rand Journal of Economics* Vol. 16, No. 3 (Autumn 1985), pp. 380-97. For an application to copyrighted products, see Christopher Yoo, “Copyright and Product Differentiation,” *New York University Law Review* Vol. 79, No. 1 (April 2004), pp. 212-80.

¹⁵ For a complete exposition of the formal economic theoretic model of competition among record companies, see Alan J. Baker, “A Model of Competition and Monopoly in the Record Industry,” *Journal of Cultural Economics* Vol. 15, No. 1 (June 1991), pp. 29-54.

that is a near monopoly, representing nearly all of the sound recording industry.¹⁶

The role of SoundExchange in determining royalty rates for sound recording performance rights creates a competitive problem. SoundExchange seeks a common price for many record companies that otherwise would compete to capture demand diversion. In some transactions, such as the licenses acquired by the National Association of Broadcasters and by Sirius XM for the Internet version of their services, SoundExchange negotiated a royalty rate for all or nearly all record companies. In other circumstances, SoundExchange represents all or nearly all record companies in a rate proceeding that offers an alternative to separate negotiations between a rights user and a record company. In negotiating rates for all or nearly all record companies, SoundExchange has no reason to take demand diversion into account and no incentive to seek rates that reflect the normal competitive process in the record industry. If nearly all record companies set a common price, each firm no longer can seek to divert demand from competitors by cutting its price. The result is a higher price than would emerge from separate negotiations with each record company.

In comparison to rates arising from a process in which the interests of record companies are harmonized by a copyright collective to set a common rate, when each record company seeks

¹⁶ A copyright collective offers a right to a large number of copyrighted products that are produced by firms that otherwise are competitors. The economics of copyright collectives are examined in Stanley M. Besen, Cheila N. Kirby and Steven C. Salop, “An Economic Analysis of Copyright Collectives,” *Virginia Law Review* Vol. 78, No. 1 (February 1992), pp. 383-411; Abraham Hollander, “Market Structure and Performance in Intellectual Property: The Case of Copyright Collectives,” *International Journal of Industrial Organization* Vol. 2, No. 3 (September 1984), pp. 199-216; Arthur Snow and Richard Watt, “Risk Sharing and the Distribution of Copyright Collective Income,” in Lisa N. Takeyama, Wendy J. Gordon and Ruth Towse, *Developments in the Economics of Copyright: Research and Analysis*, Edward Elgar, 2005, pp. 23-36; and Andrew N. Kleit, “ASCAP Versus BMI (Versus CBS): Modeling Competition between and Bundling by Performance Rights Organizations,” *Economic Inquiry* Vol. 38, No. 4 (October 2000), pp. 579-90.

to negotiate its own rate, the opportunity to divert demand creates an incentive for record companies to compete on the basis of price. Thus, transactions between a rights user and a record company are more reliable indicators of a competitive market outcome than a transaction between a rights user and SoundExchange.

DIRECT LICENSES WITH RECORD COMPANIES

The principal criterion for selecting a benchmark is that it involves transactions arising in a reasonably competitive market that is as similar as possible to the market for which a rate is being set: the same or similar rights sold to the same or similar buyers by the same or similar sellers. By far the best such benchmarks in this matter are direct licenses of sound recording performance rights between Sirius XM and record companies that otherwise could have relied on this proceeding to establish their royalty rate.

The Most Appropriate Competitive Benchmark

In the previous SDARS proceeding, no license for sound recording performance rights for a service that was similar to SDARS was presented to the Copyright Royalty Judges as a potential benchmark for the SDARS statutory rate. The transaction that was regarded as the most relevant for establishing a benchmark in that proceeding was a license for an interactive Internet music service. The adjustment to the rate for this service to account for interactivity was based on the difference in rates between interactive and noninteractive video services.

None of these services is similar to SDARS. Interactive Internet music services differ substantially from satellite radio in two ways. First, consumers are fully in control of the recordings that they receive from an on-demand service. Second, as discussed above, on-

demand service is a substitute for sales of sound recordings, whereas plays on satellite radio promote sales. Internet video services also are dissimilar to both SDARS and Internet music services not only because the nature of the content differs, but also because Internet video services are not used extensively in automobiles and cannot be used by drivers of motor vehicles.

In this proceeding a far better benchmark is now available. During 2011 Sirius XM negotiated direct licenses with many record companies. These licenses grant Sirius XM the same sound recording performance right that is at issue in this proceeding plus additional valuable rights. The terms of these agreements begin between August 2011 and January 2012 and run for three years, with successive automatic renewals for another year if neither party notifies the other of its intention to withdraw. Thus, all of these agreements replace the last year of the current SDARS statutory license and extend at least 19 to 24 months into the term of the next statutory license.

As of November 28, 2011, Sirius XM had executed agreements with 62 record labels. Table 1 lists the record companies that have signed a direct license agreement and the royalty rate that each is paid. The rates range between 5 and 7 percent of gross revenues from subscriptions to Sirius XM's satellite radio services. The most common rate is [REDACTED] which applies to [REDACTED]. Of the remaining agreements, [REDACTED] have a rate of [REDACTED] and [REDACTED] are at [REDACTED]. The average royalty rate is [REDACTED].

These direct licenses are the most appropriate benchmark for a royalty rate for the record companies that have not negotiated an agreement with Sirius XM for the following reasons.

- (1) The rights that were acquired in these transactions include the rights (sound recording performance rights for SDARS) that are at issue in this proceeding. The only difference is that the direct licenses provide other

rights that are not included in the statutory license and that are valuable to Sirius XM.

(2) The sellers in these transactions are record companies that are similar to the seller that will have their SDARS rates determined in this proceeding. These sellers could have chosen to have their rates set in this proceeding, but instead freely chose to sign a separate license with Sirius XM. Moreover, these sellers and the record companies that are represented by SoundExchange are direct competitors in the market for sound recording performance rights and in the other markets in which record companies compete.

(3) The buyer – Sirius XM – is the only provider of SDARS. Consequently, the buyer in these licenses is identical to the buyer of the rights for which a rate will be determined in this proceeding.

(4) Because the sellers of rights to Sirius XM are record companies, the rates reflect the competitive process among companies that seek to divert demand (play time on Sirius XM) from other record companies. Rates proposed or negotiated by SoundExchange do not reflect this competitive process. By delegating to SoundExchange the duty to represent them in determining a rate, whether through negotiation or regulation, a record company commits not to respond to the incentive to compete by offering a lower rate.

Because of these similarities, the direct licenses between Sirius XM and record companies provide unprecedented, compelling evidence about competitive market rates for sound recording performance rights and constitute the best available benchmarks for setting a statutory rate.

Although the direct licenses are much better benchmarks than transactions for any other

rights, the rates in the direct licenses are higher than the appropriate rate for the right that is at issue in this proceeding. As discussed in detail in the testimony of Ronald Gertz, these agreements grant additional rights, such as allowing a user to save a program for later play. These licenses also apply to multiple platforms for delivering content, such as noninteractive Internet service, service to businesses, and cable television service. These additional rights allow Sirius XM to compete more effectively with customized noninteractive Internet music services. As explained in the testimony of David Frear, these additional rights make the direct licenses more valuable to Sirius XM than the narrower rights at issue in this proceeding.

The Competitive Nature of the Direct Licenses

The record companies that signed direct licenses with Sirius XM did so voluntarily. These companies could have chosen to have their royalty rate determined in this proceeding. An incentive for a record company to sign a direct license is that a lower rate creates an inducement for Sirius XM to favor that record company in constructing its play lists. The payment to a record company is based on its proportion of sound recordings on the play list, so that a lower rate can increase total royalty payments if it leads to sufficiently more plays.

Given the incentive to create demand diversion, record companies that have negotiated license agreements with Sirius XM have agreed to a lower rate than the rate that was established for the last year of the license that emerged from the previous SDARS proceeding. In 2011 and 2012, the last two years of the current SDARS statutory license, Sirius XM pays royalties of 7.5 and 8.0 percent, respectively. The actual net proceeds to record companies and artists from the statutory license are less than these rates.¹⁷

¹⁷ The testimony of Ronald Gertz discusses in more detail why the net proceeds to rights holders

SoundExchange states that it deducts 6.9 percent of revenue for administrative costs before distributing royalty payments to record companies and artists.¹⁸ This rate is understated for two reasons. First, this deduction is expressed as a fraction of royalties collected, not of royalties paid to artists and labels. In 2010, SoundExchange had administrative costs of \$18 million, received royalty income of \$264 million, but paid out \$249 million to artists and record companies.¹⁹ Thus, administrative costs as a fraction of payout was 7.4 percent. Second, rights holders have complained that SoundExchange makes payment errors and does not pay promptly, in part because its system for allocating royalties among rights holders performs poorly.²⁰ Slow payment is costly to rights holders because of the time value of money.

For the purpose of my analysis, I assume that the deduction for administrative costs is 6.9 percent, as reported by SoundExchange. Using this assumption, the 7.5 percent statutory rate in 2011 is a net rate of 7 percent and the 8 percent rate in 2012 is a net rate of 7.45 percent. Hence, the companies that have signed direct license agreements at 7 percent have agreed to a 2012 net rate that is at most 0.55 percent below the net rate after the deduction for administration that they would have earned had they continued to operate under the statutory license.

A record company can benefit from a rate that is lower than the statutory rate if the lower

differ from the gross royalties collected by SoundExchange.

¹⁸ “SoundExchange Statement on Sirius XM Direct Licenses and the Statutory License,” October 27, 2011. at <http://soundexchange.com/2011/10/27/october-2011-soundexchange-statement-on-sirius-xm-direct-licenses-and-the-statutory-license/>.

¹⁹ Data from “SoundExchange Draft Annual Report for 2010” (no date) at http://soundexchange.com/wp-content/uploads/2011/03/2010-Annual-Report_3-30-11_PRE-AUDIT.pdf and “SoundExchange Contributes to Music Industry Growth with Highest-Ever Quarterly Distribution,” press release, October 25, 2011, at <http://soundexchange.com/2011/10/25/soundexchange-contributes-to-music-industry-growth-with-highest-ever-quarterly-distribution/>. Royalties paid are less than royalties received in part because SoundExchange distributes half of its royalty revenue directly to artists but has not located some artists who have earned royalties.

²⁰ Greg Scholl, “A Sound Exchange?” *Billboard*, September 6, 2011, p. 6.

rate induces demand diversion. The net royalty rate in 2012 from the statutory license (7.45 percent) will yield less royalties to a record company and its artists than the 7 percent direct license rate if the direct license causes Sirius XM to increase its play time by more than 6.4 percent.²¹ The increase in play time that would justify a direct license at the 7 percent rate actually is less than this because a record company and its artists also benefit from the promotional effect of play time on Sirius XM.

If a direct license calls for a rate that is lower than 7 percent, the increase in play time that is necessary to offset the lower rate is greater, but the incentive for Sirius XM to increase the play time of a record company also is greater if the rate is lower. Likewise, during the term of the next statutory license, the benefit to a record company from signing a separate agreement with Sirius XM depends on the rate that will be determined in this proceeding and the extent to which Sirius XM increases the play time for labels with lower rates. If the rate that emerges from this proceeding is higher than 8 percent, the increase in play time that makes a direct license attractive to a record company is correspondingly greater, but so is the incentive for Sirius XM to substitute recordings from companies with direct licenses for recordings from companies that operate under the statutory rate.

The Similarity of Sirius XM's Licensees to Other Record Companies

The separate licenses between Sirius XM and record companies all involve independent record labels, which raises the issue of whether the absence of a licensing agreement with any of the four major distribution companies affects the validity of these transactions as benchmarks.

²¹ Ignoring promotional benefits, the percentage increase in plays must equal the percentage decline in the royalty rate. Here the percent increase in play time is $(7.45)/(7.00) - 1 = 0.064$.

To examine this issue requires a more detailed analysis of the structure of the record industry.

The record industry consists of four components. First is a label, which contracts with artists to produce sound recordings. Most record companies, including independents, own several labels. Second is a manufacturer that makes copies (CDs, audio tapes, vinyl records, etc.) from a master recording that is supplied by the label. Independent labels contract out this function, whereas major labels typically manufacture the copies of their sound recordings. Third is a distributor, which is an entity that promotes and sells hard copies and the rights to the retail distribution of electronic copies over the Internet. Some independent labels distribute their recordings, but many acquire distribution services from the four major record companies. Fourth is music publishing, which licenses musical compositions for the purpose of making, duplicating and distributing sound recordings.

Roughly 90 percent of retail sales of sound recordings are distributed by four large, vertically integrated record companies: EMI, Sony, Warner and Universal.²² The four major record companies own many record labels. These companies also distribute many independent labels as well. In 2010, 16 independent labels produced 30 albums that were ranked among the top 200 by *Billboard*, and 11 of these labels, accounting for 25 of the top 200 albums, were distributed by one of the four major distribution companies.²³ Including independent labels that are distributed by the majors, the market shares for albums (including digital downloads) in

²² Recently Citigroup (the current owner of EMI), Universal and Sony announced that Universal will acquire EMI's sound recording business and Sony will acquire its publishing business. These acquisitions must be approved by antitrust authorities in Europe and the United States. If approved, the Universal acquisition will reduce the number of distribution companies to three. See Ethan Smith, "In EMI Split, Digital Overtones," *Wall Street Journal*, November 15, 2011, at <http://online.wsj.com/article/SB10001424052970203503204577038303658583424.html>.

²³ "2010 Year in Music," *Billboard*, December 18, 2010. Identification of independent labels was provided by Music Reports, Inc.

record distribution in 2010 were: Universal – 31 percent, Sony – 28 percent, Warner – 20 percent, EMI – 10 percent, and all other distributors combined – 10 percent.²⁴

Incentives of Majors to Compete

The high market shares of the major distribution companies do not alter the presence of an incentive to create demand diversion, which must be present to create competition in setting rates for sound recording performance rights. As with an independent record company, a major record company would find a direct license at the 7 percent rate more attractive than an industry-wide rate of 8 percent if a lower rate would cause an increase in plays of 6.4 percent. The fraction of play time that is accounted for by labels that are distributed by Universal is not known, but is likely to be less than its market share of album sales because, as reported in the testimony of Ronald Gertz, the four major record companies account for between 55 and 65 percent of all plays on Sirius XM, which is less than their 90 percent share of sales. Thus, Universal's 31 percent market share in album sales is an upper bound estimate of its share in play time on Sirius XM.

If Universal's share of play time were 31 percent, the increase in its share of play time that would be needed to offset a reduction in its net effective royalty from 7.45 percent to 7 percent is about two percentage points.²⁵ Based on data provided by Sirius XM, the channels on Sirius XM that make more than incidental use of sound recordings average 14.23 recordings per

²⁴ "The Nielsen Company & Billboard's 2010 Music Industry Report," *Business Wire*, January 6, 2011, at <http://www.businesswire.com/news/home/20110106006565/en/Nielsen-Company-Billboard%E2%80%99s-2010-Music-Industry-Report>. The shares do not add to 100 percent due to rounding.

²⁵ The required change in market share is 6.4 percent of 31 = 1.98 percent.

hour,²⁶ so that the increase in Universal plays that would be required to offset the lower rate is about one play on each music channel every 3.5 hours.²⁷ Thus, the largest distribution company does not need to expect much of a gain in play time to have an incentive to undercut the industry-wide rate. The increase in plays that the other majors would require is even smaller, falling to roughly one play per channel every eleven hours for EMI.

If all record companies seek to increase their play times by cutting their rates, most companies – perhaps all – will not experience an increase in their play shares. Instead, the lower rates give Sirius XM an incentive to play more music, such as by creating more music channels or adding more music to channels that have a mix of music and nonmusic content. The failure of most record companies to increase their market shares, combined with an increase in total use of sound recording performance rights, is the normal outcome in a competitive market. This market process serves to increase the availability of music to consumers while still providing an incentive for rights holders to produce creative products, in accordance with mandatory factor (A) of Section 801(b)(1).

If the four major distribution companies act collectively to set rates, they avoid a bidding war among them that would drive the rate to the competitive market level. Because these four companies account for 90 percent of sales of recorded music, nearly all of the benefit from a competitive rate reduction by one major distribution company must come at the expense of the other majors. SoundExchange provides the mechanism by which these four companies can collectively overcome the incentive that each has to compete with the other three on the basis of royalties for sound recording performance rights. All four major distribution companies are

²⁶ The categories of channels in this calculation are music, children's and comedy, and the calculation is explained in Appendix C.

²⁷ The required increase in plays per hour is 2 percent of $14.23 = .28$ plays per hour.

represented on the SoundExchange Board of Directors.²⁸ The ability to coordinate pricing strategies through SoundExchange explains the testimony by David Frear, the Chief Financial Officer of Sirius XM, that none of the four major distribution companies would engage Sirius XM in substantive negotiations for a direct license.

Types and Quality of Recordings

Although the independent record companies that have signed direct licenses are small compared to the four major distribution companies, the testimonies of Ronald Gertz and Steven Blatter provide several examples of popular albums, singles and artists, as well as other recordings that are played on Sirius XM channels, for which rights have been licensed through these agreements. I also have examined the sound recordings that have been licensed by these record companies to assess independently whether the rights acquired in these licenses are similar to the rights that are offered by the four major record companies.

The obvious characteristic of the four major distribution companies is their dominance in sales. The high market shares of the four major record companies reflect in part a difference between majors and independents in the scope of recordings that they offer. Sound recordings are classified into types, or genres, that are used to identify hit records within categories and types of radio stations. Genre classifications exist because radio stations, advertisers and record companies find them useful in identifying audiences and promoting products. The following is the percentage distribution of album sales (including digital downloads) among genres in 2010:²⁹

²⁸ The Board includes Jeff Harleston from Universal, Andrea Finkelstein from Sony, Tucker McGrady from Warner and Alasdair McMullan from EMI. The members of the board are listed at <http://soundexchange.com/about/people/board/>).

²⁹ Calculated from “The Nielsen Company & Billboard’s 2010 Music Industry Report” *op. cit.*

Alternative	13.7	Metal	8.3
Classical	2.3	New Age	0.4
Country	11.2	R&B	14.8
Gospel	6.2	Rap	7.0
Jazz	2.2	Rock	26.5
Latin	3.2	Soundtrack	4.2

This classification is incomplete because it does not fully reflect all types of recordings. Latin is not the only foreign genre, and many subcategories within alternative and rock, such as goth, grunge and punk, have their own specialized audiences. Also missing are traditional popular music and folk music, especially important categories into the 1970s. The list also does not include nonmusical recordings, such as comedy routines and classic radio programs. All of these excluded categories are played on channels that are offered by Sirius XM.

Unlike the four major distribution companies, independent record companies tend to specialize in genres. Table 1 shows the specializations and popular artists of each independent that has negotiated a separate license agreement with Sirius XM. The range of specialties among these companies is broad, including bluegrass, blues, Broadway shows, children's, Christian, comedy, electronic, folk, hip-hop, jazz, new age and punk as well as the most popular categories. The recordings that are offered by these companies include new releases, old releases of hit records, and rerecorded versions of old hits by the original artists.

For example, one record company that has signed a license agreement with Sirius XM at the [REDACTED] is PS Classics.³⁰ PS offers musical theatre recordings, including Broadway musicals and live concerts. For example, one PS release is *She Loves Him* by Kate Baldwin, a recording of a live concert featuring the work of lyricist Sheldon Harrick. Some PS recordings of musicals are by the original cast, such as *Sondheim on Sondheim*, or the casts of

³⁰ Information about PS is taken from <http://www.psclassics.com/>.

revival productions, such as *La Cage Aux Folles* and *A Little Night Music*. Other releases are studio recordings of musical scores, such as a 2011 version of George and Ira Gershwin's *Strike up the Band!* While not the first recording of this Broadway classic, this is the only recording of the complete original score as the musical was released in 1929.

Many PS recordings of theatrical productions compete directly with recordings of the same musical, but with a different cast, that are offered by the major record companies. A uniform industry rate administered by SoundExchange would eliminate competition between PS and the majors for play time on Sirius XM's channels that feature show tunes and live concerts.

Another company that has signed a direct license is Cleopatra Record Group, a collection of labels that receives the [REDACTED]. Cleopatra features many established artists, but also includes recordings in less popular genres such as goth, punk and metal, plus older jazz and hip-hop recordings.³¹ Among former hit singles that are available from Cleopatra are "Gangsta's Paradise" (Coolio), "Flashdance – What a Feeling" (Irene Cara) and "Total Eclipse of the Heart" (Bonnie Tyler). In addition, Cleopatra artists whose recordings are in the less widely popular alternative and metal genres include several groups that have released recordings on major labels. Thus, Cleopatra provides recordings for both specialized channels and popular music channels that are close substitutes for recordings offered by major labels.

Eardrum Records, which will receive a [REDACTED] rate, is a highly specialized label that was created when comedian George Carlin acquired Little David Records, the label that had released his comedy albums. Little David was devoted primarily to comedy albums but also featured some jazz recordings, including the Modern Jazz Quartet. After being renamed Eardrum, the label released only George Carlin records. Carlin won five Grammy awards and

³¹ Information about Cleopatra Record Group from <http://cleorecs.com/>.

was nominated for 12 more.³² Carlin accounts for four of the top 25 comedy records of all time as ranked by Amazon.com.³³ Carlin's records compete for play time on Sirius XM's comedy channels with recordings by other top comedians on labels owned by the four major companies.

These and other examples illustrate the range of recordings that have been licensed directly by Sirius XM. As a group, the recordings of the companies that have signed direct licenses with Sirius XM are representative of the type and quality of recordings that are released by a major record company.

Market Concentration

Whether the licenses between Sirius XM and independent record companies are a valid benchmark depends on whether the rates called for in these licenses reflect special market conditions that do not apply to the rates that will be set by this proceeding. In particular, a possible concern about these transactions is whether the rates between SiriusXM and record companies were determined in a competitive market. Sirius XM is the only provider of SDARS, so the issue is whether Sirius XM has monopsony power (buyer monopoly power) in the market for sound recording performance rights. In its initial response to Sirius XM's licenses with independent record companies, SoundExchange stated that Sirius XM had "monopoly power in the satellite radio marketplace."³⁴ I conclude that this assertion is incorrect. Sirius XM does not possess "monopoly power" as either a seller of SDARS or a buyer of rights.

For Sirius XM to have "monopoly power in the satellite radio marketplace" requires that

³² See <http://www.metrolyrics.com/george-carlin-awards-featured.html>.

³³ See <http://www.amazon.com/Best-comedy-albums-all-time/lm/3I6RHX5MECCNF>.

³⁴ "SoundExchange Statement on Satellite Radio Royalty Proceedings," August 11, 2011.

Sirius XM’s satellite radio services have no close competitive substitutes. As discussed below, the competitive substitutes for SDARS are terrestrial radio and Internet audio services that can be accessed on wireless devices. The issue of potential monopoly power in satellite radio was examined by the U.S. Department of Justice and the FCC in reviewing the merger of Sirius and XM. Approval from both agencies was required for the merger to go through without protracted litigation. Both agencies did not regard the merger as creating a long-term competitive problem. The Department of Justice mentioned “competitive alternative services available to consumers” and “technological change that is expected to make those alternatives increasingly attractive over time” as reasons to conclude that the merger was unlikely to harm consumers by reducing competition.³⁵ The FCC imposed a condition on the merging parties not to increase prices for three years. This condition is consistent with the emergence by 2008 of competitive wireless services that could and did become significant competitors to SDARS.

The current competitive landscape facing Sirius XM is discussed elsewhere in this testimony. That discussion explains that noninteractive Internet music services that are distributed through wireless devices are a direct competitive substitute for Sirius XM satellite radio. In July 2011, the FCC confirmed its earlier expectation that Sirius XM would not possess monopoly power by the time that the price freeze was removed. According to the FCC’s review of lifting the price freeze on Sirius XM:

³⁵ The Department of Justice stated: “Any inference of a competitive concern was further limited by the fact that a number of technology platforms are under development that are likely to offer new or improved alternatives to satellite radio. Most notable is the expected introduction within several years of next-generation wireless networks capable of streaming Internet radio to mobile devices... The likely evolution of technology played an important role in the Division’s assessment of competitive effects in the longer term...” See “Statement of the Department of Justice Antitrust Division on Its Decision to Close Its Investigation of XM Satellite Radio Holdings Inc.’s Merger with Sirius Satellite Radio Inc.,” March 24, 2008, pp. 1, 3, at http://www.justice.gov/opa/pr/2008/March/08_at_226.html.

“Although our decision rests on the lack of evidence to support extending the price cap, we note that the marketplace has evolved since the merger closed, and consumers now have additional audio entertainment choices... Indeed, it appears that since the *Merger Order* new audio services have emerged as viable consumer alternatives, including smartphone Internet streaming applications that can be used in a mobile environment such as automobiles equipped with user-friendly interfaces.”³⁶

The FCC order goes on to cite Pandora, Last.fm, Slacker, Rhapsody and iheartradio as services that compete with SDARS, and Ford, General Motors and Toyota as auto manufacturers that have introduced the capability to receive Internet streaming services in their vehicles.

Notwithstanding the implausibility of the claim by SoundExchange that Sirius XM has monopoly power in the market that includes SDARS, the relevant issue is not the intensity of competition in the output market that includes Sirius XM, but whether Sirius XM has monopsony power in sound recording performance rights. A firm that possesses monopoly power in an output market will not possess monopsony power in an input market unless all or nearly all of an input is used to produce the monopoly product.

Sound recordings are inputs to many products other than SDARS, so Sirius XM cannot possibly possess monopsony power in the market for sound recording performance rights. Sirius XM accounts for a small fraction of total revenue of record companies in the U.S. In 2010, the total revenue from sound recordings in the U.S. was \$6.85 billion, giving Sirius XM

³⁶ Federal Communications Commission, “Memorandum Opinion and Order,” MB Docket No. 07-57, July 27, 2011, p. 4.

approximately a [REDACTED] share of the total revenues of record companies.³⁷ Sirius XM does account for much of the royalty income of SoundExchange; however, that is because most digital sales arise through licenses that have been executed separately by record companies and that do not involve SoundExchange. Total revenue from digital sales in 2010 was \$3.21 billion, with Sirius XM's share roughly [REDACTED]. Even if the relevant market is restricted to just mobile, subscription and SoundExchange, sales to these sources were \$977 million. About [REDACTED] of this revenue came from Sirius XM, which is smaller than the sales shares of three of the four major distribution companies.

Finally, even if Sirius XM did enjoy monopsony power in the market that contains sound recording performance rights for SDARS, the record companies that signed license agreements could not have regarded the rates that they were offered as monopsony prices. These companies could have elected to have their rates determined in this proceeding. Thus, these record companies must regard the rates that they negotiated as more attractive to them than the outcome of this proceeding – and certainly more attractive than a monopsony rate.

Summary of Analysis of Direct Licenses

The rates in the licenses that Sirius XM has executed with record companies, which range between 5 and 7 percent, are the most appropriate benchmark for the rate to be set in this proceeding. Unlike the benchmarks that have been used in all prior proceedings before the Copyright Royalty Board, these agreements include the same rights for the same buyer from the

³⁷ All sales data are from “2010 Year-End Shipment Statistics,” Recording Industry Association of America, at <http://76.74.24.142/548C3F4C-6B6D-F702-384C-D25E2AB93610.pdf>. Royalty payments by SiriusXM to RIAA members were about [REDACTED] in 2010.

same sellers as the licenses that are at issue in this proceeding. The sound recordings that are licensed in these agreements are representative of the sound recordings that are produced and distributed by the four major record companies. The rates in these licenses reflect competition among labels for playing time on Sirius XM and do not reflect any exercise of buyer market power. As indicators of the rate that would be paid by Sirius XM in a competitive market, the rates in these licenses are, if anything, too high because these licenses include rights that are not part of the statutory license. Thus, I conclude that, while these agreements are the best available benchmark, they are too generous to rights holders as the statutory rate.

Response of Industry Organizations to Sirius XM Direct Licenses

SoundExchange and other industry organizations actively have discouraged record companies from striking separate deals with Sirius XM. The opposition of these organizations is important for two reasons. First, as discussed in the testimony of David Frear, this opposition has made negotiating direct licenses with record companies much more difficult. Second, the explanations that these organizations have given for their opposition reveal that one of their goals is to avoid market competition. Industry organizations explicitly state that the industry can expect a higher rate if it allows SoundExchange to speak for everyone and relies on regulation, rather than the competitive market, to determine the rate.

In attempting to generate support for its role in setting statutory rates, SoundExchange issued two statements in response to Sirius XM's initiative to negotiate separate licenses with individual record companies. The first statement emphasized the expectation of SoundExchange that reliance on the process of establishing a statutory rate would lead to a substantially higher rate. Although the statement did not directly refer to the separate agreements between Sirius XM

and some record companies, it did point out that evidence about market rates “may play a very significant role in the outcome.”³⁸ This message thereby not only expresses a strong preference for regulated rates but warns that privately negotiated deals between record companies and Sirius XM may have a negative effect on the rate that emanates from this proceeding.

The second SoundExchange statement reports that Sirius XM’s agent in obtaining these agreements, Music Reports Inc., attempts to license music at “the lowest possible cost.”³⁹ The statement argues for the desirability of determining Sirius XM’s rates in this proceeding, rather than through separate licenses. Again marketing its services, SoundExchange states:

“We represent everyone in the creative process – record labels and recording artists – and we spend countless hours and millions of dollars fighting for their rights. In the last satellite radio proceeding, we obtained a 300 percent increase in the rate paid by Sirius XM. MRI, by contrast, works with services, and in past rate proceedings has closely coordinated with digital music services that sought to lower rates for creators’ music.”

“SoundExchange represents thousands of artists and labels, and is governed by a Board comprised of varying interests in the industry - half representing artists and half representing labels. As a non-profit organization, we are not overseen by any particular commercial interest. Instead, we advocate the interests of all creators.”

The statements issued by SoundExchange are descriptively accurate. Buyers can be expected to try to obtain the lowest possible rates. Likewise, SoundExchange represents a very large fraction of the music industry and seeks to obtain the highest possible rates for its members in rate-making proceedings before the Copyright Royalty Board. In an unregulated market with many buyers and sellers, competition balances the conflicting objectives of buyers and sellers by

³⁸ “SoundExchange Statement on Satellite Radio Royalty Proceedings,” August 11, 2011, at <http://networkedblogs.com/lzsUu>.

³⁹ “SoundExchange Statement on Sirius XM Direct Licenses and the Statutory License,” October 27, 2011, at <http://soundexchange.com/2011/10/27/october-2011-soundexchange-statement-on-sirius-xm-direct-licenses-and-the-statutory-license/>.

producing rates that are sufficient to allow both sides of the market to prosper. But in this case, SoundExchange is not one among many competitive suppliers of rights. SoundExchange derives market power from representing nearly all of the industry. Moreover, SoundExchange's advocacy of rate regulation, rather than negotiations in the market, is inconsistent with the policy objective of minimizing the potential distorting effect of both monopoly and regulation and relying to the maximum feasible extent on unregulated rates that are negotiated in a workably competitive market.

The American Association of Independent Music (A2IM), a trade association of independent record companies, upon learning that Sirius XM and some independent record companies had signed licensing agreements, posted a news release stating:

“SoundExchange is an advocate for the highest possible royalty rates... [S]tatutory licenses insure that all music label copyrights, whether those of the major labels or those of independent labels or artists, are treated equally and paid the same rate amount for each stream (play) of that music. Under direct licenses there are cases where independents have received less than equitable rates. The authority of SoundExchange to aggressively pursue the best possible statutory rates and handle all of the administration, including processing and auditing, results in having a central group to protect Indie rights as the statutory rate is working and indie labels are benefiting from having this central voice.”⁴⁰

Again, the economic theory underlying this statement is valid. If an industry-wide group sets a uniform rate for all record companies, the result is likely to be the “best possible statutory rate” that exceeds the rates that a record company would negotiate in a competitive process. The assertion that this outcome is not equitable, however, ignores the fact that the independent labels that have signed direct licenses have done so voluntarily, expressing their preference for the rates

⁴⁰ American Association for Independent Music, “Statutory Rates versus Direct Licenses for Digital Music Streaming,” August 9, 2011, at <http://a2im.org/2011/08/09/statutory-rates-versus-direct-licenses-for-digital-music-streaming/>.

they have negotiated over the rate that will emerge from this regulatory proceeding. Thus, the preference of A2IM for a uniform rate cannot possibly be in the best interests of the record companies that freely have rejected that option.

The Recording Academy, an organization of artists and record company personnel, also has weighed in. The CEO of The Recording Academy, Neil Portnow, warned members that “Sirius/XM is seeking to bypass the standard system of paying royalties” and that “[i]f they are allowed to do so, it will likely result in substantially reduced payments to artists and producers...”⁴¹ The message tells managers of independent labels: “It is in your interest to refrain from direct licensing. While Sirius may be offering positive terms, the long-term effect of accepting a rate lower than the compulsory rate could be to reduce rates overall in the future. Creating downward pressure on the value of music may be good for Sirius/XM, but it’s bad for artists and labels.”

The American Federation of Television and Radio Artists and the American Federation of Musicians told their members to “let your labels know that you believe they should support the long-term value of music by refusing the Sirius XM offer and insisting on the statutory license administered by SoundExchange.”⁴²

The Future of Music Coalition, an organization of artists and record company personnel,

⁴¹ “An Important Message from The Recording Academy President/CEO,” October 27, 2011, at <http://www.datamusicata.com/journal/2011/10/27/another-attempt-at-an-end-run-by-corporate-greed.html>.

⁴² “AFTRA and AFM Alert Members to Sirius XM’s Anti- Artist Licensing Offer,” October 27, 2011, at <http://www.aftra.com/F9EA13E58A564945B025B525075A9C63.htm>. This press release expresses concern that under these licenses Sirius XM will pay all royalties directly to labels, whereas under the statutory license payments are made to SoundExchange which then divides the payment equally between labels and artists. In fact, under both types of agreements artists are entitled to half of the payment, and the issue here is solely which entity, a label or SoundExchange, pays an artist. The Sirius XM agreements distribute royalties to artists in the same manner that royalties are paid to artists from sales of CDs and digital downloads.

also issued a negative appraisal of Sirius XM’s direct license activity. This statement explained: “Direct licensing deals means that Sirius/XM might pay a little bit less. While this might generate some savings for Sirius/XM, it’s clearly not good for labels OR artists... If you are a label, we urge you to look closely at these deals, and remember that the statutory rate-setting process represents an opportunity for labels to work together to get the best rate possible.”⁴³ Once again, the underlying economic analysis is valid: if all record companies “work together” they will obtain “the best possible rate” because that is the expected outcome of eliminating competition among them.

The messages from these organizations are clear. Using the process for setting statutory rates is preferred to transactions in a competitive market because a regulatory process in which the industry speaks with a single voice is likely to produce higher rates. The goal of these organizations is explicitly not to seek rates that approximate the outcome of negotiations between willing buyers and willing sellers in a competitive market. All of these statements reflect the expectation that royalties for SDARS sound recording performance rights will be higher if the industry relies on regulation, rather than individual market transactions, and allows SoundExchange to present a united front in the rate-setting process.

These expectations are congruent with decades of scholarship on regulation, which concludes that the informational and political advantages of regulated firms cause the expected outcome of price regulation to be prices that exceed the competitive level. In a competitive industry these same factors regularly cause regulated prices to be higher than otherwise would be

⁴³ Kristin Thompson, “Musician’s Digital Performance Royalties at Risk,” posted at <http://futureofmusic.org/blog/2011/10/28/musicians-digital-performance-royalties-risk>. The author is Co-director of Artist Revenue Streams Project at the Future of Music Coalition.

the case.⁴⁴ Organizations that broadly represent the sound recording industry should be expected to prefer a regulatory process in which an entity that represents them all harmonizes their interests to a competitive market.

These statements reveal widespread recognition among industry personnel that the direct licensing activity of Sirius XM is likely to lead to lower rates because it leads to competition among record companies. Whereas many record companies, including the four majors, are unwilling to enter meaningful negotiations for direct licenses, these statements show that the source of this reluctance is the expectation that letting SoundExchange lead a collective effort to set a single statutory rate for the entire industry will produce more royalty income for all because SoundExchange will not respond to the competitive incentive facing each record company to compete on the basis of price in order to receive more plays. This phenomenon is precisely why the direct licenses between Sirius XM and 62 record companies are the most appropriate benchmark for this proceeding.

COMPETITIVE CONDITIONS FACING SDARS

To provide a check on the reasonableness of the rates that have been negotiated in direct licenses between Sirius XM and many record companies, I have examined publicly available information in an attempt to find other license agreements that could serve as alternative

⁴⁴ Paul L. Joskow, "Inflation and Environmental Concern: Structural Change in the Process of Public Utility Price Regulation," *Journal of Law and Economics* Vol. 17, No. 2 (October 1974), pp. 291-328; H. Stuart Burness, W. David Montgomery and James P. Quirk, "Capital Contracting and the Regulated Firm," *American Economic Review* Vol. 70, No. 3 (June 1980), pp. 342-354; Paul L. Joskow and Nancy L. Rose, "The Effects of Economic Regulation," in Richard Schmalensee and Robert Willig, *Handbook of Industrial Organization* (henceforth *Handbook*), North Holland, 1989, pp. 1449-1506; David P. Baron, "Design of Regulatory Mechanisms and Institutions," in *Handbook*, pp. 1347-1447.

benchmarks for the rates to be determined in this proceeding.

To generate other potential benchmarks, I began by analyzing the competitive conditions facing Sirius XM to identify other services that are close substitutes for satellite radio services. Except for market transactions between Sirius XM and record companies, the rates for services that are the closest competitive substitutes for SDARS provide the most appropriate benchmark for SDARS sound recording performance rights for two reasons. First, the closest competitive substitutes involve the most similar rights from the same sellers for the most similar services. Second, if two services are close competitors, a significant difference in the rates for these services, after proper adjustments for differences between them, will cause competitive disadvantage to the service with the higher rate, thereby inefficiently and unfairly distorting the distribution of sales between them. Thus, identifying the closest competitors to satellite radio services during the period that is at issue in this proceeding (2013-2017) is relevant to selecting non-distorting rates for SDARS.

Changes in Competitive Conditions since 2006

The evidence that was used in the last proceeding to determine a sound recording performance royalty rate for SDARS was submitted in 2007, and was based mainly on information pertaining to 2006 and earlier. As described in the testimony of William Rosenblatt, Mel Karmazin and James Meyer, the competitive landscape facing Sirius and XM was very different then than it is today. In 2006, the only close competitive alternative to SDARS was terrestrial radio, but today SDARS faces substantial new competition from noninteractive Internet services that are available in automobiles using wireless communications.

The similarities among SDARS and terrestrial radio are that each can be received in vehicles, offers fixed programmed schedules that users cannot influence, provides the same type of content (music, news, sports, talk, etc.), and has about the same quality of unobstructed transmissions. Notwithstanding these similarities, SDARS and terrestrial radio differ in important ways. Because SDARS is a subscription service, it could not succeed without offering some advantages in comparison with terrestrial radio and free Internet music services.

In 2006 SDARS possessed some unique advantages. One advantage of SDARS is ubiquitous portability. SDARS can be received virtually anywhere with a high-quality signal. In mountainous terrain or other areas with signal interference, reception quality of terrestrial stations often is poor, and in locations with very low population few terrestrial radio stations with good signals are available. Moreover, even where terrestrial stations are available, a consumer making a long-distance trip by automobile frequently must find a new station because the signal of nearly all stations can be received only in a relatively small geographic area.

While terrestrial radio remains the most important alternative to SDARS as a source of programmed radio services in vehicles, the competitive landscape has changed substantially since 2007. The most important change is the development of Internet-based customized programmed audio services that can be delivered to mobile wireless devices and played through a car audio system. Like SDARS, most of these services offer high-quality transmissions of numerous pre-programmed channels, sorted by musical genre. An advantage of these services is that they are delivered to each user over a dedicated connection (“narrowcast”) rather than a broadcast that is common to all potential listeners. These services take advantage of the unique connection to each user by adjusting the content of a channel to the consumer’s musical tastes, which causes the pre-programmed channels to be simply starting places for creating the play lists

that take into account a consumer's personal preferences. Some of these services are fully interactive, giving users complete control of content and allowing users to download recordings to their receiving device for repeated on-demand listening.

Long-term Technological Developments

The starting place for understanding the changes in the competitive conditions faced by Sirius XM is the rapid change that is taking place in wireless technology. The analysis to follow compares the technical and market circumstances in 2007 and 2011. The purpose of this discussion is to illustrate two important points. First, competitive conditions in the market in which Sirius XM competes today were not anticipated only four years ago, and competitive conditions near the end of the term of the next SDARS statutory license are likely to be equally unpredictable. Second, the technologies that deliver mobile audio entertainment continue to evolve extremely rapidly, and this technological progress is increasing the extent of competition among different types of content and the technologies that are used to deliver entertainment services. Thus, the competitive conditions in the audio entertainment industry a few years from now are likely to exhibit important differences from the competitive conditions that are present today. The implication for this proceeding is that regulation should seek to avoid distorting the evolution of technology and services.

In 2007, the nation's wireless carriers used 3G technology, which transmits data at a sufficiently high speed to enable the quality of music transmission over the wireless network to be as high or higher than the transmissions that can be received from terrestrial FM radio stations. Nevertheless, at the time of the last SDARS proceeding, wireless telecommunications was not used extensively for this purpose. Accessing Internet-based music services through a car

radio was technically feasible but difficult to accomplish. Within months after the last SDARS proceeding ended, the rapid deployment of new noninteractive music services for use on mobile devices, including car audio systems, had begun.

Today the wireless industry has begun another technological transformation. Wireless carriers are deploying 4G wireless technology, which can sustain data transmission rates that are adequate for transmitting video signals at the same quality as a DVD played on an expensive home entertainment center. By the time the new SDARS rate is in place, most Americans will have access to 4G service, and by the end of the period that these rates will be in force, most Americans will be using 4G service to access the Internet. As was the case with 3G service a few years ago, there is no reliable way to forecast the services that will be invented in the next few years using 4G mobile wireless technology. But major, unexpected changes in the services that are available over mobile wireless devices services are virtually certain to occur.

The rapid development of wireless telecommunications is part of three broad trends in information technology: convergence, pervasive computing, and evolution. These trends are radically changing communications services, and in the next few years are expected to bring more major changes in the technical capabilities of wireless devices and the services that they can access. Moreover, wireless communications has distinct technical advantages over broadcast technologies like terrestrial and satellite radio that are likely to be increasingly important, bringing forth more intense competition for both technologies in the future.

Convergence refers to the increasing overlap in the services that are supported by each technology for delivering communications.⁴⁵ Modern digital technology reduces all forms of

⁴⁵ The scholarly journal *Convergence* was first published in 1995. The journal's purpose and scope is described as follows: "*Convergence* is an international peer-reviewed academic journal... to address the creative, social, political and pedagogical issues raised by the advent of

communications to a bit stream – a series of ones and zeros that contain the information that a sender seeks to convey to a receiver. Because all communications take the same physical form, distinctions among communications technologies (wire-line telephony, wireless telephony, cable television, broadcasting) are becoming blurred.

Originally, each type of information, each technology for delivering information, and each end-user communications device was designed to provide a specific service in a specific format. Telephones were used for two-way voice communications. Broadcasting and cable television were used for one-way scheduled audio and visual programs. Stereos and video playback devices were used to provide user-controlled audio and visual entertainment. Books, magazines and newspapers were used to deliver text and still images.

Digital technology allows each communications segment to be used for all of these purposes. Technologies (e.g., hard-copy publications) that cannot be transformed to support multiple forms of information products are being displaced by multi-purpose technologies (e.g., tablet computers). Today there is no technical barrier to replacing a single-purpose car radio with a device that can receive both terrestrial radio stations and audio content over the Internet.

Pervasive computing refers to a circumstance in which a consumer literally always uses computers in a variety of ways that were unimaginable a decade ago.⁴⁶ Pervasive computing is a

new media technologies... Topics include: Video games * Cable and telecoms * Mobile media/content * Internet studies* Digital/new media art * Digital photography * VR * Control and censorship of the media * Copyright/intellectual property * New media policy * New media industries/institutions * New media history * New media in cross-cultural/international contexts * New media products * Digital TV * DVD * Digital music – recording, production, distribution, file formats/file sharing * Cinema..” (See <http://www.uk.sagepub.com/journals/Journal201774>)

⁴⁶ The concept of pervasive computing is generally attributed to Mark Werner at Xerox Palo Alto Research Center. See Mark Werner, “The Computer for the 21st Century,” *Scientific American* Vol. 265, No. 3 (September 1991), pp. 66-75. See also Debashis Saha and Amitava Mukherjee, “Pervasive Computing: A Paradigm for the 21st Century,” *IEEE Computer* Vol. 36,

consequence of rapid technological progress in microprocessors, video processors and memory chips. According to Moore's Law (an empirical regularity that has persisted for six decades), the amount of information that can be etched on a semiconductor of given size roughly doubles every 18 months, causing the cost per unit of capacity to fall roughly in half in that time period.

By the late 1990s, semiconductor technology had progressed sufficiently that building substantial computing capability into almost any mechanical device, including automobiles, had become inexpensive. By the mid 2000s, advances in semiconductors made wireless technology using high data transmission rates inexpensive, creating the possibility to give consumers access to affordable wireless communication. Wireless communications at high data rates allows consumers to receive high-quality audio and video entertainment on mobile devices.

Evolution refers to the transformation of communications into new services that take advantage of convergence and pervasive computing. Communications services that in the past accounted for nearly all communications – voice telephony, over-the-air broadcasting, cable television, print media – are in decline, being replaced by new Internet-based digital services and devices that were unknown a decade ago. New digital communications technology not only has caused the services offered by each delivery system to become overlapping, but has caused old services to be transformed into new services that take advantage of new technology. As a result, consumers have greater choice among an expanding array of information services.

An example of evolution arising from convergence and pervasive computing is the growing complexity of the information systems that are installed in automobiles. Services that use wireless connectivity, as exemplified by General Motor's "OnStar,"⁴⁷ initially were used for

No. 3 (March 2003), pp. 25-31.

⁴⁷ OnStar's features are described at <http://www.tech-faq.com/onstar.html>.

providing emergency services after an accident or break-down, including data from electronics in the vehicle for remote detection and diagnosis of mechanical problems. As time passed, the scope of services that are available using wireless connectivity in cars has broadened. Some automobile wireless communications systems today include GPS directional software, and in some cases consumers can use this capability not only to locate a nearby restaurant but also to call for a reservation. For purposes of this proceeding, some systems now deliver Internet-based information and entertainment services through the car audio system. The testimony of William Rosenblatt contains details about the information technologies, including audio and video entertainment systems, that already are being installed in automobiles.

As Moore's Law drives the cost of information technology lower, the range of services that will become available through the computers and wireless communications that are built into a car will continue to expand. This trend threatens single-purpose technologies such as SDARS. As more cars have built-in multiuse wireless receivers incorporated into the information system that is built in to a car, Sirius XM at best can hope to be among the services that users can access through this system, but even then SDARS will face a growing array of competitors for the time and attention of mobile consumers.

The Rise of Mobile Internet Services

As described in more detail in the testimony of Mr. Rosenblatt, a major change in the competitive landscape for SDARS since the last proceeding is the explosive growth of audio entertainment services that are accessed by portable wireless devices that can be played through the audio system in a moving vehicle. Portable digital media players (like the iPod) were available in 2006, but these devices were not close competitive substitutes for radio services

because they could not connect directly to the Internet. To use these devices, a consumer must acquire physical recordings or digital downloads, then store and catalogue these recordings on a personal computer (PC), and then create a play list and transfer it to a portable player

At the time of the last SDARS proceeding, U.S. wireless carriers had rolled out 3G digital wireless service. Originally 3G wireless provided data transmission at a peak rate of 200 kilobits per second (kbs).⁴⁸ This standard was a crucial step in developing audio programming for mobile wireless devices because it allowed audio services to equal or surpass the quality of SDARS and FM radio. Today, U.S. wireless carriers employ 3G wireless technologies that are capable of sustained bit rates of more than a megabit per second (mbs) and are in the process of upgrading their networks to 4G technology.⁴⁹ 4G service can sustain substantially higher data speeds, thereby making mobile wireless devices capable of receiving video transmissions that are comparable to DVDs and high-definition cable television. Wireless carriers plan to make 4G available to roughly 90 percent of the population by 2013.⁵⁰

On June 29, 2007, just before rebuttal testimony in the previous proceeding was submitted, Apple introduced the iPhone,⁵¹ and on September 5, 2007, the iPod touch was introduced.⁵² These were the first affordable, widely accepted portable devices that could access

⁴⁸ See James Martin, "Mobile Computing: The Newest Wireless Technology," *PC World*, November 14, 2002, at http://www.pcworld.com/article/106149/mobile_computing_the_newest_wireless_technology.html.

⁴⁹ Federal Communications Commission, *Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, June 24, 2011, pp. 72-78 (henceforth *Mobile Wireless Report*).

⁵⁰ *Ibid.*, pp. 73-74.

⁵¹ "iPhone Premieres this Friday Night at Apple Retail Store," press release, June 28, 2007, at <http://www.apple.com/pr/library/2007/06/28iPhone-Premieres-This-Friday-Night-at-Apple-Retail-Stores.html>.

⁵² "Apple Unveils iPod touch", press release, September 5, 2007, at <http://www.apple.com/pr/>

sound recordings directly over the Internet. These devices could receive digital downloads of sound recordings from Apple's iTunes Store. The use of portable wireless devices to obtain high-quality noninteractive programmed audio content was developed after these devices were released. Technological progress and competition in wireless networks and devices drove prices down while improving the range and quality of wireless services.

The availability of new services over mobile wireless devices dramatically increased the use of wireless communications. The most recent report on the wireless industry by the FCC contains extensive information about the penetration of high-speed data services over wireless devices.⁵³ Surveys report that the fraction of consumers who owned smartphones grew from roughly 20 percent in July 2007 to roughly 42 percent in December 2009. The total number of mobile devices in use that were capable of receiving data at 200 kilobits per second (kbs) or more rose from 86 million at the end of 2008 to 116 million a year later. Because the FCC modified its reporting requirements in 2008, older data are not strictly comparable, but the reported number of devices in use that were capable of high data speeds was 22 million at the end of 2006 and 51 million at the end of 2007. Surveys of mobile telephone subscribers found that the fraction that use their cell phones to access the Internet rose from 19 percent in December 2007 to 38 percent by May 2010. The number of mobile telephone users who subscribe to Internet access service rose from 26.5 million at the end of 2008 to 55.8 million at the end of 2009.

The FCC data are more than a year out of date, but more recent reports by industry analysts indicate that the use of mobile wireless devices to access the Internet is still growing

library/2007/09/05Apple-Unveils-iPod-touch.html.

⁵³ FCC, *Mobile Wireless Report, op. cit.*, pp. 8-10, 95-102. The data series in this report end sometime between December 2009 and June 2010.

rapidly. Recent Nielsen survey data indicate that by July 2011 smartphones accounted for 40 percent of all mobile telephones.⁵⁴ An analysis by eMarketer estimated that in 2011 97.3 million U.S. mobile communications subscribers access the Internet using their mobile phone at least once a month, and forecast that this number will grow to 127.9 million by 2013.⁵⁵ Mobile Internet use is heaviest among young adults (ages 18-34). Another industry analysis by IDC forecasts that Internet use using wireless devices will grow at 16.6 percent per year until, by 2015, the majority of Internet use will be through wireless devices.⁵⁶

While the preceding data pertain to the general use of the Internet, using mobile wireless devices for audio entertainment has increased dramatically since 2007. The testimony of Mr. Rosenblatt provides evidence that in 2011 approximately 35 million Americans use a smartphone to listen to music, which exceeds the number of subscribers to Sirius XM satellite radio services. Mr. Rosenblatt cites other evidence that shows that the number of people who listen to Sirius XM in cars is comparable to the number in cars who listen to either Internet streaming services or Internet distribution of terrestrial radio stations.

The most popular Internet-based service for delivering music to mobile wireless devices is Pandora.⁵⁷ The company began by organizing the Music Genome Project, which created a

⁵⁴ “Study: Smartphone Penetration hits 40% of Overall U.S. Mobile Market,” *Intomobile*, September 1, 2011, at <http://www.intomobile.com/2011/09/01/study-smartphone-penetration-hits-40-of-overall-u-s-mobile-market/>.

⁵⁵ “Two in Five Mobile Owners Use Internet on the Go,” *eMarketer*, August 24, 2011, at <http://www.emarketer.com/Article.aspx?R=1008553>.

⁵⁶ Todd Hasselton, “U.S. to Use Mobile Internet More than Wireline by 2015, IDC Says,” *BGR Innovation*, September 12, 2011, at <http://www.bgr.com/2011/09/12/u-s-to-use-mobile-internet-more-than-wireline-by-2015-idc-says/>.

⁵⁷ Claire Cain Miller, “How Pandora Slipped Past the Junkyard,” *New York Times*, March 7, 2010, at <http://www.nytimes.com/2010/03/08/technology/08pandora.html>.

method for categorizing musical recordings. Pandora used this method to develop software that could learn a user's musical tastes from the user's listening choices to create a noninteractive music channel to reflect these tastes.⁵⁸ Pandora first used its customization software in a music service that was delivered to PCs over the Internet. In 2008 Pandora released an application that enabled consumers to access this music service using an iPhone, thereby extending customized noninteractive music service to mobile devices.⁵⁹

As of July 2011, Pandora had 36 million active users and 3.6 percent of the U.S. radio audience.⁶⁰ All Internet radio services collectively account for about 6 percent of the total radio audience.⁶¹ Most use of Pandora is on mobile devices. Pandora estimates that mobile wireless users accounted for 50.5 percent of its listener hours in 2011, compared to 4.6 percent in 2009.⁶² The testimony of Mr. Rosenblatt provides evidence that in the third quarter of 2011, roughly 11 million people in the U.S. listen to Pandora in their vehicles, up from 6.3 million a year earlier.

The most recent survey data show that in July 2011 the audience in cars for Pandora and other Internet streaming service exceeded the audience of Sirius XM.⁶³ In this survey 8 percent of respondents listened to Sirius XM in their car. The total audience rating in cars for Internet services was 12 percent, consisting of 6 percent for Pandora, 4 percent for Internet streams of

⁵⁸ Pandora Media Inc., *Form S-1: Registration Statement*, February 11, 2011, p. 1.

⁵⁹ *Ibid.*, p. 44.

⁶⁰ Pandora news release, "Pandora Announces Listener Milestones," July 12, 2011, available at: http://blog.pandora.com/archives/press/2011/07/pandora_announc_1.html. Active users are registered users who accessed a Pandora service in the last month.

⁶¹ "Pandora Media, Inc.," *Equity Research*, Wells Fargo Securities, July 25, 2011.

⁶² Pandora Media Inc., *Form 10-Q* for Quarter Ended July 31, 2011, September 2, 2011, p. 33.

⁶³ *The Road Ahead: Media and Entertainment in the Car*, Arbitron/Edison Research/Scarborough Research, September 2011, at <http://www.slideshare.net/webby2001/the-road-ahead-in-car-entertainment-2011-from-edison-research>.

terrestrial radio stations, and 2 percent for other Internet streaming services.

These figures actually understate the edge of Internet music services over satellite radio. Almost half of the content on satellite radio makes little or no use of sound recordings, while the content of Pandora and other Internet music service is almost entirely sound recordings. Thus, the conclusion to be drawn from this analysis is that Internet music services now have a much larger audience in cars than the audience in cars for music on Sirius XM. Moreover, Internet services are growing rapidly, and are likely to benefit from continued progress in the capabilities of wireless networks, devices and services that will accompany the move to 4G technology. Thus, the competitive landscape facing Sirius XM includes important new competitors that were not present in 2007 and that will be even more important during the next SDARS license period.

IMPLICATIONS OF COMPETITIVE ENVIRONMENT FOR THE SDARS RATE

In the previous SDARS proceeding market-determined rates for noninteractive audio services that are comparable to the music channels on SDARS were not offered as potential benchmarks. Instead, the SDARS rates that were set in 2007 were influenced by the rate for interactive (on-demand) Internet music service, adjusted for interactivity by the relationship between interactive and noninteractive rates for Internet video services.

Today many widely used services are much more similar to Sirius XM (indeed, they are direct competitive substitutes) than the services that were examined in setting SDARS rates in the prior proceeding. The significance of the trends in the size and growth of noninteractive Internet music services is that many widely used services now provide a similar ubiquitously available mobile delivery system as SDARS and offer the same type of content as the channels on satellite radio that feature performances of sound recordings. To avoid distorting the outcome

of the competition between Sirius XM and noninteractive Internet music services, the statutory rates for sound recording performance rights, after proper adjustments for differences in these services, must not differ substantially between them. In this section I identify the noninteractive audio services that are most like Sirius XM and use publicly available information about one service, offered by Last.fm, to determine a royalty rate for Sirius XM that is competitively neutral with respect to these services. I find that the SDARS royalty rate that is implied by this benchmark is within the range of the rates that have been negotiated between Sirius XM and independent record companies. Hence, the rate based on the Last.fm service that is most like the music component of satellite radio services corroborates my conclusion that the direct licenses provide a reasonable benchmark for the SDARS rate.

I use a five-step procedure to establish the rate for SDARS that is implied by the rate paid by a noninteractive Internet audio services. This procedure includes adjustments to the royalty rate for the benchmark service to take into account some but not all of the important differences between satellite radio and Internet-based streaming music services that are available over mobile wireless devices. The five steps are as follows.

Step 1: identify Internet services that are most like satellite radio services. Because noninteractive Internet audio services devote all or nearly all of their channels to music, the appropriate comparison is between noninteractive Internet music services and the component of satellite radio services that is devoted to music.

Step 2: find a royalty rate that is the product of negotiations in a competitive market and that can be used as evidence in this proceeding. Because a competitive market requires multiple sellers, the rate must be negotiated between the service provider and a record company, not SoundExchange.

Step 3: calculate the implicit price of the music channels that are offered by Sirius XM, which is the price to which the royalty rates for music services should apply.

Step 4: multiply the rate in Step 2 by the price in Step 3, which yields the per-user royalty payment by Sirius XM that is comparable to the royalty payments by a benchmark Internet music service.

Step 5: calculate the ratio of the proper royalty payment from Sirius XM from Step 4 to the average revenue per user for satellite radio services, which is the appropriate royalty rate on gross revenues for SDARS services.

Step One: Identify the Competitors

The testimony of William Rosenblatt describes numerous Internet music services that can be accessed using mobile wireless devices. These services differ substantially in the nature of the services that they offer, ranging from fully interactive on demand services to noninteractive streaming music services that offer little or no customization. Because satellite radio services do not involve two-way communications, these services are not customized. Hence the Internet services that are most similar to satellite radio are the least customized Internet services, which includes simulcasts of terrestrial radio, webcasters, and streaming Internet music services.

Another difference among music services that are available over mobile devices is their source of revenue. Most audio entertainment services that are available through mobile wireless devices derive their revenue primarily by selling advertising and other products. Music channels on Sirius XM have no advertising and are part of a subscription service. Some noninteractive Internet streaming services offer a subscription services that is free of advertising. Prominent examples of Internet services that offer a noninteractive subscription service are Last.fm,

Live365, Pandora and Slacker. Noninteractive Internet subscription services are a much closer substitute for SDARS than either interactive on-demand Internet services or video services, but some important differences remain and must be taken into account when using noninteractive Internet services as a benchmark for SDARS. Noninteractive Internet subscription services are not strictly comparable to SDARS because the former offer more channels that feature sound recordings, allow some user control of content, and transmit at higher data speeds.

For example, the least interactive subscription services on Last.fm, Pandora and Slacker allow users to influence the content of the channels that are delivered to them by indicating their likes and dislikes among artists, songs, and characteristics of the music. The least interactive subscription service on Slacker allows users to save programming for later listening. Live365 does not have customization, but it also does not actually program the channels that it offers. Instead, Live365 is a platform that aggregates channels that are programmed by others, including terrestrial radio stations and webcasters.⁶⁴

Comparing the range of entertainment options available on noninteractive Internet services and satellite radio is complicated because customization greatly increases the number of options that are available to consumers. Typically noninteractive Internet services offer users the opportunity to create personalized channels, subject to limitations on the number and scope of recordings that can be included on the channel and the frequency with which a recording can be played. These services also typically offer pre-programmed channels that can be used as starting places for users who do not want to go the trouble of creating a personalized channel from

⁶⁴ In his *Webcaster III* testimony, Dr. Pelcovits cited other noninteractive subscription services: Sky.fm, DI.fm and Musicoverly. Sky.fm appears to be a platform that aggregates channels that are programmed by others, like Live365. DI appears to specialize in electronic music. Musicoverly appears to provide a substantial degree of customization in its subscription service.

scratch. Thus, the only feasible way to compare the content choices available on satellite radio and noninteractive Internet services is to compare the number of channels on Sirius XM with the number of pre-programmed channels on a noninteractive Internet service.

Using this approach, the least customized noninteractive subscription Internet music services generally offer many more channels than the number of Sirius XM channels that feature sound recordings. Pandora and Slacker have more than twice as many, and Last.fm and Live365 have so many channels that I have been unable to determine the number, although it is in the thousands. Last.fm and Live 365 have no pre-programmed channels, serving only as platforms for channels that others have created. A new user on Last.fm, Pandora or Slacker can begin by entering the name of a channel that already has been created or by creating a personalized channel by listing a genre, some artists and some specific recordings.

Another difference among services is the quality of the transmission. From the user's perspective, the quality of an audio signal depends on the complexity of the signal, the method for coding the music as a digital transmission, and the bit rate – that is, the rate at which information is transmitted to the user's receiver, which normally is measured in kilobits per second (kbs). Typically the least complex transmissions are nonmusic channels featuring talk with no other sound effects, while the most complex transmission are music channels featuring recordings with many instruments and complex scores. Sirius XM can assign channels bit rates in increments of about 4 kilobits per second (kbs), and its channels vary in bit rates up to a maximum of 48 kbs. Lower rates are used for talk channels and the highest rates for the channels with the most complex music.

Noninteractive Internet subscription music services like Last.fm, Pandora and Slacker have maximum bit rates from 128 kbs to 192 kbs, which are substantially greater than the

maximum on Sirius XM. Customers who buy high-speed data services from a mobile wireless carrier obtain maximum bit rates that exceed the transmission rates of noninteractive Internet subscription music services. Thus, customers of mobile audio services can receive higher quality transmissions than the signals from Sirius XM.

Because the Internet services that are most like the music channels on Sirius XM have higher data speeds and more customization, I conclude that subscription Internet services are more valuable to consumers than the music channels on satellite radio. Hence, rates for sound recording performance rights that are negotiated between record companies and noninteractive Internet subscription services exceed the appropriate rate for SDARS if they are not adjusted for customization and the quality of the transmission.

Step Two: Royalty Rates for Competitive Services

The royalty rates that are paid by noninteractive Internet subscriptions services are either statutory rates set by the Copyright Royalty Judges or, in a few cases, rates in negotiated agreements. Pandora pays the “pureplay” rate that was negotiated with SoundExchange under the provisions of the Webcaster Settlement Act (WSA). The WSA states that settlements under the act cannot be used as a precedent in a statutory rate proceeding unless the parties to the agreement otherwise stipulate. This provision applies to pureplay rates, including the rates for Pandora and Sirius XM’s Internet service. While this provision may have encouraged settlements, it also has the perverse effect of allowing SoundExchange to permit only the highest rate to be used as a precedent in this proceeding. Selective use of negotiated rates causes an upward bias in the rates that can be used as benchmarks in this proceeding.

Outside the context of the WSA, I am aware of only two negotiated rates for

noninteractive Internet music services that are publicly available. These rates were negotiated in early 2007 by Warner Music with Last.fm and Slacker.⁶⁵ These licenses are attached as Appendices E (Last.fm) and F (Slacker). Table 2 summarizes the terms of these licenses. The Last.fm license was effective as of February 1, 2007, expired on December 31, 2007, and was renewable on a month-to-month basis thereafter. The Slacker license was effective as of April 17, 2007, expired 15 months later, and was renewable thereafter on a monthly basis. The only information that is publicly available about the subsequent fate of these agreements is the testimony of Dr. Pelcovits in *Webcaster III*, who simply notes that these agreements were replaced in 2008.

Both of these agreements cover four service tiers, ranging from a free, advertiser-supported noninteractive service to an interactive, on-demand service. The services that are most similar to SDARS are Tier 4 for Last.fm and Tier 2 for Slacker. Last.fm's Tier 4 service lets customers create customized channels, but customers cannot use these channels as an on-demand service, cannot create a channel using the recordings of only one artist, cannot play the same song more often than once every 90 minutes, and cannot replay or record a song or fast forward through the channel program, although a customer is allowed to skip songs. Tier 2 in the Slacker agreement does not impose as many limitations as Last.fm's Tier 4.

Because the Last.fm agreement pertaining to Tier 4 is more restrictive with respect to saving streams and customizing channels, satellite radio is more like Last.fm's Tier 4 than

⁶⁵ Exhibits to Proposed Findings of Live365, Inc., http://www.loc.gov/crb/proceedings/2009-1/pffcol/live365_exhibits.pdf. The Warner-Last.fm agreement refers to all four Last.fm service tiers as "interactive," even though the tiers vary widely in terms of how much interactivity they allow and only Tier 1 allows for full on-demand streaming. At the time this agreement was signed, the extent of customization that would cause a service to be classified as interactive was uncertain.

Slacker Tier 2. Moreover, Last.fm currently offers a service that is very similar to Tier 4 in its agreement, while Slacker does not now offer the Tier 2 service as described in its agreement.

Thus, Last.fm Tier 4 is more appropriate as a benchmark for the SDARS statutory rate.

The rate for Last.fm Tier 4 is the maximum of 25 percent of subscriber payments, \$0.50 per subscriber per month, or \$0.001 per play per user. The monthly subscription fee for this service is \$3.00, so that the 25 percent rate implies a payment of \$0.75 per subscriber per month. The \$0.50 minimum payment is less than this amount and implies a royalty rate of 16.7 percent per month. The royalty that would be derived from the per play rate is unknown because the number of plays per subscriber per month for Last.fm Tier 4 is unknown. In testimony on behalf of SoundExchange in the *Webcaster III* proceeding, Dr. Pelcovits estimated that the average number of plays per month for a webcaster was 563. This estimate implies a monthly payment based on the per play rate of \$0.563 per subscriber, which also is less than the payment that is required by the 25 percent rate. Thus, the best estimate of the royalty rate for Last.fm's Tier 4 is 25 percent of revenue, yielding payments of 75 cents per subscriber per month.⁶⁶

The estimated effective Last.fm rate (25 percent) exceeds the appropriate benchmark for SDARS because Last.fm Tier 4 is customized and is transmitted at a higher data rate. As shown by the differences among the tiers in both the Last.fm and Slacker licenses, the extent of customization substantially affects the royalty rate. Because no royalty rates for non-customized services with less customization and lower bit rates that emanated from a competitive market are available for use in this proceeding, there is no empirical basis for adjusting the Last.fm Tier 4

⁶⁶ The Last.fm agreement also has a 50 percent royalty on advertising and merchandise sales. Whether Warner's royalties from these sources are significant is unknown. Because Sirius XM does not generate revenue in this way from music channels, these provisions would not produce additional royalties if applied to Sirius XM.

rate downward to account for these features. Thus, 75 cents per subscriber per month for Last.fm exceeds the true competitive payment for SDARS by an unknown amount.

Step Three: The Implicit Market Price for Sirius XM's Music Channel

The average monthly revenue per subscriber for Sirius XM's satellite radio services was \$11.38 in 2010.⁶⁷ This fee applies to a bundle of products: access to broadcasts of performances of sound recordings, access to broadcasts of other content (news, sports, talk, dramatic performances, etc.), and use of a unique system for delivering broadcast content to a vehicle. The price of this bundle is the sum of implicit prices of the components.

Applying the willing buyer, willing seller method, the appropriate price of a component of satellite radio services is the price that would emerge from interactions among willing buyers and willing sellers in a competitive market for that component. In a competitive market, the implicit price of accessing performances of sound recordings on advertising-free channels over satellite radio cannot deviate substantially from the price of accessing the same content through a close substitute, which in this case is a noninteractive Internet subscription service that can be accessed in vehicles through mobile wireless devices. Thus, the best benchmark for the price of the musical component of satellite radio services is the competitive market price of a comparable noninteractive Internet subscription service. Of course, because no noninteractive subscription Internet music service is exactly the same as the music channels on Sirius XM, some adjustments in these prices are necessary to provide the most accurate estimate of the implicit price of music channels on satellite radio.

⁶⁷ Calculated from the Sirius XM 10-K for year ended 12/31/2010, p. 46. This ARPU does not include advertising revenue and purchase price adjustments. The daily average number of subscribers in 2010 was 19.4 million.

Application of Section 801(b)(1) factor (C) provides another approach to estimate the implicit price of performances of sound recordings on satellite radio. Factor (C) requires that rates take into account the relative contributions of rights holders and rights users to the product for which a royalty rate is to be determined. The unique contributions of Sirius XM to satellite radio services are content other than performances of sound recordings and investments by Sirius XM in the system for delivering satellite radio broadcasts to the vehicle.

As explained in the testimony submitted by David Frear, Mel Karmazin and James Meyer, Sirius XM pays for the satellites, ground stations and terrestrial repeater network that transmit its broadcasts to vehicles. Sirius XM also pays part of the cost of the satellite radio receivers that are installed in new automobiles by automobile manufacturers. For Internet services that are accessed using mobile wireless devices, customers pay entities other than the Internet music service for their wireless telecommunications services and reception devices. Satellite radio competes with noninteractive Internet subscription music services. The total cost of the transmission, delivery and content of two competing pathways for delivering content cannot differ substantially because, if they did, the more expensive pathway could not survive. One way to take into account factor (C) is to determine the cost per subscriber of the components of satellite radio service other than performances of sound recordings and to subtract these costs from the average revenue per user, yielding the portion of the payment that is attributable to performances of sound recordings.

The foregoing analysis implies that the implicit market value of the music on Sirius XM to which the benchmark rates from the preceding section should be applied can be determined in three ways. The first is to use the subscriber fees for subscription Internet music services that are widely used and similar to satellite radio services, which are competitive market prices between

willing buyers (consumers) and willing sellers (vendors of noninteractive Internet services). The second is to use direct information about the value of music to satellite radio customers from the survey that was conducted by Professor Hauser, which also is the price that willing buyers state that they would pay. The third is to apply 801(b)(1) factor (C) pertaining to the relative contributions of Sirius XM and musical performances by allocating the revenues of satellite radio services among unique system costs of satellite delivery, content from sound recordings, and other content. This section applies all three approaches, and finds that they produce very similar estimates of the implicit price of music on satellite radio.

Subscription Fees for Competitive Services

Using the first approach, the monthly price of Last.fm's least customized noninteractive subscription service is \$3.00.⁶⁸ Among noninteractive Internet music services, Pandora is the most important because it accounts for 60 percent of the audience for all noninteractive Internet services and has an audience in vehicles that is comparable to the music audience of Sirius XM. Pandora also charges \$3.00 per subscriber per month for its advertising-free subscription service.

As discussed elsewhere in this testimony, Last.fm and Pandora provide subscription music services that have features that are not available on satellite radio services and that, as a result, cause the value of these services to consumers to exceed the value of music channels on satellite radio. In addition to customization and more channels, these services also deliver music at higher bit rates than SDARS channels. Thus, I conclude that \$3.00 per month exceeds the implicit competitive market price for the music channels on Sirius XM services.

⁶⁸ By comparison, the monthly fee for the Slacker Tier 2 service was \$3.99. The difference between these prices illustrates the higher value of greater customization.

Survey Valuations of Music

The second approach for determining the implicit price of music on satellite radio is to use the survey by Professor Hauser that was undertaken in September 2011. Professor Hauser's main result is that consumers would be willing to pay 25.7 percent per month less than they currently pay for satellite radio service if music channels were discontinued. The actual average revenue per subscriber from Sirius XM satellite services is \$11.38, so the implied average value of music on satellite radio is \$2.93.⁶⁹

The survey asked specifically about music, so the responses do not include the value to subscribers of channels that play comedy recordings. The average number of comedy channels on Sirius XM's satellite radio subscription packages is 5.83 percent of the number of music channels.⁷⁰ Thus, an upward adjustment to the value of music channels is necessary to obtain an implicit price for all channels that feature sound recordings.⁷¹ Assuming that the per-channel value of comedy is the same as music, the adjusted implicit price for sound recordings on

⁶⁹ The value of music to survey respondents was \$3.24, but the average monthly payment for satellite radio services among Professor Hauser's subjects was \$12.60 per month because the survey included only paying subscribers, not subscribers who were still in the free trial period. The survey was limited to paying customers because of the difficulty of deriving reliable responses about the value of a service from customers who have not paid for it or even decided to subscribe. Because a substantial fraction of users do not subscribe to satellite radio service, \$3.24 overstates the value of music to all users.

⁷⁰ Among Sirius XM's six most popular satellite radio packages (accounting of 98 percent of Sirius XM's subscribers), Sirius Select and Sirius Premier have 73 music (including children's) channels and 4 comedy channels, XM Select and XM Premier have 79 music channels and 5 comedy channels, and Sirius Mostly Music and XM Mostly Music both have no comedy channels. The average ratio of comedy channels to music/children's channels is 5.83% across the six packages, weighted by the number of subscribers to each service.

⁷¹ No similar adjustment is necessary for the \$3.00 price for Last.fm and Pandora because both of these services include comedy sound recordings.

satellite radio is \$3.10.⁷² Thus, the estimated value of channels that feature sound recordings from the survey is quite close to the prices for the noninteractive Internet subscription music services that are the closest competitors to Sirius XM.

An alternative method for determining the implicit price for music plus comedy is to allocate the value from the survey of comedy, talk and other non-music entertainment channels that is attributable to comedy. Comedy accounts for 15.58 percent of the channels in this category, and the category as a whole is valued by consumers at 11.59 percent of the price of the service.⁷³ These numbers yield an implied value of the comedy channels of \$0.21.⁷⁴ Thus, the total value of channels that feature sound recordings is $\$.2.92 + \$0.21 = \$3.13$.

Value of Unique Contributions by Sirius XM

The third approach is to implement Section 801(b)(1) factor (C) pertaining to the relative contributions of rights holders and rights users to the value of the service. As discussed above, one method to implement this factor is to calculate the costs of inputs to the satellite radio service that are necessary for satellite delivery, to deduct these costs from the gross revenues from satellite radio services, and to allocate the revenue that remains between music and nonmusic content. Table 3 shows the annualized costs in 2010 of the unique inputs that are used to transmit and deliver satellite radio services to vehicles.⁷⁵ The validity of these estimates of the unique costs of satellite radio services is confirmed in the testimony of David Frear. The unique

⁷² Calculated as $(1.0583) \times (\$2.93)$.

⁷³ Survey respondents placed a value of \$1.46 on these channels, which is 11.59 percent of the average amount paid by survey respondents of \$12.60.

⁷⁴ Calculated as $(.1558) \times (.1159) \times (\$11.38)$.

⁷⁵ Appendix D contains detailed information about the construction of the cost data that are reported in Table 3.

annualized cost of SDARS in 2010 was \$1.02 billion. The average number of satellite radio subscribers in 2010 was 19.4 million, so that the average cost per user of the unique inputs to satellite radio service was \$4.38 per month.

Most of the unique costs of satellite services are capital costs, and the data in Table 3 include annual depreciation and amortization of investments that are strictly for the purpose of providing satellite services. Depreciation and amortization are derived from only the direct costs of the investments that are unique to providing SDARS. From an economic perspective, the proper way to measure investment costs is to include the financial cost of capital. The above calculation does not include any return on these capital investments and as such underestimates the unique contribution of Sirius XM to investments in SDARS.

The *Webcaster III* decision states that the cost that must be recovered by a licensee need not include a return on investment.⁷⁶ This exclusion is valid if the appropriate test is whether a service provider can survive in the short run by recovering its variable costs while making no additional capital investments. This standard is not meaningful for SDARS. Sirius XM continuously must invest in new satellite radios that are installed in automobiles. If a firm cannot recover the financial cost of capital for serving new customers, the company will stop adding them. Because ownership of new cars (and hence subscribership to satellite radio services by new car owners) lasts for only a few years, a subscriber must obtain a satellite receiver with a new car to continue to receive service. Setting an SDARS rate that excludes the financial cost of incremental capital investments assures that SDARS will disappear within a few years after most of its subscribers buy new cars. For this reason, a rate that does not allow Sirius XM to recover the financial cost of capital for forward-looking investments is not consistent with

⁷⁶ *Webcaster III*, *op. cit.*, p. 13028.

mandatory 801(b)(1) factor (C) concerning relative contributions, factor (D) concerning disruption, and, because it would cause disruption, factor (A) concerning availability.

If the financial cost of investments that are unique to SDARS is included, the cost per subscriber of unique investments in SDARS is substantially higher. In the previous SDARS proceeding, Dr. Pelcovits estimated that the appropriate rate of return for capital investment for SDARS was 16.7 percent. I adopted his conclusion in my rebuttal testimony in the same proceeding. If a return of 16.7 percent is added to the unique forward-looking investments of Sirius XM, the capital cost per subscriber is \$5.11.

This calculation underestimates the unique costs of SDARS because it ignores certain start-up costs that were experienced by SDARS as necessary for entering the industry. First, this calculation ignores research and development that was necessary to create a commercially viable SDARS technology. Second, this calculation ignores the costs of participating in proceedings before the FCC that led the Commission to authorize SDARS service. Third, this calculation ignores the cash flow losses from operations in the early years of SDARS which were necessary to build customer acceptance and to achieve sufficient scale to cover the fixed cost of the satellite distribution system.

In the previous SDARS proceeding I estimated the cumulative cost of these unique aspects of SDARS service, including the financial cost of capital, in my rebuttal testimony.⁷⁷ I concluded that the annualized cost was \$1.22 billion per year, which would be \$5.25 per user per month in 2010. The testimony of David Frear reports that the cumulative operating loss of Sirius XM is \$8 billion. Again using 16.7 percent as the financial cost of capital, the operating profit

⁷⁷ *Rebuttal Testimony of Roger G. Noll*, “Adjustment of Rates and Terms for Preexisting Subscription and Satellite Digital Audio Radio Services,” July 17, 2007, p. 37.

that is necessary to obtain a competitive return on these losses is \$1.34 billion per year, which amounts to \$5.74 per user per month in 2010. These calculations demonstrate that there is no danger that the statutory rate for SDARS runs any risk of overcompensating Sirius XM for its unique contributions to satellite radio service. Thus, the fair return on the start-up costs of Sirius XM is comparable in magnitude to the forward-looking unique costs of the unique contributions of Sirius XM in its satellite distribution system.

To derive an implicit value of music, I do not include a fair return on start-up costs. Instead, I use only the calculations pertaining to the forward-looking investment costs of continuing satellite radio services. The calculation that the unique forward-looking costs of SDARS are \$5.11 per subscriber per month implies that the remaining \$6.27 should be attributed to content and allocated between performances of sound recordings and other content.

One method for allocating the share of revenue due to content is on the basis of the amount of each type of content that is offered. As shown in Table 4, channels based primarily on sound recordings, weighted by the number of subscribers to each Sirius XM package, account for 55.1 percent of satellite radio service.⁷⁸ Multiplying \$6.27 (monthly average revenue per subscriber for content) by 55.1 percent produces an implied value for sound recordings of \$3.45.

Summary of Price Calculations

The preceding calculations of the market price of the sound recording component of SDARS produce broadly similar results: the implicit price of sound recordings on satellite radio services is between \$3.00 and \$3.45 per subscriber per month. The most reliable estimate is \$3.00 because that is the price of the closest competitors to the sound recording component of

⁷⁸ Appendix C describes in detail the calculation reported in Table 4.

SDARS. Moreover, all of these estimates are too high because they ignore factors that ought to be taken into account, regardless of whether the approach to rate-setting is the willing buyer, willing seller method or the mandatory rate factors in Section 801(b)(1).

Step Four: Calculate the Appropriate Royalty Payment

In Step Two, I concluded that the most appropriate benchmark rate is 25 percent of the revenue that is derived from services that feature sound recordings, which is the rate in the Last.fm agreement for the subscription service that has the least customization. In Step Three, I concluded that the most appropriate implicit price for the satellite radio channels that feature sound recordings is at most \$3.00, with the alternative estimates being \$3.10, \$3.13, and \$3.45. The royalty payment is calculated by multiplying each of these implicit prices by 25 percent. The payments associated with the most appropriate price of \$3.00 is \$0.75. The royalties associated with the other estimates are \$0.78 for the prices of \$3.10 and \$3.13, and \$0.86 for a price of \$3.45.

Step Five: Calculate the Appropriate SDARS Rate

The final step in determining the SDARS royalty rate from the preceding calculations is to express the monthly royalty per subscriber as a fraction of average subscription revenue. Sirius XM's average monthly subscription revenue per subscriber in 2010 was \$11.38, so the rate implied by a price of \$3.00 for sound recording performance rights is $\$0.75/\11.38 , or 6.59 percent. For the other prices, the implied rates are 6.85 percent (for a royalty of \$0.78 and a price of \$3.10 or \$3.13) and 7.56 percent (for a royalty of \$0.86 and a price of \$3.45).

The preceding calculations support the conclusion that the rates in the direct licenses

between Sirius XM and record companies are reliable indicators of the rate that would emerge from a competitive, unregulated market.

Adjustments Over Time

Previous decisions of the Copyright Royalty Board have adopted royalty schedules that rise through the term of the license. Increasing rates may be appropriate under two conditions. The first is to take into account inflation and the second is to avoid a conflict with the mandatory Section 801(b)(1) factor (D) concerning disruption of the industry by allowing a temporary rate below the rate that would emerge in a competitive market. I do not believe that these considerations are relevant in this proceeding, so I conclude that the SDARS rate should not differ over the course of the next license term.

By adopting a royalty that is expressed as a fraction of gross revenue, the problem of appropriate inflation adjustments is avoided. As the price of satellite radio services rises over the term of the license, so will the royalty payment from Sirius XM. The only reason to make a further inflation adjustment would be if the rate of inflation differed substantially between sound recordings and satellite radio services. I am not aware of any basis in the system that is used by the federal government to calculate inflation rates that these rates of inflation differ.

The *Webcaster III* rates illustrate why an inflation adjustment is not needed for SDARS. The per play rates adopted in *Webcaster III* rise from \$0.0019 in 2011 to \$0.0021 in 2012-2013 and \$0.0023 in 2014-2015. The price increase for 2012-13 is 10.5 percent. Over the four year period the increase is 21 percent, which is an average annual increase of 4.9 percent. By comparison, Sirius XM already has announced a price increase of 12 percent for 2012, which

exceeds the rate of increase in *Webcaster III* in that year. This means that if the SDARS rate were unchanged between 2011 and 2012, the payments by Sirius XM to rights holders would rise by 12 percent. For the increase in royalty payments from Sirius XM to track the increase in the payments arising from *Webcaster III* through 2015 requires a further increase in Sirius XM effective rates by 8 percent after 2012, or less than 3 percent per year. This rate of increase is roughly the long-term average increase in the U.S. Consumer Price Index. Thus, a constant percentage royalty rate on gross revenues is likely to produce growth in payments that comes very close to tracking the rate of inflation without any further adjustment.

Regarding potential adjustments to account for the maturation of the industry, the testimony of David Stowell concludes that risk of disruption is real. Nevertheless, I have not taken disruption into account in my analysis of the appropriate SDARS rate. My analysis is based primarily on the willing buyer, willing seller method. The licenses negotiated between Sirius XM and record companies are transactions in a competitive market and so do not provide any cushion to protect Sirius XM from disruption. Likewise, the Last.fm agreement is a market transaction and the SDARS rates that was developed from the Last.fm example, producing a benchmark rate of 6.59 percent, did not apply the mandatory Section 801(b)(1) factors. Thus, there is no need to adjust these rates for inflation over the term of the next statutory license.

Appendix A

CURRICULUM VITAE
ROGER G. NOLL

PERSONAL

Date and Place of Birth: March 13, 1940; Monterey Park, California

EDUCATION

East High School, Salt Lake City, Utah, 1958
B.S. (Math, Honors), California Institute of Technology, 1962
A.M., Ph.D. (Economics), Harvard University, 1965, 1967

SCHOLARSHIPS, FELLOWSHIPS AND AWARDS

National Merit Scholarship 1958-62
National Defense Education Act Fellowship 1962-66 (declined)
Harvard Prize Fellowship 1962-63
National Science Foundation Fellowship 1963-64
Guggenheim Fellow 1983-84
Rhodes Prize for Undergraduate Teaching, Stanford University, 1994
Distinguished Service Award, Public Utilities Research Center, University of Florida, 2001
Distinguished Lecture Award, Brookings-AEI Joint Center on Regulation and Markets, 2006

POSITIONS HELD

Instructor, California Institute of Technology, 1965-67
Assistant Professor, California Institute of Technology, 1967-69
Senior Staff Economist, Council of Economic Advisers, 1967-68
Associate Professor, California Institute of Technology, 1969-71
Senior Fellow and Co-director, Studies in the Regulation of Economic Activity, Brookings Institution, 1970-73
Professor, California Institute of Technology, 1973-82
Visiting Professor, Graduate School of Business, Stanford University, 1976-77
Chair, Division of the Humanities and Social Sciences, California Institute of Technology, 1978-82
Reuben Gustavson Lecturer, University of Chicago, April 1981
Institute Professor of Social Sciences, California Institute of Technology, 1982-84
Donald Gilbert Memorial Lecturer, University of Rochester, December 1982
Fellow, Center for Advanced Study in the Behavioral Sciences, 1983-84
Professor of Economics, Stanford University, 1984-2006 (*Emeritus* 2006-)
Visiting Scholar, Hoover Institution, 1984-85
Professor by Courtesy, Department of Political Science, Stanford University, 1985-2006
Professor by Courtesy, Graduate School of Business, Stanford University, 1986-2006
Veblen-Clark Lecturer, Carleton College, May 1986
Director, Public Policy Program, Stanford University, 1986-2002
David Kinley Lecturer, University of Illinois, May 1987
Sunderland Fellow, Law School, University of Michigan, Fall 1988
Morris M. Doyle Centennial Professor in Public Policy, Stanford University, 1990-2002
Jean Monnet Professor, European University Institute, Spring 1991
Associate Dean, Humanities and Sciences, Stanford University, 1991-92
Visiting Professor, University of California, San Diego, 1993

Positions, cont'd

Visiting Fellow, Brookings Institution, 1995-96
Nonresident Senior Fellow, Brookings Institution, 1996-99
Director, American Studies Program, Stanford University, 2001-02
Visiting Scholar, London School of Economics, Spring 2001 and Spring 2002
Senior Fellow, American Antitrust Institute, 2002-
Director, Stanford Center for International Development, 2002-06
Kim Thomas Lecturer, Whittier College, 2010

TEACHING EXPERIENCE

Undergraduate: Introductory Economics, Intermediate Microeconomic Theory, Introduction to Econometrics, Antitrust and Regulation, Economic History of Medieval Europe, History of Economic Thought, Economic Policy Analysis, Economics of Sports, Political Economy of the West

Graduate: Antitrust and Regulation, Economic Policy Analysis, Applied Microeconomic Theory, Experimental Economics

RESEARCH INTERESTS

Antitrust and Regulation, Technology Policy, Political Economics, Political Economy of Law

MEMBERSHIP ON BOARDS AND COMMITTEES

President's Task Force on Communications Policy (CEA Staff Representative and Alternate Member), 1967-68
President's Task Force on Suburban Problems, 1968
President's Committee on Urban Housing, 1968
President's Task Force on Public Broadcasting, 1968
Department of Commerce Technical Advisory Board Panel on Venture Capital, 1968-69
Committee on the Multiple Uses of the Coastal Zone, National Council on Marine Resources and Engineering, 1968
Secretary, President's Interagency Task Force on Income Maintenance, 1968
Task Force on Application of Economic Analysis of Transportation Problems, National Research Council, 1970-73
Committee on Technological Forecasting on Behalf of the Environment, Office of Science and Technology, 1970-71
Board of Economic Advisers, Public Interest Economics Foundation, 1974-84
Executive Committee, Caltech Environmental Quality Laboratory, 1970-71
Faculty Board, Caltech, 1974-76
Advisory Commission on Regulatory Reform, Senate Committee on Government Operations, 1975-77
Chair, Fourth Annual Telecommunications Policy Research Conference, 1975-76
Committee on Satellite Communications, National Academy of Sciences, 1975-76
Advisory Council, Jet Propulsion Laboratory, 1976-82
Chair, Committee to Monitor the Desegregation Plan of the Los Angeles Unified School District, Los Angeles Superior Court, 1978-79
Advisory Council, National Aeronautics and Space Administration, 1978-81
Advisory Council, National Science Foundation, 1978-89

Boards and Committees, cont'd

Board of Advisers, National Institute of Economics and Law, 1978-84
Research Advisory Board, Committee for Economic Development, 1979-82
President's Commission for a National Agenda for the Eighties, 1980
Board of Directors, Economists, Inc., 1981-
Review Panel, NSF Regulation and Public Policy Program, 1981-84
Board of Editors, Journal of Economic Literature, 1981-90
Advisory Board, Solar Energy Research Institute, 1982-91
Board of Directors, Cornell Pelcovits and Brenner, Inc., 1982-1988
Chair, Advisory Panel on Information Technology R&D, Office of Technology Assessment, 1983-84
Supervisory Board of Editors, Information Economics and Policy, 1982-88
Advisory Committee on Integrated Environmental Management Program, Environmental Protection Agency, 1983-85
Commission on Behavioral and Social Sciences and Education, National Research Council, 1984-90
Advisory Panel, NSF Policy Research and Analysis Division, 1984
Director, Program on Regulatory Policy, Stanford Institute for Economic Policy Research, 1984-
Panel on Clean Air, Science Advisory Board, Environmental Protection Agency, 1985-86
Board of Editors, Review of Economics and Statistics, 1985-2002
Contributing Editor, Regulation, 1986-93
Energy Research Advisory Board, Department of Energy, 1986-89
President & Chairman of the Board, Telecommunications Policy Research Foundation, 1986-87
Coordinating Editor, Information Economics and Policy, 1988-92
Board of Directors, International Telecommunications Society, 1988-92
Advisory Board of Editors, Journal of Risk and Uncertainty, 1988-
Acid Rain Advisory Committee, Environmental Protection Agency, 1990-91
Secretary of Energy Advisory Board, 1990-95
International Board of Editors, International Journal of the Economics of Business, 1993-
Faculty Senate, Stanford University, 1993-95, 98-02, 04-06
California Council on Science and Technology, 1995-2001
Panel on Universities, President's Committee of Advisors on Science and Technology, 1996
Committee on Intellectual Property and the Information Infrastructure, National Research Council, 1997-9
Board of Editors, Journal of Sports Economics, 1999-
Board of Associate Editors, Economics of Governance, 1999-
Board of Advisors, American Antitrust Institute, 2000-
Board on Science, Technology and Economic Policy, National Research Council, 2000-2006
Committee on Universal Postal Service, National Research Council, 2008

SPONSORED RESEARCH

"Opinions of Policemen." International Association of Chiefs of Police, 1969
"Studies in the Regulation of Economic Activity." Brookings Institution and Ford Foundation, 1970- 3
"Government Policies and Technological Innovation." National Science Foundation National R&D Assessment Program, 1973-4
"The Social Consequences of Earthquake Prediction," National Aeronautics and Space Administration, 1974-6
"Nuclear Safety Regulation." National Science Foundation RANN Program, 1975-7
"The Public Television Station Program Cooperative." National Science Foundation RANN Program, 1975-7
"The Station Allocation Game." Federal Communications Commission, 1977
"Energy Policy Studies." Various donors, 1978-84

"Economics of Oil Leasing" and "Issues in Utility Pricing." Department of Energy, 1978-9
"The Economics of Boxing, Wrestling and Karate." California Athletic Commission, 1978
"Implementing Tradable Emissions Permits." California Air Resources Board, 1979-82
"Social Science and Regulatory Policy." National Science Foundation, 1980-2
"The Political Economy of Public Policy." National Science Foundation and Center for Economic Policy Research, Stanford University, 1983-4
"SIEPR Program on Regulatory Policy." various donors, 1987-
"The Economics of Research Universities and Scholarly Communication." Brown Center for Education Policy, Brookings Institution, 1995-6
"Coordination of Regulatory Reform," Organization for Economic Cooperation and Development, 1996
"The Future of the Research University," Carnegie Foundation, 1996
"SCID Program in Economic Policy Reform," Various donors, 2002-06

CONSULTING

Special Assistant to the President, Ford Foundation, 1969
Space Technology Applications, Jet Propulsion Laboratory, 1969
Panel on the Abatement of Particulate Emissions, National Research Council, 1971
Sloan Commission on Cable Communications, 1971
President's Commission on Government Procurement, 1971
Senate Subcommittee on Antitrust and Monopoly, 1971-72
MCI, Inc., 1972-73, 1983, 1986
National Science Foundation, 1973, 1975
Department of Justice, Antitrust Division, 1974-77, 1979-81, 1993-97
Internal Revenue Service, 1976-77
RAND Corporation, 1974-82
Los Angeles Lakers, 1974-75
National Football League Players Association, 1974-76, 1987-93, 2008, 2010-
Office of Telecommunications Policy, 1975-77
National Basketball Association Players Association, 1975-76, 1987-88, 1994
Naval Ordnance Test Station, 1975
Commission on Law and the Economy, American Bar Association, 1977-78
Aspen Institute Program on Communications and Society, 1977
National Commission on Electronic Funds Transfer, 1977
Business Round Table, 1978
Federal Communications Commission, 1977-81
Food and Drug Administration, 1978
Carnegie Commission on the Future of Public Broadcasting, 1978
Department of Energy, 1979
Office of Technology Assessment, 1980
Kerr-McGee Corporation, 1980
CBS, Inc. 1982-83
Environmental Protection Agency, 1982-83
Showtime/The Movie Channel, 1983, 1985
Harlequin Books, 1984
Lake Huron Broadcasting, 1984
National Collegiate Athletics Association, 1984
National Medical Enterprises, 1985, 1987-88
Camellia City Telecasters, 1985-86
Brown and Root, Inc., 1985-86
McDermott, Inc., 1985-86

Consulting, cont'd

Major League Baseball Players Association, 1985, 1994
United Cable Television and American Television and Communications, 1985
United States Football League, 1985-86
City of Anaheim, 1986
Technicolor, 1986
Metro-Mobile, 1986-89
Hewlett-Packard, 1986-1990, 1991
Echostar, 1987, 1994-95, 2002-03, 2004-05
Continental Airlines, 1987-88
Home Box Office, 1988-89
Bell South Cellular, 1989
Western Union, 1989
Minnesota Twins, 1989
Northwest Airlines, 1989
Pepsico, 1989
Yellow Phone, 1989-91
Dialog, 1990-91
California Public Utilities Commission, 1989-90
American Newspaper Publishers Association, 1990
Humana, 1990-91
Powell, Goldstein, Frazer and Murphy, 1990-93
South Coast Air Quality Management District, 1990-91
Federal Trade Commission, 1990-91, 2010-
Delta Airlines, 1991
California Cable Television Association, 1991
Bureau of Competition Policy, Government of Canada, 1991
R&D Business Systems, *et al.* 1991-95
International Entertainment Group, 1992-93
Nike, Inc., 1992
World Bank, 1992-
Gemini, Inc. 1992-94
Servicetrends, Inc., 1993-94
William Sullivan, 1993-95
Sure Safe Industries, 1993
U. S. Department of Justice, Civil Division 1994-95
Kopies, Inc., *et al.* 1995-1999
Telecom Technical Services, *et al.*, 1995-1999
Digital Distribution, Inc.. 1996-1999
Silvey, *et al.*, 1996-2000
Aguillar, *et al.* 1996-2000
Wadley Medical Center, 1997-2001
Oakland Raiders, 1997-2000
Major League Soccer Players Association, 1997-2000
Class Plaintiffs, Brand Name Prescription Drugs Litigation, 1998-9
Class Plaintiffs, Compact Disc Litigation, 1999-2003
Class Plaintiffs, State Microsoft Antitrust Litigation (California, Iowa, Minnesota, New York), 2000-2007
Kingray, 2000
Napster, 2000-2
Metropolitan Intercollegiate Basketball Association, 2002-5
Congressional Budget Office, 2002

Consulting, cont'd

Pioneer and Scientific Atlanta, 2002-3
Lenscrafters, 2003-4, 2009-
Seven Network, 2003-7
Sports Car Clubs of America, 2003-05
Intertainer, 2003-05
Class Plaintiffs, DRAM Antitrust Litigation 2005-7
Class Plaintiffs, Honeywell Antitrust Litigation, 2005-
Class Plaintiffs, Tableware Antitrust Litigation, 2005-7
Class Plaintiffs, *White, et al., v. NCAA*, 2006-8
Sirius Satellite Radio and XM Satellite Radio, 2006-7
Class Plaintiffs, Cartier Antitrust Litigation, 2006-7
Monte Carlo Country Club and Société Monégasque pour l'Exploitation du Tournoi de Tennis, 2007
Pearle Vision, Inc., 2007-8
Class Plaintiffs, Apple iTunes/iPod Antitrust Litigation, 2007-
Class Plaintiffs, SRAM Antitrust Litigation, 2007-9
Fair Isaac, 2007-9
Houston Baptist University, 2008.
U. S. Department of Justice, U. S. Attorney's Office, San Francisco, 2008-9
Novell, 2008-
GlaxoSmithKline, 2008-11
Class Plaintiffs, Flash Memory Antitrust Litigation, 2008-10
MobiTV, 2009-10
AT&T, 2009-10
Verizon, 2009-10
Ericsson, 2009-10
Class Plaintiffs, California Automobile Insurance Antitrust Litigation, 2011-

BOOKS AND MONOGRAPHS

Reforming Regulation: An Evaluation of the Ash Council Report. Brookings Institution, 1971.

Economic Aspects of Television Regulation, co-authors Merton J. Peck and John J. McGowan. Brookings Institution, 1973. Winner, National Association of Educational Broadcasters Annual Book Award, 1974.

Government and the Sports Business, editor. Brookings Institution, 1974.

The Political Economy of Deregulation, co-author Bruce Owen. American Enterprise Institute, 1983.

Regulatory Policy and the Social Sciences, editor. University of California Press, 1985.

The Technology Pork Barrel, co-author Linda R. Cohen. Brookings Institution, 1991.

The Economics and Politics of Deregulation. European University Institute, 1991.

Constitutional Reform in California: Making State Government More Effective and Responsive, co-editor Bruce E. Cain. University of California Institute of Governmental Studies, 1995.

Sports, Jobs, and Taxes, co-editor Andrew Zimbalist. Brookings Institution, 1997.

Books, cont'd

Challenges to Research Universities, editor. Brookings Institution, 1998

A Communications Cornucopia, co-editor Monroe E. Price. Brookings Institution, 1998.

The Economics and Politics of the Slowdown in Regulatory Reform. AEI Press, 1999.

The Digital Dilemma, 17 co-authors 17 (Committee on Intellectual Property Rights and the Emerging Information Infrastructure). National Academy Press, 2000.

Bridging the Digital Divide, editor. California Council on Science and Technology, 2001.

ARTICLES IN SCHOLARLY PUBLICATIONS

"Urban Concentration: Prospects and Implications." In *Increasing Understanding of Public Problems and Policies*. Farm Foundation, 1969.

"Metropolitan Employment and Population Distribution and the Conditions of the Urban Poor." In *Financing the Metropolis: Public Policy in Urban Economics: The Urban Affairs Annual Reviews*, IV, John P. Crecine, ed. Sage Publications, 1970. Brookings Reprint No. 184.

"National Communications Policy: Discussion--Spectrum Allocation Without Markets." *American Economic Review Papers and Proceedings* 60(2) (May 1970).

"The Behavior of Regulatory Agencies." *Review of Social Economics* 24(1) (March 1971): 15-19. Brookings Reprint No. 219 (November 1971).

"Summary and Conclusions," co-author William Capron. In *Technological Change in Regulated Industries*, William Capron, ed. Brookings Institution, 1971.

"The Nature and Causes of Regulatory Failure." *Administrative Law Review* 23(4) (June 1971): 424-437. Revised version published as "The Economics and Politics of Regulation." *Virginia Law Review* 57(6) (September 1971): 1016-1032.

"Mass Balance, General Equilibrium and Environmental Externalities," co-author, John Trijonis. *American Economic Review* 61(4) (September 1971): 730-735.

"Selling Research to Regulatory Agencies." In *The Role of Analysis in Regulatory Decisionmaking: The Case of Cable Television*, Rolla Edward Park, ed. Heath-Lexington, 1973.

"Relative Prices on Regulated Transactions of the Natural Gas Pipelines," co-author Paul W. MacAvoy. *Bell Journal of Economics and Management Science* 4(1) (Spring 1973): 212-234.

"Regulating Prices in Competitive Markets," co-author Lewis A. Rivlin. *Yale Law Journal* 82(7) (June 1973): 1426-1434.

"The U.S. Team Sports Industry." In *Government and the Sports Business*, Roger G. Noll, editor. Brookings Institution, 1974. Abridged version reprinted in *Public Policies Toward Business: Reading and Cases*, William G. Shephard, ed. Irwin, 1975.

Scholarly Articles, cont'd

- "Alternatives in Sports Policy." In *Government and the Sports Business*, Roger G. Noll, ed. Brookings Institution, 1974. Abridged version in *Public Policies Toward Business: Readings and Cases*, William G. Shephard, ed. Irwin 1975. Revised version in *Handbook of Social Science of Sport*, Gunther R. R. Luschen and George H. Sage, eds. Stripes Publishing Co., 1980.
- "Attendance and Price Setting." In *Government and the Sports Business*, Roger G. Noll, ed. Brookings Institution, 1974. Reprinted in *The Economics of Sport*, Andrew Zimbalist, ed. Edward Elgar, 2001.
- "The Social Costs of Government Intervention." In *The Business-Government Relationship in American Society: Reassessment*, Neil H. Jacoby, editor. University of California Press, 1975.
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http://www.spotify.com/us/about/what/	
http://www.psclassics.com/	
http://cleorecs.com/	
http://www.last.fm	
http://www.slacker.com	
http://www.live365.com	
http://www.pandora.com	
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http://radio-locator.com/cgi-bin/page?p=maps	
http://soundexchange.com/about/people/board/	
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http://www.uk.sagepub.com/journals/Journal201774	
Interactive Radio Agreement between Warner Music Inc. and Last.fm Ltd., available at http://www.loc.gov/crb/proceedings/2009-1/pffcol/live365_exhibits.pdf	February 1, 2007

Document Title**Document Date**

Interactive Radio and Music Services Agreement between Warner Music Inc. and Slacker, Inc.,
available at http://www.loc.gov/crb/proceedings/2009-1/pffcol/live365_exhibits.pdf

April 17, 2007

Data from Sirius XM

Dataset Listing Sound Recordings Played on Sirius XM's Channels During the Month of August 2011

Record Labels with Which Sirius XM has Signed Direct Licenses

Sirius XM's Financial Costs 2010

Sirius XM's Number of Subscribers as of November 20, 2011

Documents from Sirius XM

Various Sirius XM public filings (e.g., quarterly and annual reports)

Sound Recording Catalog License with Adjett Productions, entered August 18, 2011

Sound Recording Catalog License with Amherst Records, entered August 10, 2011

Sound Recording Catalog License with Boyds Tone Records, entered January 1, 2012

Sound Recording Catalog License with Bumstead Productions, Ltd, entered August 10, 2011

Sound Recording Catalog License with Cleopatra Records, entered August 10, 2011

Sound Recording Catalog License with Main Sequence Ltd (Eardrum Records), entered November 1, 2011

Sound Recording Catalog License with Fader 4 Music, LLC, entered January 1, 2012

Sound Recording Catalog License with HEP Records, entered August 20, 2011

Sound Recording Catalog License with In the Red Records, entered August 10, 2011

Sound Recording Catalog License with Indica Records, entered August 11, 2011

Sound Recording Catalog License with K-TEL Music, Inc., entered August 16, 2011

Sound Recording Catalog License with Master's Records, entered August 10, 2011

Sound Recording Catalog License with NorthernBlues Music, entered August 10, 2011

Sound Recording Catalog License with PS Classics, entered August 5, 2011

Sound Recording Catalog License with Stone Table Records, entered August 10, 2011

Other Testimony

Testimony of Michael Pelcovits

October 27, 2006

Rebuttal Testimony of Roger G. Noll

July 17, 2007

Rebuttal Testimony of Michael Pelcovits

July 24, 2007

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February 16, 2010

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November 29, 2011

Written Direct Testimony of John Hauser

November 29, 2011

Written Direct Testimony of William R. Rosenblatt

November 29, 2011

Written Direct Testimony of David J. Frear

November 29, 2011

Written Direct Testimony of Ronald H. Gertz

November 29, 2011

Written Direct Testimony of James F. Meyer

November 29, 2011

Written Direct Testimony of Steven Blatter

November 29, 2011

Document Title

Written Direct Testimony of Mel Karmazin

Document Date

November 29, 2011

Any Other Sources Cited in the Report and Exhibits

Appendix C

Channel Share and Performance Counts

Channels with Significant Sound Recording Plays on Sirius XM's Satellite Service

1. Sirius XM's music channels (including children's channels *Radio Disney* and *Kids Place Live*) and comedy channels play a significant number of sound recordings subject to this proceeding. I use the share of these channels in Sirius XM's overall channel lineup in benchmarking calculations described in my testimony. This Appendix describes how I have calculated the share of music/comedy channels, the details of which are included in Table 4.

2. Sirius XM offers a variety of packages with different channel lineups. I focused on the six most popular packages (Sirius Select, Sirius Premier (including Sirius All Access), Sirius Mostly Music, XM Select, XM Premier (including XM All Access), and XM Mostly Music), which account for about [REDACTED] of the Sirius XM's subscribers as of November 20, 2011. The channel lineups of these six packages on November 21, 2011 show the following number of music/comedy channels out of the total channels: 77 out of 134 for Sirius Select; 77 out of 151 for Sirius Premier; 61 out of 71 for Sirius Mostly Music; 84 out of 158 for XM Select; 84 out of 165 for XM Premier; 62 out of 73 for Sirius Mostly Music.

3. I note that the XM packages offer many more play by play sports channels (over 50) than the Sirius packages, which have between 3 (for Sirius Select) and 13 (Sirius Premier). However, unlike the play by play channels on Sirius, it is my understanding from Sirius XM that not all of XM's play by play channels are permanent channels – that is, they do not have a designated share of bandwidth at all times, but rather use the spectrum of other stations on a part-time basis when they need to broadcast sporting events. Since these play by play channels are an important part of Sirius XM's programming (as evidenced by Sirius XM paying significant amounts of money to acquire the rights to broadcast play-by-

play games), one must account for these channels in determining the relative share of music/comedy and non-music channels. It would be over-counting to consider all 50-plus XM play-by-play channels in my calculations. I therefore assume, conservatively, that the count of XM's play-by-play channels is the same as that of Sirius Premier (i.e., 13).

4. Based on the foregoing assumptions, I calculated the overall share of music/comedy channels by taking the weighted average of the shares across the different packages, using the number of subscribers¹ of each package on November 20, 2011 as weights. As shown in Table 4, the weighted average share for music/comedy channels on Sirius XM is 55.1%.

Average Number of Sound Recording Plays on Music/Comedy Channels

1. I received from Sirius XM a dataset that listed sound recordings that were played on 118 Sirius XM channels during the month of August 2011. For each sound recording played, the dataset included the artist and title of the sound recording along with the time, date, and Sirius XM channel on which it was played. 41 of the channels were not part of Sirius XM's current channel lineup for its satellite service (as of November 21, 2011), e.g., online only channels and versions of satellite service channels broadcast on channels available to business establishments.

2. Of the 77 remaining channels, there were 72 music channels (including two children's channels, *Radio Disney* and *Kids Place Live*), four comedy stations (*Blue Collar Radio*, *Laugh USA*, *Raw Dog Comedy*, and the *Foxxhole*), and one non-music station (*OutQ*). *OutQ* did not play a significant number of sound recordings (only 2.8 per hour in hours when a recording is played at all) so it was not included in the share calculation above.

3. I estimated the number of plays during each hour on each channel in the data by calculating the numbers of plays that started during the hour on the channel. Using this measure for the number of

¹Including both self-pay and promotional subscribers.

plays in an hour on a channel, I estimated the average number of plays per hour for the channels in the plays data.

4. As above, I again focused on the six most popular packages of Sirius XM's satellite service and calculated the average number of sound recording plays per hour across music/comedy channels for each of the six packages. The calculated averages were 14.16 for Sirius Premier and Sirius Select; 14.28 for XM Premier and XM Select; 14.53 for Sirius Mostly Music; and 14.59 for XM MostlyMusic.²

5. The average per play across all packages was calculated by taking the average of each package's play rate using the number of subscribers of that package on November 20, 2011 as weights. This gave an average of 14.23 plays per hour per channel for music/comedy channels.

² For each package, there was a small number of music channels not contained in the plays data. For purposes of my calculations, I had no reason that think that the number of plays on those channels was significantly different from the music/comedy channels that Sirius XM did include. Thus, for each package, it was assumed that any music/comedy channel offered by the package but not in the plays data included music plays per hour equal to the average calculated from the other music/comedy channels contained in the plays data.

Appendix D

Costs of Sirius XM's Unique Delivery Infrastructure

Using detailed cost information from Sirius XM for 2010, I identified all costs associated with Sirius XM's unique delivery infrastructure. These costs entailed expenses associated with creating a satellite system, maintaining terrestrial repeaters and infrastructure to support the satellite signal, and marketing and distribution costs associated with creating a network of satellite radios in cars and in the retail market. These costs are in excess of what a benchmark Internet music service provider would incur.

Satellite and Transmission Costs ()

- **Costs Unique to Sirius XM's Delivery System:** . These were costs associated with Sirius XM's satellite and broadcast network.

Engineering, Design, and Development Costs ()

- **Costs Unique to Sirius XM's Delivery System:** . These were costs associated with Sirius XM's research and development projects, which, according to the Company, were primarily related to Sirius XM's unique delivery system. According to Sirius XM's 10-K, these include "costs to develop chip sets and new products, research and development for broadcast information systems and costs associated with the incorporation of our radios into vehicles manufactured by automakers."¹

Subscriber Acquisition Costs ()

- **Costs Unique to Sirius XM's Delivery System:** . SAC costs largely pertained to hardware costs and subsidies paid to radio manufacturers, distributors, and automakers. These costs also included subsidies paid for chipsets and sales commissions paid to retailers and automakers. Therefore, this entire set of costs was determined to be unique to Sirius XM's delivery system.

Sales and Marketing Costs ()

- **Costs Unique to Sirius XM's Delivery System:** . These costs included marketing fees primarily associated with the OEM and retail distribution network.
- **Other Costs:** . These costs included general marketing, advertising costs, and product management costs. They also included costs associated with service activation, subscriber winback and retention, and business development (all on the order of). Costs here included marketing costs associated with Sirius XM's marketing of its sports programming (approximately). Although this sports marketing is a cost specific to Sirius XM's programming, it is not unique to its delivery system. Personnel costs like

¹ Sirius XM 2010 10-K, p. 31.

“Equity Granted to 3rd Parties and Non-Cash Stock Compensation” and non-cash employee compensation costs [REDACTED] were reflected here as well.²

Revenue Share and Royalties [REDACTED]

- **Costs Unique to Sirius XM’s Delivery System:** [REDACTED]. This included revenue sharing arrangements with OEM’s as part of Sirius XM’s unique hardware distribution network.
- **Other Costs:** [REDACTED]. This included the royalties paid to RIAA and royalties paid for web broadcasts [REDACTED]. It also included royalty payments made to ASCAP/BMI and SESAC [REDACTED] and a residual revenue sharing category [REDACTED]. Revenues that are not part of the royalty base, including revenue sharing for data service providers like weather data feeds [REDACTED] and revenue sharing arrangements with non-music programs like Howard Stern or CNN Headline News [REDACTED] were also included here. Although these non-music costs are specific to Sirius XM’s programming, they are not included as part of the unique costs for Sirius XM’s delivery system.

Depreciation and Amortization Costs [REDACTED]

- **Costs Unique to Sirius XM’s Delivery System:** [REDACTED]. This included all depreciation expenses associated with satellite transmission including satellite costs (on the order of [REDACTED]). It also included costs associated with the launch vehicle, broadcast equipment and the terrestrial repeater network (approximately [REDACTED]). Depreciation and Amortization costs in this category also included smaller line items such as costs on receiver test equipment [REDACTED], some licensed software ([REDACTED]), and factory systems ([REDACTED]), among others.³
- **Other Costs:** [REDACTED]. This included costs associated with buildings, computer hardware and software [REDACTED].

² There was a [REDACTED] which is not reflected in the individual line items. This [REDACTED] was allocated to “Costs Unique to Sirius XM’s Delivery System” and “Other Costs” according to their share of costs. This purchase price adjustment was mandated by GAAP at the merger of Sirius and XM.

³ These sub-figures do not total [REDACTED] because there was a [REDACTED] which is not reflected in the individual line items. This [REDACTED] was allocated to “Costs Unique to Sirius XM’s Delivery System” and “Other Costs” according to their share of costs.

None of the following costs are included in the calculation of costs unique to Sirius XM's delivery system.

Programming and Content Costs [REDACTED]

- This included programming costs associated with non-music programming like sports programming [REDACTED] and talk programming [REDACTED]. It also included music programming costs which related to the salaries of staff and computer programmers needed to support music broadcast (on the order of [REDACTED]). "Equity Granted to 3rd Parties and Non-Cash Stock Compensation" and non-cash employee compensation costs [REDACTED] were reflected here. Finally, these costs included smaller line items such as general programming costs [REDACTED], programming promotions [REDACTED], and music production [REDACTED].

Customer Service and Billing Costs [REDACTED]

- This included costs associated with billing, call centers technology, customer care, collection (bad debt and credit card fees) and invoicing, and subscriber management systems [REDACTED]. It also included a cost associated with Application support [REDACTED]. "Equity Granted to 3rd Parties and Non-Cash Stock Compensation" and non-cash employee compensation costs [REDACTED] were reflected here.

General and Administrative Costs [REDACTED]

- These costs include executive office fees, finance department fees, legal fees. Although some of these costs were related to Sirius XM's delivery system, they are not included in the costs unique to Sirius XM's delivery system.

Cost of Equipment [REDACTED]

- These were costs associated with the sale of satellite radios, components, and accessories. These costs were excluded from the analysis because the revenues associated with the sale of satellite radios, components, and accessories are not subject to the royalty rate at issue in these proceedings.

Restructuring, Impairments, and Related Costs [REDACTED]

- These costs were related to the reorganization of Sirius XM, the restructuring of contracts, and the impairment of assets.

⁴ These sub-figures do not total [REDACTED] because [REDACTED].

Appendix E

INTERACTIVE RADIO AGREEMENT

This INTERACTIVE RADIO AGREEMENT ("Agreement") is made and entered into effective as of February 1, 2007 (the "Effective Date") by and between Warner Music Inc., a Delaware corporation, with offices located at 75 Rockefeller Plaza, New York, New York 10552 ("Warner"), and Last.fm Ltd., a company registered in England and Wales No. 04569646, with its registered address at Clearwater House, 4 - 7 Manchester Street, London W1U 3AE ("Licensee") (each a "Party" and, collectively, the "Parties").

WHEREAS, Licensee desires to develop, implement, operate, maintain and make available Sound Recordings to End Users via the Licensee Interactive Service (as such terms are defined below);

WHEREAS, the Licensee Interactive Service is experimental in nature and Warner is willing to grant the non-precedential licenses set forth in Section 2(a) hereof for a limited period of time solely to determine consumer interest in accessing Warner Masters (as such term is defined below) via the Licensee Interactive Service; and

WHEREAS, subject to the terms and conditions herein and in exchange for Licensee's obligations as set forth herein, Warner is willing to allow Licensee to include Warner Masters within the Licensee Interactive Service.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, and for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the Parties hereby agree as follows:

1. Definitions.

(a) "Advertisement" means any advertisement, sponsorship or other promotion delivered by or on behalf of Licensee to an End User's Personal Computer or otherwise transmitted or displayed in connection with the Licensee Interactive Service, as more fully described on Exhibit A hereto.

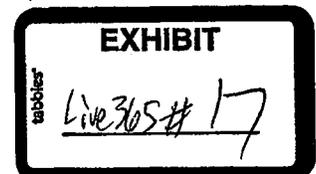
(b) "Authorized Contractor" means a third party that (i) provides services for or on behalf of Licensee, including, without limitation, Fulfillment Activities under Licensee's supervision and in accordance with the terms and conditions of this Agreement and (ii) is recognized in the industry as capable of professionally and competently performing such services.

(c) "Authorized Website" means Licensee's Internet website located at <http://www.last.fm>, provided that such website is solely (i) owned and/or controlled by Licensee or its permitted successor or assign, and (ii) marketed and branded using the name "Last.fm."

(d) "Clip" means a thirty (30) second audio clip of a Warner Master, as approved by Warner in writing in advance in each instance, including by way of the provision or designation of such a clip in connection with Warner's delivery of Warner Masters hereunder.

(e) "Commissioned Ad Revenues" means, in the applicable calendar month (or portion thereof) and as allocable to the applicable Tier (as defined below), the sum of all monies or other consideration received by or on behalf of Licensee from: (i) audio Advertisements transmitted in connection with the transmission of Sound Recordings via such Tier or in any promotional communications sent by or on behalf of Licensee to End Users; and (ii) Advertisements delivered or displayed in connection with the actual transmission of Sound Recordings via such Tier, and in the case

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- (n) "Licensee Servers" means computer servers storing phonorecords or making public performances licensed hereunder that at all times (i) remain under the control of Licensee (including via its Authorized Contractors), (ii) incorporate security measures that meet or exceed prevailing best practices in the industry and (iii) to the extent owned or controlled by Authorized Contractors, are covered by agreements between Licensee and Authorized Contractors, provided that Licensee manages and controls the hosting activities. For the avoidance of doubt and notwithstanding the foregoing at (iii), above, Licensee may utilize Authorized Contractors that perform so-called "edge serving" services.
- (o) "On-Demand" means the digital transmission, via the Licensee Interactive Service, of a particular Sound Recording to a particular End User, at or immediately following a request by such End User.
- (p) "Other Materials" means artwork, graphic images (e.g., album artwork), artists' names, images and likenesses, and other information or materials relating to Warner Masters that are provided by or on behalf of Warner to Licensee in Warner's sole discretion, solely for Licensee's use in accordance with the terms and conditions hereof and any additional terms and conditions of which Warner notifies Licensee.
- (q) "Personal Computer" means an electronic device that supports the Security Solution.
- (r) "Person" means a natural person, a corporation, a limited liability company, a partnership, a trust, a joint venture, any governmental authority or any other entity or organization.
- (s) "Play" means a Stream of a Sound Recording of more than thirty (30) consecutive seconds, other than Sponsored Plays.
- (t) "Security Solution" means the digital rights management and content protection system for Warner Content as described on Exhibit B hereto (which may be modified from time to time pursuant to the Parties' agreement), and as further set forth in the White Paper.
- (u) "Similarly Situated Service" means a service offering On-Demand and interactive radio functionality, with rights in the Territory substantially similar to those granted to Licensee hereunder.
- (v) "Sound Recording" means a work that results from the fixation of a series of musical, spoken or other sounds, but not including the sounds accompanying a motion picture or other audiovisual work, regardless of the nature of the material objects, such as disks, tapes or other phonorecords, in which they are embodied.
- (w) "Sponsored Play" means a Stream of a Sound Recording of more than thirty (30) consecutive seconds that is supported by a Sponsorship.
- (x) "Sponsorship" means any arrangement mutually agreed to by and between Licensee and the applicable record company, by which a particular advertiser purchases web site or audio advertisements (for purposes of clarity, not including PowerPlay) against one or more particular Warner tracks, one or more particular Warner artists' content, a particular record label's content, or any other, similar category of content agreed to between Licensee and the applicable record company.
- (y) "Sponsorship Revenues" means, in the applicable calendar month (or portion thereof) and as allocable to the applicable Tier (as defined below), the sum of all Commissioned Ad Revenues and Direct Sale Ad Revenues from Sponsorships.

of (i) and (ii), for which *bona fide* third-party sales representative costs were actually paid by Licensee to sales representatives, less (A) *bona fide* third-party ad agency commissions actually paid or payable by Licensee to an ad agency for such Advertisements (not to exceed fifteen percent (15%) per such Advertisement), and (B) such *bona fide* third-party sales representative costs actually paid or payable by Licensee to sales representatives for such Advertisements (not to exceed thirty percent (30%) per such Advertisement).

(f) “Direct Sale Ad Revenues” means, in the applicable calendar month (or portion thereof) and as allocable to the applicable Tier (as defined below), the sum of all monies or other consideration received by or on behalf of Licensee from: (i) audio Advertisements transmitted in connection with the transmission of Sound Recordings via such Tier or in any promotional communications sent by or on behalf of Licensee to End Users; and (ii) Advertisements delivered or displayed in connection with the actual transmission of Sound Recordings via such Tier, and in the case of (i) and (ii), for which no *bona fide* third-party sales representative costs were actually paid or payable by Licensee to sales representatives for such Advertisements, less *bona fide* third-party ad agency commissions actually paid or payable by Licensee to an ad agency for such Advertisements (not to exceed fifteen percent (15%) per such Advertisement). For ease of calculation, any revenues set forth in this subsection (f) that are not easily allocable to a particular Tier shall be allocated to Tier One.

(g) “End User” means any Person who views or otherwise accesses the Authorized Website, including without limitation Streaming Sound Recordings via a Tier.

(h) “Fulfillment Activities” means all activities associated with the use and distribution of Warner Masters and Other Materials, including without limitation, hosting, encoding, serving, transmitting, promoting, Streaming, downloading, processing of files, and implementing the Security Solution.

(i) “Gross Revenues” means, in the applicable calendar month (or portion thereof) and as allocable to the applicable Tier (as defined below), the sum of all monies or other consideration (i) paid or payable by End Users to Licensee for access to such Tier (the “Retail Revenues”), (ii) received or receivable by or on behalf of Licensee from the sale of products, goods and services (other than Retail Revenues) to End Users less the cost to Licensee of such products, goods and services (the “Product Revenues”) and (iii) Commissioned Ad Revenues (other than Sponsorship Revenues), less (in the case of (i) and (ii) above), bad debt and credit card expenses (not to exceed two and one half percent (2.5%) of total Retail Revenues and Product Revenues for such period). For ease of calculation, any revenues set forth in this subsection (i) that are not easily allocable to a particular Tier shall be allocated to Tier One.

(j) “Internet” means the wide area cooperative network of university, corporate, government and private computer networks communicating predominately through Transmission Control Protocol/Internet Protocol which network is commonly referred to as “the Internet” (but which specifically excludes wireless transmissions other than IEEE 802.11x transmissions).

(k) “Law” means any local, state or federal law, statute, ordinance, rule, regulation, code, order, judgment or decree.

(l) “Launch Date” means the Effective Date.

(m) “Licensee Interactive Service” means Licensee’s Internet-based service available via the Authorized Website, flash player, and client that permits End Users to Stream authorized Sound Recordings via a Tier as described on Exhibit A hereto, and which is (i) wholly owned and/or controlled by Licensee and (ii) operated by Licensee and/or an Authorized Contractor.

(z) “Stream” or “Streaming” (as a verb or gerund) means the process or action of making a single digital transmission (other than as a download) of a Sound Recording (or any part thereof) delivered to an End User’s Personal Computer via the Internet from Licensee Servers, whereby such transmission is contemporaneous or nearly contemporaneous with the performance of, as applicable, the sound recording embodied therein, and which is not intended to be, or capable of being (other than via an unauthorized hack not facilitated or encouraged in any way by Licensee), copied or stored on the End User’s Personal Computer (other than any ephemeral copies used solely for caching or buffering purposes, and provided that such cached or buffered copies are automatically deleted after being played). “Stream” (as a noun) means the digital audio transmission made in the process of Streaming.

(aa) “Territory” means the United States and its territories and possessions, including without limitation Puerto Rico.

(bb) “Tier” means Tier One, Tier Two, Tier Three or Tier Four of the Licensee Interactive Service (as each is defined on Exhibit A hereto).

(cc) “Warner Content” means all Warner Masters, Other Materials and any other materials provided by or on behalf of Warner to Licensee hereunder, in Warner’s sole discretion. Warner Content is provided to Licensee solely for Licensee’s use in accordance with this Agreement. Licensee shall comply with any usage and other guidelines pertaining to the Warner Content that are made available to Licensee by or on behalf of Warner from time to time, including without limitation any revisions Warner may reasonably request to the guidelines on Exhibit A hereto.

(dd) “Warner Masters” means those Sound Recordings delivered to Licensee by or on behalf of Warner and identified on a list provided by Warner to Licensee hereunder (which list Warner shall update on a biweekly basis) and which by being on such list (as updated) are deemed to be approved by Warner, in its sole discretion, for Licensee’s use in connection with the Interactive Licensee Service.

(ee) “Warner Share” means a fraction, the numerator of which is the total number of times that any Warner Masters incorporated into or made available through the applicable Tier are Streamed by End Users during the applicable calendar month for more than thirty (30) consecutive seconds, and the denominator of which is the total number of times that all Sound Recordings (including without limitation Warner Masters) available in their entirety (*i.e.*, not as Clips) through such Tier are Streamed by End Users during such calendar month for more than thirty (30) consecutive seconds.

(ff) “White Paper” means that document describing the features, functionality, specifications and other details of or relating to the Licensee Interactive Service as set forth on Exhibit B hereto.

2. License.

(a) Subject to all the terms and conditions of this Agreement, Warner hereby grants to Licensee during the Term a non-exclusive, non-assignable, non-transferable, non-sublicensable (except to Authorized Contractor(s) in accordance with this Agreement) right and license, solely within the Territory, to:

- (i) store and reproduce Warner Content on Licensee Servers, solely as necessary for Licensee to exercise those rights set forth in Sections 2(a)(ii) through (v) below;
- (ii) allow End Users to Stream Warner Masters via the Licensee Interactive Service to Personal Computers in the Territory in their entirety (or part thereof, if an End User terminates a Stream prior to the end of the applicable Warner Master) solely in the

manner set forth herein and in the format and structure designated by Warner; and

- (iii) subject to Warner's prior written consent, on a case-by-case basis, digitize and display Other Materials that have been provided by or on behalf of Warner to Licensee (A) on the Authorized Website, (B) via the Licensee Interactive Service or (C) in other promotional communications sent directly from Licensee to those End Users who have consented to such receipt, in each case, in the same size and prominence as all other similar content in each such location or communication and solely to promote the availability of Warner Masters via the Licensee Interactive Service;
- (iv) pursuant to Section 5(b), and otherwise on Warner's prior written consent on a case-by-case basis, display in connection with the Streaming of Warner Masters as part of the Licensee Interactive Service, (A) the names, logos and trade names of Warner, as such names, logos and trade names appear on records which embody Warner Masters, (B) the album titles for Warner Masters and the titles of the records which embody each Warner Master and (C) the names of the artists whose performances are embodied in Warner Masters referred to in subsection (B) as such Warner names, logos, tradenames, album titles, and artist names have been provided by or on behalf of Warner to Licensee; and
- (v) to the extent Licensee is authorized to offer or facilitate downloads of Warner Masters via the Licensee Interactive Service, to Stream the Clip associated with each such Warner Master, solely for the purpose of facilitating the sale of such Warner Master.

(b) Licensee will not edit, change or alter in any way any Warner Masters or Other Materials provided by or on behalf of Warner hereunder without Warner's prior written consent, except as necessary to render visual displays appropriately (e.g., adjustment of pixels). Without limiting the foregoing, the license granted herein does not include any adaptation (derivative work) rights or the right to alter the fundamental character of any Warner Content.

(c) Without Warner's prior written consent, Licensee: (i) shall use commercially reasonable efforts to ensure that all Advertisements displayed on or in connection with the Licensee Interactive Service are not tied to any individual recording artist or Sound Recording and are clearly distinguished from the performance of any such Sound Recording; and (ii) may not take any action, directly or indirectly, so as to imply an artist or Warner endorsement, or artist or Warner commercial tie-in of any product or service, including, without limitation, the Authorized Website or the Licensee Interactive Service.

(d) All rights not expressly conferred to Licensee are expressly reserved to Warner. For the avoidance of doubt, Warner is not restricted from sales (either its own or via third parties) of Warner Masters in any format or channel in the Territory. Except as expressly set forth herein, Licensee shall not use or make available any Warner Masters, Other Materials or other property of Warner (including the names and/or likenesses of any artist whose performances are embodied in Warner Masters), provided that the foregoing shall not prevent Licensee from using any artist name or likeness embodied in any Warner Masters or Other Materials in any manner that does not require consent from Warner or any other Person.

(e) Except as embodied in Warner Masters and/or Other Materials as provided to Licensee, the Authorized Website, the Licensee Interactive Service and the Advertisements shall not contain content or engage in activities (and shall not frame, link to, advertise, be embedded on or otherwise endorse any

other website or media that contains content or engages in activities) that Licensee is or reasonably should be aware: (i) is or are unlawful, harmful, threatening, defamatory, obscene, harassing or discriminatory; (ii) violate(s) or infringe(s) the rights of any third party (including intellectual property, name and likeness and privacy/publicity rights); (iii) depict(s) sexually explicit images; (iv) promote(s) violence, discrimination, illegal activities, or alcohol or tobacco products; or (v) is or are objectionable to Warner based upon reasonable grounds that Warner may notify Licensee from time to time. Warner acknowledges that, because the flash player and/or client may be embedded on websites by End Users pursuant to Section 2(g) below, Licensee may not always be aware of particular violations of this subsection (e) and, as such, Licensee shall be considered in compliance with this subsection to the extent that it takes commercially reasonable efforts to remedy such violations in a timely manner as it becomes aware of them, including by terminating the applicable End User's account when appropriate.

(f) For the avoidance of doubt, except as expressly set forth herein or otherwise agreed to by Warner in advance in writing, nothing in this Agreement grants Licensee, nor does this Agreement authorize Licensee to grant to any other Person (including without limitation any End User or any Authorized Contractor), the right to: (i) host, display or use in any manner any Warner Masters (or portions thereof) on the Licensee Interactive Service or otherwise; (ii) perform publicly, by means of digital transmission or otherwise, any Warner Master; or (iii) Stream any Warner Master on a "pay-per-view" or "pay-per-play" basis.

(g) Unless Warner agrees otherwise in writing during the Term, neither Licensee nor any Authorized Contractor shall: (i) Stream (or encode to permit the Streaming of) Warner Masters at a transmission rate greater than 128 kbps; (ii) license or otherwise authorize a third party to "deep link" (providing a direct means to download or Stream a Sound Recording outside of the Licensee Interactive Service) from outside of the Licensee Interactive Service for the purpose of Streaming a Warner Master; (iii) permit any End User to make downloads of any Warner Masters; or (iv) frame or otherwise superimpose Warner Masters into any other website, sublicense or "syndicate" (as that term is commonly understood in the Internet marketing industry) Warner Masters to any third party except that Licensee may permit its end users to embed the Licensee's flash player and client, provided that Licensee shall not offer the flash player or client in such a manner as to change the underlying economic arrangement hereunder, e.g., by not displaying the advertisements typically displayed (if any) in connection with the applicable Tier, as described on Exhibit A.

(h) Warner acknowledges that Licensee may use Authorized Contractors to perform its obligations hereunder in accordance with the provisions of this Agreement, provided that Licensee must maintain control over, and retains liability hereunder for all such obligations, including, without limitation, all Fulfillment Activities. Licensee shall cause each Authorized Contractor to abide by the terms and conditions of this Agreement applicable to Licensee (regardless of whether Authorized Contractors are expressly covered by such obligation). If any Authorized Contractor takes any action or omits to take any action that would breach this Agreement if it were Licensee: (i) Licensee shall promptly notify Warner of same; (ii) upon notice to Licensee from Warner, Licensee shall immediately cease providing any Warner Content to such Authorized Contractor and cease permitting such Authorized Contractor to perform Licensee's obligations hereunder, and such entity shall cease to be an "Authorized Contractor" hereunder; and (iii) Licensee shall be deemed to be in breach of this Agreement as if such action or omission were or were not taken by Licensee.

3. Warner's Rights and Obligations.

(a) Warner shall provide Licensee with all Warner Masters in mp3 format at a bit rate of 128 kbps or other mutually agreed format(s). Warner shall provide Licensee a list of Warner Masters that may be used as part of the Licensee Interactive Service in accordance with the terms and conditions

hereunder, and may update it from time to time during the Term in its sole discretion.

(b) Warner shall be responsible for the following: (i) all artist royalties, producer royalties or other record royalties payable to artists and producers and other record royalties payable to third parties in the Territory resulting from agreements made by Warner or the relevant artists pertaining to Licensee's authorized use of Warner Masters hereunder; and (ii) payments that may be required hereunder pursuant to the American Federation of Musicians (AFM) and/or the American Federation of Television and Radio Artists (AFTRA) collective bargaining agreements applicable to Warner. For the avoidance of doubt Warner shall have no responsibility for obtaining any licenses or permissions to use, or for paying any royalties, fees or other payments (A) for the use of any musical compositions underlying the Warner Content (including, without limitation, mechanical rights and public performance rights) or (B) not expressly assumed by Warner in this Section 3(b), all of which are Licensee's sole responsibility.

(c) Warner may terminate Licensee's prospective rights to use any Warner Content and/or Other Materials at any time by notifying Licensee in writing. Upon receipt of such notice, Licensee shall: (i) cease to offer such materials on a prospective basis as promptly as possible, but in no event later than two (2) business days following receipt of notice; and (ii) promptly following such notice, return to Warner or destroy, at Warner's option and in accordance with Warner's instructions, such Warner Content and/or Other Materials (including, without limitation, from Licensee Servers). Warner shall not exercise its rights under this subsection to frustrate or defeat the purposes of this agreement, including by discriminating against Licensee in bad faith with respect to Similarly Situated Services. If, notwithstanding the foregoing, Warner elects to terminate Licensee's prospective rights to all or substantially all Warner Content prior to the end of the Initial Term, Warner shall refund a pro-rated portion of any unrecouped advance paid by Licensee pursuant to Section 7(b) hereunder. The pro-rated portion in the foregoing sentence shall be calculated by multiplying the amount of the unrecouped advance by the number of complete calendar months remaining in the Initial Term, and dividing by twelve.

(d) Each Party will designate a single contact person to address all technical, marketing or other business issues (other than accounting as contemplated by Exhibit C hereto) relating to this Agreement.

4. Licensee's Security.

(a) Licensee shall at all times during the Term use mutually-agreed, robust "state of the art" (*i.e.*, best available) practices and systems (including without limitation the Security Solution) to enforce the territorial, use and other restrictions of this Agreement and to prevent and (to the extent of Licensee's applicable awareness) take prompt and proper remedial action against unauthorized physical or electronic access, copying, modification or distribution of Warner Content, including without limitation the sharing of any End User accounts. In no event shall Licensee modify any part of the Licensee Interactive Service or its functionality in a manner that would impair the security of Warner Content or otherwise limit any of Warner's rights or Licensee's obligations hereunder. If there is any commercial release of any upgrade, update, repair, patch, new release or modification to software or technology that could materially improve the Security Solution, Licensee shall notify Warner and add it to the Licensee Interactive Service to the extent commercially practicable.

(b) Licensee shall operate the Licensee Interactive Service with functionality and features consistent with the description set forth in Exhibit A hereto. Licensee shall ensure through all commercially available technological means, including without limitation by its financial and clearinghouse process and credit card address verification and reverse IP address lookup, that all End Users reside in the Territory at all times. Warner may, on its own or through an independent firm subject to its signing a confidentiality and

non-disclosure agreement containing confidentiality restrictions substantially similar to those hereunder, conduct a technical audit of the Authorized Website and Licensee Interactive Service (including related technical systems, servers, content preparation and functionality) one (1) time per year (or more often, if justified under the circumstances) during reasonable business hours and upon at least thirty (30) days' notice to ensure Licensee's compliance with this Agreement. Licensee shall promptly procure any and all rights and permissions, documentation and availability of personnel of Licensee or any Authorized Contractor necessary for Warner to exercise its audit rights hereunder. Any information initially disclosed by Licensee to Warner in the course of such an audit also shall be treated as Confidential Information of Licensee hereunder.

5. Licensee's Obligations.

(a) If Warner, in its sole discretion, provides a parental advisory warning due to explicit lyrics or otherwise, Licensee shall promptly and clearly disclose such warning to End Users prior to their playing of the applicable Warner Master. If Warner, in its sole discretion, provides a copyright notice for Warner Masters or Other Materials, Licensee shall include such notice so it can be readily viewed by End Users. Licensee shall take all commercially reasonable steps to ensure that no current or future signals, identifying codes, watermarks, copy protection codes or similar content or features integrated by Warner into Warner Content are removed or otherwise hampered by or on behalf of Licensee. To the extent that Warner wishes to integrate any such content or features into Warner Content already delivered to Licensee, Licensee shall permit Warner to re-deliver such Warner Content with such features, and thereafter shall use such Warner Content only as re-delivered. At Warner's commercially reasonable request, Licensee shall institute systems to read any unique identifiers to Warner Masters contained in the Warner Content. Licensee shall not cover, impair or alter in any way any watermark (or similar item) in Warner Masters. Neither party shall exercise any rights under this subsection 5(a) in bad faith, so as to frustrate or defeat the purposes of this Agreement.

(b) The Licensee Interactive Service will display the track title and name of the artist for each Warner Master during the playing thereof by an End User.

(c) Licensee shall require all End Users, prior to delivery of any Warner Masters or Other Materials hereunder, to agree to "Terms of Use" that: (i) require End Users to comply with all applicable Laws in their use of Warner Masters and to protect Warner's rights therein; and (ii) state that End Users are not granted any commercial, sale, resale, reproduction, distribution or promotional use rights for Warner Masters. Licensee shall provide Warner with its End User "Terms of Use" which shall be at least as protective as this Section 5(c) and the terms and conditions on Exhibit A hereto and shall allow Warner, upon reasonable notice to Licensee, to revise provisions pertaining to Warner's rights and interests. Licensee shall, on a regular basis, monitor End User activity to ensure compliance with such "Terms of Use."

(d) Except as expressly assumed by Warner in Section 3(b) hereof, Licensee shall obtain and pay for all licenses, rights, permissions and consents and pay all costs relating to the exercise of its rights and performance of its obligations under this Agreement and all Fulfillment Activities, including, without limitation: (i) royalties payable for the performance, reproduction or any other rights in or to musical compositions underlying Warner Masters; (ii) all promotional activities conducted by or on behalf of Licensee; and (iii) all activities after Licensee receives any Warner Content, including encoding, hosting and serving such Warner Content. As between Warner and Licensee, Licensee shall be responsible for obtaining all licenses necessary for the operation of the Licensee Interactive Service (except as expressly assumed in Section 3(b) hereof). Warner agrees to use commercially reasonable efforts to assist Licensee in obtaining publishing consents and licenses in the Territory, provided that (A) Warner shall have no obligation to pay any costs associated with such consents and licenses and (B) Licensee will reimburse Warner for all reasonable expenses incurred by Warner in assisting to obtain such consents and licenses.

(e) Licensee shall not release any Warner Master to any End User prior to the release date designated by Warner. Licensee will not utilize or leverage any Warner Masters or Other Materials provided by Warner hereunder in connection with any offer other than the Licensee Interactive Service, and all such materials shall only be made available, as permitted hereunder, from those areas of the Authorized Website dedicated to the Licensee Interactive Service.

(f) During the Term of this Agreement and for one (1) year thereafter, Licensee shall maintain in full force and effect, at its own expense, Internet media liability, network security liability or other suitable insurance with limits of no less than three million pounds (£3,000,000.00) per claim and three million pounds (£3,000,000.00) as an annual aggregate to cover technology errors and omissions and negligent acts, with worldwide coverage including, without limitation, loss of data, theft of personal information or Warner Content resulting from hacker attacks or viruses, breaches of security, unauthorized access, credit card liability or other similar loss to Warner (the "Policy"). The Policy shall be with a reputable licensed insurance company. Within thirty (30) days from the Effective Date, Licensee shall submit to Warner a certificate of insurance naming Warner, its subsidiaries, affiliates and assigns as additional insured parties, and requiring that the insurer not terminate or materially modify such policy without written notice to Warner at least twenty (20) days in advance thereof. For the avoidance of doubt, insurance required by Warner hereunder shall in no way reduce or limit Licensee's actual obligation to indemnify and defend Warner for claims, suits or allegations brought as a result of, or as related to the performance of this Agreement.

(g) For the avoidance of doubt, (i) all terms set forth herein regarding restrictions on the use of Warner Content, including, without limitation, the content usage rules set forth herein and (ii) the economic terms, shall be applicable to all end users of the Licensee Interactive Service, regardless of whether such end user is considered an "End User" under this Agreement. Payment for such use of Warner Masters shall not relieve Licensee of its obligations hereunder or constitute a waiver by Warner of any rights and remedies it may have under law or equity.

6. Promotional Opportunities.

(a) Licensee shall provide to Warner, at no cost to Warner, advertising space valued at five hundred thousand dollars (\$500,000.00) at Licensee's then-current market rates, to permit Warner to run its own advertisements, as designated by Warner in its discretion (subject in each case to Licensee's approval, not to be unreasonably withheld), in the Licensee Interactive Service (or in other promotional communications sent by or on behalf of Licensee to End Users), which advertisements Warner may use to promote Warner or its labels, Sound Recordings or artists.

(b) During the display, playback or other viewing via the Licensee Interactive Service of each Warner Master and from each area of the Authorized Website where artist, album title and/or song title information for any Warner Master is made available, Licensee shall include: (i) a space where Warner may place its banner advertisements related to that artist, which may link to an artist web site or other mutually agreeable destination; Licensee shall provide such ads at half of Licensee's then-current market rates, and Warner shall be permitted to use its allocation under 6(a) above towards such ads (but at the lower rate); and (ii) prominently-placed buttons or links in the Licensee Interactive Service that seek to encourage End Users to purchase the applicable Warner artist's album or digital download from one or more legally operating third-party providers, it being understood that if Licensee operates a service which makes available Warner album or digital download sales to end users, such buttons or links may direct end users to purchase opportunities within Licensee's service. In connection with subsection (ii), and while a Warner Master is being Streamed, Licensee shall, at a minimum, provide a link to buy the related album or digital download. Notwithstanding the foregoing, however, Warner acknowledges that such links to buy will likely not be live by the Launch Date, and Licensee agrees to use commercially

reasonable efforts to implement such links over the course of the following several months.

(c) Licensee shall provide to Warner promotional opportunities reasonably requested by Warner and shall use reasonable efforts to send mutually-agreed promotional messages via the Licensee Interactive Service's dashboard and advertising space thereon. Each such campaign may, at Warner's request, contain a Warner approved song clip or link to a stream and/or artist-related information (e.g., tour dates, album release information) that has been provided by Warner. Without limiting the foregoing, but solely to the extent permitted by applicable Law, Licensee shall not make available to any other record label any more favorable promotional opportunities than those available to Warner hereunder in terms of prominence, placement, quality and quantity (other than limited, special promotional arrangements that are exclusive or provided to such third parties in exchange for other special, non-monetary consideration, provided that upon Warner's request, Licensee shall extend to Warner similar types of special promotional arrangements on substantially similar terms).

(d) Subject to applicable Laws and Licensee's privacy policy that has been provided to Warner, Licensee shall furnish Warner with weekly "flash" reports by noon of each Tuesday, setting forth, in a medium and format reasonably acceptable to Warner, (i) the identity and date of each Play of a Warner Master via the Licensee Interactive Service and (ii) the following information relating to End Users who play Warner Masters on an aggregate, anonymous basis: (A) age; (B) gender; (C) geographical area; (D) data relating to the number and type of Plays of Warner Masters by End Users; and (E) any additional information relating to End Users or the use of Warner Masters of a type that Licensee provides to any other record companies about the use of such other record companies' own content (such subsections (i) and (ii), collectively, "End User Data"). It is understood and acknowledged by Warner that such flash reports on End User Data shall set forth only the data in Licensee's possession as of the date of the report, and that such flash reports may therefore not be as accurate as the monthly reporting Licensee will provide under Section 8. Licensee shall use all reasonable efforts to notify Warner of any proposed changes to its privacy policy at least thirty (30) days in advance of implementing any such changes, at the same time and in the same manner that it notifies third parties of such changes, it being understood that if a change is required to be implemented in a time period of less than thirty (30) days for Licensee to comply with applicable law, Licensee's compliance with such law shall not constitute a breach of this Agreement. Except as further required by law, or (in the good-faith judgment of Licensee's legal advisers) as reasonably necessary to reduce Licensee's liability exposure, Licensee shall not change its privacy policy in a manner that would impact the nature of the parties' relationship, e.g. by further restricting the amount or type of information that Licensee discloses hereunder.

(e) For purposes of this Agreement, "User Information" means information that is collected in connection with or otherwise concerning Warner Masters licensed and exploited under this Agreement as part of the Licensee Interactive Service that would be competitively useful to Warner's direct competitors (i.e., other record companies), which for purposes of clarity shall include End User Data, but shall not include data relating to other record companies' content (including information related to End Users who play such other record companies' content) or data collected in connection with plays of Warner content other than via the plays of Warner Masters from the Licensee Interactive Service.

(f) If Licensee wishes to disclose User Information to any third party, Licensee must seek Warner's prior written approval, which Warner may provide or withhold in its sole discretion. In the event that any such disclosure is approved by Warner, Licensee shall provide to Warner at no charge any copy of User Information provided to third parties or otherwise used by Licensee, to the extent that such User Information has not already been provided to Warner hereunder. Notwithstanding the foregoing, however, Licensee may freely use for its own internal purposes any information that is collected and processed by the Licensee application (such application, the "Audio Scrobbler" and information that is collected and processed by the Audio Scrobbler, "Scrobbler Information"). For purposes of clarity,

Licensee's permissible internal use of User Information includes providing information or other services to third parties (such as programming recommendations, Top Ten charts, etc.) in a manner that would not disclose such underlying User Information, as well as for providing the Licensee Interactive Service (e.g. for use in Licensee's music recommendation service, for profiling of End Users, for use in programming customized Tier Four channels, for tracking listening trends, and for reporting hereunder). Except as otherwise required by applicable Law, Licensee shall maintain a copy of the User Information for a minimum of two (2) years following the termination or expiration of this Agreement (or such longer period as reasonably requested by Warner).

(g) For the avoidance of doubt, User Information shall not be deemed to constitute the Confidential Information (as defined below) of Licensee hereunder; otherwise, however, Scobbler Information shall be deemed to constitute the Confidential Information of Licensee.

7. Royalties.

(a) Within ten (10) days after the Effective Date, Licensee shall remit to Warner a non-refundable, non-recoupable content preparation and delivery fee of twelve thousand five hundred dollars (\$12,500.00) for Warner's preparation and delivery of Warner Masters hereunder. For each Renewal Term, if any, Licensee shall remit to Warner a non-refundable, non-recoupable content preparation and delivery fee of one thousand forty-two dollars (\$1,042.00), on the first day of each such Renewal Term. However, and notwithstanding the foregoing, Licensee shall have no obligation to remit to Warner the amounts under this Section 7(a) for so long as, and to the extent that, Licensee elects not to receive digital copies of Warner Masters from Warner, but rather from a third party such as 7 Digital.

(b) Within ten (10) days after the Effective Date, Licensee shall remit to Warner a non-refundable, advance payment in the amount of fifty thousand dollars (\$50,000.00), which amount shall be fully recoupable from the fees set forth in Section 7(c) hereof (the "Service Fees") hereunder. For each Renewal Term, if any, Licensee shall remit to Warner an additional advance payment in the amount of four thousand one hundred sixty-seven dollars (\$4,167.00) on the first day of each such Renewal Term, which amount shall be fully recoupable against future Service Fees under Section 7(c) hereof.

(c) For each calendar month of the Term (or portion thereof), Licensee shall pay to Warner the following amounts:

- (i) with respect to Tier One, the greater of (A) the Warner Share for such calendar month multiplied by the sum of (x) sixty-five percent (65%) of Tier One Gross Revenues during such calendar month, and (y) fifty percent (50%) of Tier One Direct Sale Ad Revenues, and (B) the applicable rate set forth herein for each Play of a Warner Master via Tier One during such calendar month, which rate (1) shall equal four tenths of one cent (\$0.004) for each Play of a Warner Master during the first six calendar months after the Effective Date and (2) shall be one cent (\$0.01) for each Play of a Warner Master thereafter;
- (ii) with respect to Tier Two, the greater of (A) the Warner Share for such calendar month multiplied by fifty percent (50%) of Tier Two Gross Revenues and Tier Two Direct Sale Ad Revenues during such calendar month and (B) two cents (\$0.02) for each Play of a Warner Master via Tier Two during such calendar month, provided that such rate shall be renegotiated by the parties, acting in good faith, commencing in the seventh month after the Effective Date;
- (iii) with respect to Tier Three, the greatest of (A) the Warner Share for such calendar

month multiplied by fifty percent (50%) of Tier Three Gross Revenues and Tier Three Direct Sale Ad Revenues during such calendar month, (B) the Warner Share for such calendar month multiplied by two dollars fifty cents (\$2.50) for each End User of Tier Three and (C) one cent (\$0.01) for each Play of a Warner Master via Tier Three during such calendar month; and

- (iv) with respect to Tier Four, the greatest of (A) the Warner Share for such calendar month multiplied by twenty-five percent (25%) of the Tier Four Retail Revenues, (B) the Warner Share for such calendar month multiplied by fifty cents (\$0.50) for each End User of Tier Four and (C) one tenth of one cent (\$0.001) for each Play of a Warner Master via Tier Four during such calendar month, plus, regardless of whether subsection (A), (B) or (C) is applicable, the Warner Share for such calendar month multiplied by fifty percent (50%) of Tier Four Gross Revenues (other than revenues from the Tier Four Retail Revenues) and Tier Four Direct Sale Ad Revenues during such calendar month.
- (v) with respect to Sponsored Plays, the sum of (x) sixty-five percent (65%) of Sponsorship Revenues that are Commissioned Ad Revenues during such calendar month, and (y) fifty percent (50%) of Sponsorship Revenues that are Direct Sale Ad Revenues during such calendar month.

(d) All calculations with respect to amounts payable to Warner hereunder shall be made by carrying out all fractional amounts to the fourth digit following the decimal point, completing the necessary additions, and then rounding to the nearest penny (*i.e.*, no number should be rounded to the nearest penny prior to the completion of all necessary additions).

(e) All payments hereunder shall be in U.S. dollars and made by check, wire or ACH. Payments made by check can be sent via regular mail to Warner/Elektra/Atlantic Corporation Dept. CH10125, Palatine, Illinois 60055-0125 or via overnight delivery to Mellon Bank Chicago Regional, Lockbox 5505, North Cumberland Avenue, Suite #301, Chicago, Illinois 60656, Attention: Lockbox #10125. Payments made via wire or ACH should be sent to Mellon Financial Corporation ABA #043000261, for the Account: Warner/Elektra/Atlantic Corporation, 3400 West Olive Avenue, Burbank, California 91505, Account Number: 070-1325, Lockbox Number: 500005. Any past due amounts will bear interest daily until paid at a rate of interest equal to the lesser of: (i) the prime rate as published in *The Wall Street Journal* on the payment due date plus two percent (2%); or (ii) the maximum rate of interest allowed by applicable Law.

(f) Licensee shall collect, bear and pay any and all taxes, duties and customs of any kind, however designated, levied or based in any way anywhere in the Territory upon the sale or resale of any products or provision of services by Licensee, including, for the avoidance of doubt and without limitation, all sales, use, excise, purchase, value added or similar taxes (other than U.S. federal and state income taxes payable by Warner on monies earned by Warner hereunder). Licensee shall execute any documents Warner may reasonably deem necessary or desirable to evidence Licensee's liability for such taxes. If any claim is made against Warner for such taxes, Licensee shall indemnify and hold Warner harmless for any liability for such sums and shall promptly remit to Warner such sums together with any penalties and interest assessed.

(g) Except as otherwise set forth in subsection (f) above, all payments hereunder made by Licensee to Warner shall be made free and clear of, and without deduction or withholding for or on account of any and all taxes, levies, imposts, duties, charges, fees, deductions or withholdings now or hereafter imposed, levied, collected, withheld or assessed by any governmental authorities. If any taxes,

levies, imposts, duties, charges, fees, deductions or withholdings are required to be withheld or deducted from any amounts payable to Warner hereunder, the amounts so payable shall be increased to the extent necessary to yield to Warner the full amount specified hereunder.

(h) Licensee will maintain and preserve in its principal place of business, during the Term and for at least three (3) years thereafter, complete and accurate records of accounts and other records pertaining to its obligations hereunder ("Licensee Records"). At Warner's expense, and during reasonable business hours and upon thirty (30) days' notice, Warner may select an independent firm to audit the Licensee Records once during each successive twelve (12) month period beginning on the Effective Date ("Audit"), subject to such firm's signing a confidentiality and non-disclosure agreement containing confidentiality restrictions substantially similar to those hereunder. In the event that an Audit reveals an underpayment by Licensee hereunder, Licensee shall, without limitation of Warner's other rights and remedies, promptly pay to Warner such underpayment, together with interest thereon as calculated in accordance with this Agreement; and, in the event that such underpayment exceeds five percent (7.5%) of any payment obligations during such period covered by the Audit, Licensee shall, in addition to paying Warner such underpayment and interest, (i) reimburse Warner for all reasonable costs of the audit, including, without limitation, accountants' fees and attorneys' fees incurred in accordance with this Section 7(h) and (ii) permit Warner to conduct an additional Audit of Licensee's accounts and records in accordance with this Section 7(h) during the same twelve (12) month period. Any information initially disclosed by Licensee to Warner in the course of such an Audit also shall be treated as Confidential Information of Licensee hereunder.

8. Reporting.

(a) Within ten (10) days after each calendar month, Licensee shall deliver to Warner, together with the related payments, statements showing, in a clearly understandable manner and in reasonable detail as may be necessary to calculate the amounts owed to Warner hereunder (and broken down on a Tier-by-Tier basis): (i) the total number of Plays of Warner Masters during the applicable calendar month and year-to-date, collectively as well as separately on a Warner Master-by-Warner Master basis and identified using any code or other designation assigned by Warner (e.g., POID, ISRC, UPC or Grid #); (ii) the total Service Fees; (iii) Licensee's total Gross Revenues during the applicable calendar month and year-to-date; (iv) the total number of End Users; (v) any other category of information relating to End Users or their use of Warner Masters as is provided by Licensee to any other music company or record label the same data on an anonymous aggregate basis (e.g., no sound recordings, music companies or record labels other than Warner will be identified) for all other music companies or record labels with Sound Recordings used in the Licensee Interactive Service; (vi) all other information reasonably necessary to calculate the Service Fees hereunder (e.g., the total number of Plays of all Sound Recordings); and (vii) any additional information that Warner reasonably requires to fulfill any third party reporting or auditing obligation. Such statements shall be provided to Warner in a mutually agreeable format necessary to satisfy Warner's reporting or auditing obligations to third parties and in a manner that is compatible with Warner's royalty accounting systems. The current version of such format is set forth on Exhibit C hereto.

(b) Licensee shall provide to Warner the following information and materials throughout the Term: (i) real time access on a continuous basis, via a password-protected online account using a mutually-agreeable query system to, and (ii) by noon of each Tuesday following Licensee's first distribution of Sound Recordings hereunder, or if a holiday, the next business day thereafter, unofficial "flash" reports setting forth for the previous week Plays of Sound Recordings made as part of the Licensee Interactive Service from Licensee Servers, in each case, all information set forth on Exhibit C hereto. It is understood and acknowledged by Warner that such flash reports shall set forth only the data in Licensee's possession as of the date of the report, and that such flash reports may therefore not be as

accurate as the monthly reporting Licensee will provide under Section 8. For purposes of clarity, such unofficial flash reports may be consolidated with the flash reports required under Section 6(d). Warner also acknowledges that the real-time access required under subsection (i) above will not likely be available by the Launch Date, and that Licensee shall implement such real-time access within a reasonable timeframe.

(c) At six (6) month intervals from the Effective Date during the Term, Licensee will present to Warner the strategic marketing plans for the Licensee Interactive Service that Licensee plans to implement for the next six (6) months (the "Marketing Plans"). Licensee will give Warner a meaningful opportunity to comment and reasonably consult on the Marketing Plans.

(d) Licensee shall conduct comprehensive research and testing to better understand consumer preferences related to the music experience of the Licensee Interactive Service. Licensee shall provide Warner with access to detailed research results, with the terms of such research and testing to be determined by mutual agreement of the parties. To the extent any such research and testing specifically requested by Warner would be unduly burdensome for Licensee, the parties shall discuss in good faith the ways in which Warner can assist with such research and testing, including by sharing any undue portion of costs. In addition, but solely to the extent consistent both with Law and with Licensee's contracts with third parties (as construed by Licensee in its reasonable discretion), Licensee shall share all Advertisement-placement information with Warner (including, without limitation, CPM and "sell-through" data) and otherwise be reasonably responsive to requests from Warner regarding Advertisements. Although Licensee will disclose to Warner in accordance with the preceding sentence Licensee's standard, "rack" rates, aggregate advertisement-related information and the identities of its advertising partners, Warner expressly acknowledges that certain of Licensee's contracts with third parties may prevent Licensee from sharing some other types of Advertisement-placement information, including certain CPM and "sell-through" data. Licensee shall not determine or intentionally otherwise set charges or other consideration for Advertisements or advertising-related services, or otherwise structure its business, so as to reduce the amounts that Warner would otherwise receive from Licensee hereunder.

9. Ownership. The parties acknowledge that, as between the Parties, all right, title and interest in the Warner Content (including, without limitation, all intellectual property rights therein; any digitized files produced by Licensee hereunder; the physical and tangible embodiments thereof; and all intellectual property rights in the foregoing) are and shall remain the sole property of Warner. Licensee shall not contest or assist others in contesting the validity of any property or intellectual property rights owned by Warner pursuant to this Section 9 or otherwise. Notwithstanding anything in this Agreement to the contrary, (a) Licensee shall take possession of Warner Content (including any copy thereof) only for the purpose of facilitating the use of Warner Masters via the Licensee Interactive Service in accordance with the terms and conditions set forth herein and (b) Licensee shall not be deemed to have taken ownership of or title to any Warner Content (including any copy thereof).

10. Term; Termination.

(a) The initial term of this Agreement shall commence on the Effective Date and expire December 31, 2007 (the "Initial Term"), unless sooner terminated pursuant to the terms of this Agreement. This Agreement shall renew automatically for additional successive renewal terms of one (1) month each (each, a "Renewal Term"), unless either party gives notice of non-renewal to the other party at least one (1) month prior to the expiration of the then-current Initial Term or Renewal Term or unless sooner terminated pursuant to the terms of this Agreement (the Initial Term and any Renewal Terms, collectively, the "Term").

(b) Warner may terminate this Agreement, effective upon written notice to Licensee, in the event of: (i) Licensee's failure to comply with the payment obligations set forth in Section 7 above and fails to cure such non-compliance within ten (10) working days after written notice; (ii) Licensee's use or allows the use of the Warner Content (or any part thereof) other than as expressly authorized herein; (iii) Licensee's breach of Section 14(f) hereof; (iv) Licensee repeatedly fails to remove Warner Masters or Other Materials from the Authorized Website and/or Licensee Interactive Service pursuant to Section 3(c) hereof, notwithstanding Licensee's cure of such breach; (v) if Licensee transmits Sound Recordings fails to maintain a mechanism that permits Licensee to count reliably the number of Plays of Sound Recordings so that Warner may reliably audit such count; or (vi) the termination of any other agreement between Licensee and Warner by Warner prior to the expiration of the term thereof due to a breach of such agreement by Licensee.

(c) Each Party may terminate this Agreement, effective upon written notice to the other Party, if the other Party: (i) materially breaches any of the provisions of this Agreement and fails to cure same within thirty (30) days after written notice; or (ii) is unable to pay its debts when due, makes any assignment for the benefit of creditors, files any petition under the bankruptcy or insolvency Laws, has a receiver or trustee to be appointed for its business or property, or is adjudicated bankrupt or insolvent.

(d) Upon any expiration or termination of this Agreement, (i) Licensee shall immediately cease exercise of its rights under Section 2(a) hereof and shall, at Warner's option, promptly destroy or return all materials pertaining to same, including all copies thereof, that are in Licensee's possession or subject to its control (including, without limitation, in the possession or control of Authorized Contractor(s)); and (ii) Sections 1, 2(d), 3(b), 5(d), 5(f)-(g), 6(a), 6(e)-(g), 7, 8, 9, 10(d), 12, 13 and 14 shall survive any such event. For the avoidance of doubt, any Streams of Warner Masters made by Licensee in violation of the terms of this Agreement or after the expiration or termination of this Agreement for any reason shall be fully subject to, among other things, Warner's rights under 17 U.S.C. § 106(6) and the remedies in 17 U.S.C. § 501 et seq.

11. Representations and Warranties. Each Party represents and warrants that it has the right, power and authority to enter into this Agreement and to fully perform its obligations hereunder. EXCEPT FOR THE FOREGOING SENTENCE, WARNER MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THIS AGREEMENT OR THE WARNER CONTENT, AND EXPRESSLY DISCLAIMS ALL SUCH REPRESENTATIONS AND warranties, INCLUDING ANY WITH RESPECT TO TITLE, NON-INFRINGEMENT, MERCHANTABILITY, VALUE, RELIABILITY OR FITNESS FOR USE. EXCEPT AS EXPRESSLY SET FORTH HEREIN, AND WITHOUT LIMITING SECTION 12 BELOW, LICENSEE'S USE OF WARNER MASTERS OR OTHER MATERIALS IS AT ITS OWN RISK ON AN "AS IS" BASIS.

12. Indemnification.

(a) Warner will defend at its expense, indemnify and hold harmless Licensee and its affiliates and their respective directors, officers, employees, agents and representatives ("Related Parties") from any loss, liability, damage, award, settlement, judgment, fee, cost or expense (including reasonable attorneys' fees and costs of suit) ("Losses") arising out of or relating to any third-party (other than Authorized Contractors or other parties acting on behalf of Licensee) claim, allegation, action, demand, proceeding or suit ("Action") against any of them that arises out of or relates to: (i) any breach by Warner of this Agreement or its representations, warranties and covenants hereunder; or (ii) any claim that Licensee's use of the Warner Masters as explicitly authorized by this Agreement infringes the intellectual property rights of a third party.

(b) Licensee will defend at its expense, indemnify and hold harmless Warner and its affiliates and their respective Related Parties from any Losses arising out of or relating to any third-party Action

against any of them that arises out of or relates to: (i) any breach by Licensee of this Agreement or its representations, warranties and covenants hereunder; (ii) Licensee's operation of the Licensee Interactive Service; or (iii) any claim that Licensee's use of the Warner Content, other than as explicitly authorized by this Agreement, infringes the rights of a third party.

(c) The indemnified Party will promptly notify the indemnifying Party in writing of any Action and promptly tender its defense to the indemnifying Party. Any delay in such notice will not relieve the indemnifying Party from its obligations to the extent it is not prejudiced thereby. The indemnified Party will cooperate with the indemnifying Party at the indemnifying Party's expense. The indemnifying Party may not settle any Action in a manner that adversely affects the indemnified Party without such Party's consent (which shall not be unreasonably withheld or delayed). The indemnified Party may participate in its defense with counsel of its own choice at its own expense.

(d) EXCEPT WITH RESPECT TO (Y) SECTIONS 12 AND 13(B) HEREOF AND (Z) WILLFUL, INTENTIONAL OR GROSSLY NEGLIGENT BREACHES OF SECTION 2(D) HEREOF, NEITHER PARTY WILL BE LIABLE TO THE OTHER PARTY FOR SPECIAL, INDIRECT, CONSEQUENTIAL, STATUTORY, EXEMPLARY, PUNITIVE OR INCIDENTAL DAMAGES (INCLUDING LOST PROFITS OR GOODWILL, BUSINESS INTERRUPTION AND THE LIKE) RELATING TO THIS AGREEMENT, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. EXCEPT AS SET FORTH IN THE PRECEDING SENTENCE, IN NO EVENT WILL WARNER'S TOTAL LIABILITY FOR A DISPUTE RELATING TO THIS AGREEMENT EXCEED THE SERVICE FEES RECEIVED BY WARNER FROM LICENSEE UNDER THIS AGREEMENT DURING THE TERM.

13. Security; Confidentiality.

(a) In the event that robust methods of secure Streaming (including but not limited to such a method for flash Streaming) become generally available for all internet streaming platforms (including, e.g., a method of encryption for "flash" Streaming) on commercially reasonable terms, Warner shall notify Licensee and Licensee shall use commercially reasonable efforts to implement the appropriate method(s) as soon as is reasonably practicable for Licensee to do so. In addition, Licensee shall use diligent efforts to prevent unauthorized copying or use of Warner Masters or Other Materials, including, without limitation, by implementation of the Security Solution. Licensee shall not knowingly under any circumstances provide any functionality via the Licensee Interactive Service to facilitate, or otherwise encourage, any such unauthorized copying or use. If Licensee becomes aware of any infringement or misuse of the Warner Content (including the existence of popular "stream-rippers" or other applications or tools available for facilitating such infringement or misuse), it shall promptly notify Warner and fully cooperate with Warner's reasonable requests to remedy same, at Licensee's expense. Warner acknowledges that certain such "stream-rippers" are available as of the Effective Date, and that despite Licensee's reasonable efforts hereunder, Licensee is unlikely to be able to prevent the continued proliferation of such tools; Licensee, however, acknowledges that there are likely to be reasonable efforts that Licensee may take to make stream-ripping or misuse more difficult, or to otherwise limit the extent of such stream-ripping or misuse. With respect to End Users accessing the Licensee Interactive Service via Tier Two, Tier Three or Tier Four, Licensee shall configure the Licensee Interactive Service such that such End Users may only Stream Warner Masters when such End Users are logged onto their End User accounts, using in each case a unique user name and password. Licensee agrees that any digital computer file copy of Warner Content shall: (i) reside only on Licensee Servers; and (ii) be encrypted or protected by secure, password-protected access available to no more than five (5) essential personnel. Licensee shall restrict access to all physical or tangible copies of Warner Content solely to essential personnel who are informed of and accept the terms of this Agreement and shall store such items or any hardware or media embodying them in a secure location. If any security breaches occur in connection with this Agreement, the parties shall promptly consult with each other and all applicable third parties and shall cooperate in all appropriate remedial actions. If a security breach that is system-wide, material or

otherwise adverse to Warner occurs, Warner may suspend Licensee's rights under Section 2(a) until such breach is remedied. Licensee shall not through its business practices or otherwise take any action that Licensee knows or reasonably should know would compromise the efficacy or the security of the Security Solution or the Warner Content distributed hereunder. For the avoidance of doubt, Warner Masters will not be accessible or usable outside the Licensee Interactive Service.

(b) Neither Party shall disclose, share, communicate or provide access to any non-public, confidential or proprietary information of the other Party including the terms of this Agreement and any confidential information concerning the other Party's business, finances, plans, customers, technology and products) that it learns in connection with this Agreement ("Confidential Information") to anyone other than (x) its employees or Authorized Contractors who need to know such Confidential Information to exercise such Party's rights or to perform such Party's obligations hereunder and who are obligated to comply with confidentiality provisions no less restrictive than those set forth in this Agreement, and (y) as may be necessary to support third party reporting, royalty or audit obligations (e.g., imposed by Warner artists, publishers or otherwise). Neither Party shall use the other Party's Confidential Information, except as required to exercise such Party's rights or perform such Party's obligations hereunder. Confidential Information shall not include any information which: (i) is or becomes publicly known other than from a breach of this Agreement; (ii) is independently developed or obtained by the receiving Party from another legitimate source; or (iii) is required to be disclosed by Law or the rules of any nationally recognized stock exchange, provided that the receiving Party shall promptly inform the disclosing Party of any such requirement and cooperate with any attempt to procure a protective order or similar treatment. Licensee shall not make or issue any public statement or press release regarding this Agreement or its subject matter without the prior written approval of Warner.

14. General Provisions.

(a) *Independent Contractors.* Warner and Licensee are independent contractors, and shall not be deemed partners, franchisees, agents or joint venturers of each other. Neither Party will have any right or authority to obligate or bind the other Party in any manner whatsoever.

(b) *No Third-Party Beneficiaries.* Nothing in this Agreement shall confer upon any person any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement, and no person (including End Users or Authorized Contractors) shall be deemed a third party beneficiary under or by reason of this Agreement.

(c) *Entire Agreement; Amendment.* This Agreement, including all Exhibits hereto, constitutes the entire agreement between the Parties concerning the subject matter hereof and supersedes any prior understandings and agreements among the Parties with respect thereto. There are no representations, warranties, terms, conditions, undertakings or collateral agreements, expressed, implied or statutory, between the Parties related to the subject matter hereto other than as expressly set forth herein. No amendment of this Agreement, including this Section 14(c) shall be effective unless in writing, executed by both Parties, and expressly identifying the provision(s) to be amended and the changes to be made to such provision(s).

(d) *Waiver.* No waiver of any term of this Agreement will be effective unless executed in writing by the Party charged therewith or will excuse the performance of any acts other than those specifically referred to therein.

(e) *Severability.* If any term of this Agreement is held to be invalid or unenforceable, such holding will not affect the validity or enforceability of any other term hereto, and this Agreement will be interpreted and construed as if such term, to the extent the same will have been held to be invalid or unenforceable, had never been contained herein.

(f) *Assignment.* Licensee may not assign, confer any right in, assume in bankruptcy, pledge, mortgage or otherwise encumber this Agreement (or as applicable, Warner Masters or Other Materials), in whole or in part, without the prior written consent of Warner, which shall not unreasonably be withheld or delayed. For the avoidance of doubt, a merger, change of control, reorganization (in bankruptcy or otherwise) or stock sale of Licensee shall be deemed an "assignment" requiring such consent, regardless of whether Licensee is the surviving entity. Licensee acknowledges that this Agreement is a contract for personal services and that its identity is a material condition that induced Warner to enter into this Agreement. Any attempted action in violation of the foregoing shall be null and void *ab initio* and of no force or effect.

(g) *Notices.* All notices required hereunder shall be given by hand, overnight delivery service, or facsimile transmission (confirmed by letter sent by registered or certified mail) to the address below. Either Party may amend its address set forth above at any time by written notice to the other Party. All such notices will be deemed given when the same will be delivered, so addressed, by hand, facsimile or overnight delivery service.

To Warner:

Warner Music Inc.
75 Rockefeller Plaza
New York, New York 10019
Attn: Executive Vice President & General Counsel
Fax: (212) 258-3092

To Licensee:

Last.fm Ltd.
Clearwater House
4 - 7 Manchester Street
London, UK W1U 3AE
Attn: Chief Operating Officer
Fax: (44) 207-780-7082

(f) *Governing Law; Consent to Jurisdiction.* This Agreement will be construed in accordance with the laws of the State of New York as applied to contracts made and performed entirely therein. All disputes relating to this Agreement shall be brought solely in the state or federal courts located in the borough of Manhattan, New York, New York. Licensee hereby consents to the exclusive jurisdiction of the State of New York and waives any defense of forum inconvieniens. EACH PARTY HEREBY EXPRESSLY WAIVES ANY RIGHT TO A TRIAL BY JURY IN ANY ACTION OR PROCEEDING BROUGHT BY OR AGAINST EITHER PARTY IN CONNECTION WITH THIS AGREEMENT.

(g) *Counterparts.* This Agreement may be executed in counterparts, each of which shall be deemed an original and both of which together shall constitute one and the same document.

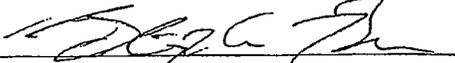
(h) *Remedies.* The rights and remedies of the Parties provided under this Agreement are cumulative and in addition to any other rights and remedies of the Parties at law or equity.

(i) *Headings.* The titles used in this Agreement are for convenience only and are not to be considered in construing or interpreting the Agreement.

(j) *Further Assurances.* The Parties hereto shall execute such further documents and perform such further acts as may be necessary to comply with the terms of this Agreement and consummate the transactions herein provided.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed as of the Effective Date by their respective offices thereunto duly authorized.

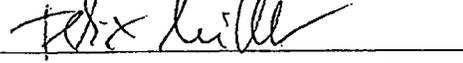
WARNER MUSIC INC.

By: 

Name: STEPHEN BRYAN

Title: VP, Bus. Dev.

LAST FM LTD.

By: 

Name: FELIX MILLER

Title: CEO

EXHIBIT A

LICENSEE INTERACTIVE SERVICE

Licensee currently offers an Internet radio service called "Last.fm" with a variety of pre-programmed genre stations that Licensee intends to be compliant with the regulations promulgated under the Digital Millennium Copyright Act (referred to herein as "DMCA-Compliant Stations"). Licensee desires to offer a Tier One, Tier Two, Tier Three and Tier Four service (as each is defined below) as an up-sell from the DMCA Compliant Stations. For purposes of this Agreement:

1. "Tier One" means Licensee's free to the consumer service that generates revenues primarily through the display of Advertisements to End Users, and which permits such End Users to Stream Sound Recordings on an On-Demand basis, provided that each such End User shall only be permitted to Stream each Warner Master (or any portion thereof) available via Tier One a maximum of three (3) times (the "Use Limitations"). Licensee shall monitor and enforce such Use Limitations on a Personal Computer-by-Personal Computer basis.
2. "Tier Two" means Licensee's pay service that is offered by Licensee to End Users based on a fee, and which permits each such End User to Stream a fixed number of Sound Recordings (including without limitation Warner Masters) on an On-Demand basis (such Tier Two ability, an End User's "Credits"). In no event shall an End User's Credits not used be available for redemption by such End User more than six (6) months after purchase of such credits.
3. "Tier Three" means Licensee's pay service that is offered by Licensee to End Users based on a recurring monthly fee (*i.e.*, on a subscription basis), and which permits each such End User to Stream an unlimited number of Sound Recordings (including without limitation Warner Masters) during each such month on an On-Demand basis.
4. "Tier Four" means Licensee's pay service that is offered by Licensee to End Users based on a recurring monthly fee (*i.e.*, on a subscription basis), and which permits each such End User to create and listen to Interactive Station(s) (as defined below) and meets the following criteria:
 - (a) An "Interactive Station" means any customized station created by Licensee for an End User, which does not permit On-Demand Streaming, but which may be (i) based on such End User selecting one or more artists as the basis for such station and/or (ii) otherwise tailored to such End User musical preferences;
 - (b) Licensee may not program an Interactive Station consisting solely of the Sound Recordings of a single artist;
 - (c) Licensee may include a function that permits End Users to skip Sound Recordings; provided, however, Licensee shall not permit End Users to utilize a rewind, record or fast forward feature with respect to any Sound Recording; and
 - (d) a Sound Recording may not be performed more than once in any ninety (90) minute period.

EXHIBIT C

ACCOUNTING FORMAT

PLEASE SEE ATTACHED. [LAST.FM: IN ORDER TO DETERMINE YOUR ABILITY TO COMPLY WITH THE ATTACHED DIGITAL ACCOUNTING FORMAT, A TEST FILE MUST BE PROVIDED TO AND APPROVED BY LEELEE LIAUDAT PRIOR TO EXECUTION. PLEASE CONTACT LEELEE DIRECTLY REGARDING THIS MATTER AT leelee.liaudat@wmg.com.]

The current contact at Warner-Elektra-Atlantic for accounting matters is Robert Baker, at Warner-Elektra-Atlantic by email at bob.baker@wmg.com and by telephone at (818) 238-6431. Warner may update such contact from time to time.

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Appendix F

INTERACTIVE RADIO AND MUSIC SERVICES AGREEMENT

This INTERACTIVE RADIO AND MUSIC SERVICES AGREEMENT ("Agreement") is made and entered into effective as of April 17, 2007 (the "Effective Date") by and between Warner Music Inc., a Delaware corporation, with offices located at 75 Rockefeller Plaza, New York, New York 10552 ("Warner"), and Slacker, Inc., a Delaware corporation, with offices located at 16935 W. Bernardo Dr., Ste. 101, San Diego, CA 92127 ("Licensee") (each a "Party" and, collectively, the "Parties").

WHEREAS, Licensee desires to develop, implement, operate, maintain and make available Sound Recordings to End Users via the Licensee Music Service (as such terms are defined below);

WHEREAS, the Licensee Music Service is experimental in nature and Warner is willing to grant the non-precedential licenses set forth in Section 2(a) hereof for a limited period of time solely to determine consumer interest in accessing Warner Masters (as such term is defined below) via the Licensee Music Service; and

WHEREAS, subject to the terms and conditions herein and in exchange for Licensee's obligations as set forth herein, Warner is willing to allow Licensee to include Warner Masters within the Licensee Music Service.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, and for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the Parties hereby agree as follows:

1. Definitions.

(a) "Advertisement" means any advertisement, sponsorship or other promotion or the like delivered by or on behalf of Licensee to an End User's Permitted Device or otherwise embedded in the Authorized Website or the Licensee Music Service, as more fully described on Exhibit A hereto.

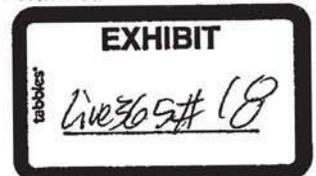
(b) "Authorized Contractor" means a third party that (i) provides services for or on behalf of Licensee, including, without limitation, Fulfillment Activities under Licensee's supervision and in accordance with the terms and conditions of this Agreement and (ii) is recognized in the industry as capable of professionally and competently performing such services.

(c) "Authorized Website" means Licensee's Internet website located at www.slacker.com, provided that such website is solely (i) owned and/or controlled by Licensee, (ii) operated in the Territory and (iii) marketed and branded using the name "Slacker."

(d) "Cached Stream" or "Cached Streaming" of a Sound Recording will mean a public performance of the Sound Recording from a cached electronic digital copy on the hard or flash drive of an End User's Portable Device, which cached electronic digital copy (i) has been made from Licensee Servers, (ii) does not require a simultaneous active connection to the Internet, (iii) is not capable of being copied to another device, and (iv) can only be accessed by the End User to the extent such access is authorized via the applicable Tier.

(e) "Conditional Download" means an electronic digital copy made by an End User of a Warner Master that is being Streamed, Cached Streamed or accessed by the End User on the On Demand for Personal Computer Only and the On Demand Portable Services, which electronic digital copy complies with the following: (i) the electronic digital copy may reside only on Permitted Devices owned or controlled exclusively by the End User; (ii) the electronic digital copy must be capable of being, and must be, automatically disabled and/or deleted and permanently erased from the End User's Permitted

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Devices within thirty (30) days of the expiration or termination of the end user's subscription to the Service; and (iii) the electronic digital copy is not capable of being copied to other devices or other storage mechanisms or formats.

(f) "End User" means any Person who views or otherwise accesses the Authorized Website, or accesses the Licensee Servers through a WiFi connection or through a satellite transmission, to receive Streams or Cached Streams via a Tier.

(g) "Fulfillment Activities" means all activities associated with the use and distribution of Warner Masters and Other Materials, including without limitation, hosting, encoding, serving, transmitting, promoting, Streaming, downloading, processing of files, and implementing the Security Solution.

(h) "Gross Revenues" means, in the applicable calendar month (or portion thereof) and as allocable to the applicable Tier (as defined below), the sum of all monies or other consideration (i) paid or payable by End Users to Licensee for access to such Tier (and with respect to annual subscriptions, as allocated on a monthly basis) minus bona fide cancellations actually refunded by Licensee (the "Retail Price"), (ii) received or receivable by or on behalf of Licensee from the sale of products, goods and services (other than Retail Price) to End Users minus (A) the wholesale price of the products and services of, and actually paid to, unrelated third Persons, and minus (B) returns, sales and use taxes, shipping, bad debts, credit card and other service fees actually paid to unrelated third Persons in connection with the sale of such products, goods or services (the "Product Revenue") and (iii) received or receivable by or on behalf of Licensee from Advertisements displayed, performed, delivered or otherwise transmitted in connection with the display, performance, distribution, transmission or other delivery of Sound Recordings via such Tier or in any promotional communications sent by or on behalf of Licensee to End Users ("Advertising Revenues"), less Licensee's actual, out-of-pocket expenditures for advertising sales agency commissions actually paid by Licensee to unaffiliated third party advertising sales agencies (subject to a maximum deduction in all events of fifteen percent (15%) of Advertising Revenues). For purposes of determining any non-cash component of Gross Revenues, such non-cash consideration will be accounted for based on the fair market value of any goods, services or other real, personal, tangible or intangible property received. Notwithstanding the foregoing, Gross Revenues do not include revenues received from sales of hardware through which End Users access the Licensee Music Service, and accessories thereto, or revenues received from End Users to access any music subscription service operated by BBI under license from Warner other than the Licensee Music Service.

(i) "Internet" means the wide area cooperative network of university, corporate, government and private computer networks communicating predominately through Transmission Control Protocol/Internet Protocol which network is commonly referred to as "the Internet" (but which specifically excludes wireless transmissions other than IEEE 802.11x transmissions).

(j) "Law" means any local, state or federal law; statute, ordinance, rule, regulation, code, order, judgment or decree.

(k) "Launch Date" means the date on which Licensee makes first makes a Sound Recording available for Streaming via the Licensee Music Service.

(l) "Licensee Music Service" means Licensee's music service available via the Authorized Website, or the Licensee Servers through a WiFi connection or through a satellite transmission, that permits End Users to Stream or Cache Stream authorized Sound Recordings via a Tier as described on Exhibit A hereto, and which is (i) wholly owned and/or controlled by Licensee and (ii) operated by Licensee and/or an Authorized Contractor.

EXECUTION COPY

(m) "Licensee Servers" means computer servers storing phonorecords or making public performances licensed hereunder that at all times (i) are located in the Territory, (ii) remain under the control of Licensee, (iii) incorporate security measures that meet or exceed prevailing best practices in the industry and (iv) to the extent owned or controlled by Authorized Contractors, are covered by agreements between Licensee and Authorized Contractors, provided that Licensee manages and controls the hosting activities.

(n) "On-Demand Stream" means the digital transmission, via the Licensee Music Service, of a particular Sound Recording at or immediately following a request by an End User.

(o) "Other Materials" means artwork, graphic images (e.g., album artwork), artists' names, images and likenesses, and other information or materials relating to Warner Masters that are provided by or on behalf of Warner to Licensee in Warner's sole discretion, solely for Licensee's use in accordance with the terms and conditions hereof and any additional terms and conditions of which Warner notifies Licensee.

(p) "Permitted Device" means a Personal Computer or a Portable Device.

(q) "Personal Computer" means a traditional-sized laptop or desktop personal computer designed for an individual user that would not replicate the portable device experience and that supports the Security Solution.

(r) "Person" means a natural person, a corporation, a limited liability company, a partnership, a trust, a joint venture, any governmental authority or any other entity or organization.

(s) "Portable Device" means a small, light-weight electronic device that supports the Security Solution and that is easily transported from one location to another and may be usable during travel.

(t) "Security Solution" means the digital rights management and content protection system for Warner Content as described on Exhibit B hereto (which may be modified from time to time pursuant to the Parties' agreement), and as further set forth in the White Paper.

(u) "Sound Recording" means a work that results from the fixation of a series of musical, spoken or other sounds, but not including the sounds accompanying a motion picture or other audiovisual work, regardless of the nature of the material objects, such as disks, tapes or other phonorecords, in which they are embodied.

(v) "Stream" or "Streaming" (as a verb or gerund) means the process or action of making a single digital transmission (other than as a download) of a Sound Recording (or any part thereof) delivered to an End User's Personal Computer via the Internet from Licensee Servers, in compliance with the Security Solution, whereby such transmission is contemporaneous or nearly contemporaneous with the performance of, as applicable, the sound recording embodied therein, and which is not intended to be, or capable of being, copied or stored on the End User's Personal Computer (other than any ephemeral copies used solely for caching or buffering purposes, and provided that such cached or buffered copies are automatically deleted after being played). "Stream" (as a noun) means the digital audio transmission made in the process of Streaming.

(w) "Territory" means the United States and its territories and possessions, including without limitation Puerto Rico.

(x) “Tier” means Tier One, Tier Two or Tier Three of the Licensee Music Service (as each is defined on Exhibit A hereto).

(y) “Warner Content” means all Warner Masters, Other Materials and any other materials provided by or on behalf of Warner to Licensee hereunder, in Warner’s sole discretion. Warner Content is provided to Licensee solely for Licensee’s use in accordance with this Agreement. Licensee shall comply with any usage and other guidelines pertaining to the Warner Content that are made available to Licensee by or on behalf of Warner from time to time, including without limitation any revisions to the guidelines on Exhibit A hereto.

(z) “Warner Masters” means those Sound Recordings identified on a list provided by Warner to Licensee hereunder (which list Warner may update from time to time, in its sole discretion), to the extent that such identified Sound Recordings are wholly owned and/or controlled by Warner, are in compliance with all applicable requirements provided by Warner and for which Warner has the right to permit the uses hereunder, it being understood that Warner may include requirements (upon reasonable notice to Licensee, including via xml feed) as to how each such Sound Recording is to be presented and offered for use hereunder (e.g., sequence of Sound Recordings and/or inclusion of artwork), and which are approved by Warner, in its sole discretion, solely for Licensee’s use in connection with the Licensee Music Service.

(aa) “Warner Share” means a fraction, the numerator of which is the total number of times that any Warner Masters incorporated into or made available through the applicable Tier is Streamed or Cached Streamed by End Users during the applicable calendar month, and the denominator of which is the total number of times that all Sound Recordings (including without limitation Warner Masters) available in their entirety (i.e., not as clips) through such Tier are Streamed or Cached Streamed by End Users during such calendar month.

(bb) “White Paper” means that document describing the features, functionality, specifications and other details of or relating to the Licensee Music Service as set forth on Exhibit B hereto.

2. License.

(a) Subject to all the terms and conditions of this Agreement, Warner hereby grants to Licensee during the Term a non-exclusive, non-assignable, non-transferable, non-sublicensable (except to Authorized Contractor(s) in accordance with this Agreement) right and license, solely within the Territory, to:

- (i) store and reproduce Warner Content on Licensee Servers and Portable Devices, solely as necessary for Licensee to exercise those rights set forth in Sections 2(a)(ii) through (iv) below;
- (ii) allow End Users to Stream, Cache Stream and On-Demand Stream Warner Masters via the Licensee Music Service (as permitted by the applicable Tier) to Permitted Devices in the Territory in their entirety (or part thereof, to the extent an End User terminates a Stream, Cache Stream or On-Demand Stream prior to the end of the applicable Warner Master) solely in the manner set forth herein and in the format and structure designated by Warner;
- (iii) to permit End Users of Tier 2 to make a Conditional Download of a Stream or Cached Stream while such End User is listening to such Stream or Cached Stream and to playback such Conditional Download during the period in which such End

User subscribes to Tier 2;

- (iv) to permit End Users of Tier 3 to have on demand control over any Stream or On Demand Stream;
- (v) to permit End Users of Tier 4 to make a Conditional Download of an On Demand Stream that has been requested by such End User and to playback such Conditional Download during the period in which such End User subscribes to Tier 3, and to have on demand control over any Stream, Cached Stream, Conditional Download or On Demand Stream;
- (vi) subject to Warner's prior written consent, on a case-by-case basis, digitize and display Other Materials (A) on the Authorized Website, (B) via the Licensee Music Service or (C) in other promotional communications sent directly from Licensee to those End Users who have consented to such receipt, in each case, in the same size and prominence as all other similar content in each such location or communication and solely to promote the availability of Warner Masters via the Licensee Music Service; and
- (vii) subject to Warner's prior written consent, on a case-by-case basis, display in connection with the Streaming of Warner Masters as part of the Licensee Music Service, (A) the names, logos and trade names of Warner, as such names, logos and trade names appear on records which embody Warner Masters, (B) the album titles for Warner Masters and the titles of the records which embody each Warner Master and (C) the names of the artists whose performances are embodied in Warner Masters referred to in subsection (B).

(b) Licensee will not edit, change or alter in any way any Warner Masters or Other Materials provided by or on behalf of Warner hereunder without Warner's prior written consent. Without limiting the foregoing, the license granted herein does not include any adaptation (derivative work) rights or the right to alter the fundamental character of any Warner Content.

(c) Without Warner's prior written consent, Licensee: (a) shall ensure that all Advertisements displayed on or in connection with the Licensee Music Service are not tied to any individual recording artist or Sound Recording and are clearly distinguished from the performance of any such Sound Recording; and (b) may not take any action, directly or indirectly, so as to imply an artist or Warner endorsement, or artist or Warner commercial tie-in of any product or service, including, without limitation, the Authorized Website or the Licensee Music Service.

(d) All rights not expressly conferred to Licensee are expressly reserved to Warner. For the avoidance of doubt, Warner is not restricted from sales (either its own or via third parties) of Warner Masters in any format or channel in the Territory. Except as expressly set forth herein, Licensee shall not use or make available any Warner Masters, Other Materials or other property of Warner (including the names and/or likenesses of any artist whose performances are embodied in Warner Masters), provided that the foregoing shall not prevent Licensee from using any artist name or likeness embodied in any Warner Masters or Other Materials in any manner that does not require consent from Warner or any other Person.

(e) Except as embodied in Warner Masters and/or Other Materials as provided to Licensee and in other Sound Recordings or related artwork or other materials provided by or on behalf of other record labels that are used in the Licensee Music Service, the Authorized Website, the Licensee Music

Service and the Advertisements shall not contain content or engage in activities (and shall not frame, link to, advertise, or otherwise endorse any other website or media that contains content or engages in activities) that: (i) is or are unlawful, harmful, threatening, defamatory, obscene, harassing or discriminatory; (ii) violate(s) or infringe(s) the rights of any third party (including intellectual property, name and likeness and privacy/publicity rights); (iii) depict(s) sexually explicit images; (iv) promote(s) violence, discrimination, illegal activities, or alcohol or tobacco products; or (v) in any manner which, in Warner's reasonable judgment, might subject Warner to unfavorable regulatory action, violate any applicable laws, or subject Warner or any Warner Artist, to liability.

(f) For the avoidance of doubt, except as expressly set forth herein or otherwise agreed to by Warner in advance in writing, nothing in this Agreement grants Licensee, nor does this Agreement authorize Licensee to grant to any other Person (including without limitation any End User or any Authorized Contractor), the right to: (i) host, display or use in any manner any Warner Masters (or portions thereof) on the Licensee Music Service or otherwise; (ii) perform publicly, by means of digital transmission or otherwise, any Warner Master; or (iii) Stream any Warner Master on a "pay-per-view" or "pay-per-play" basis.

(g) Unless Warner agrees otherwise in writing during the Term, neither Licensee nor any Authorized Contractor shall: (i) Stream (or encode to permit the Streaming of) Warner Masters at a transmission rate greater than 128 kbps; (ii) license or otherwise authorize a third party to "deep link" (providing a direct means to download or Stream a Sound Recording outside of the Licensee Music Service) from outside of the Licensee Music Service for the purpose of Streaming a Warner Master; (iii) except as permitted in Tiers 2, 3 and 4, permit any End User to make downloads of any Warner Masters; or (iv) frame or otherwise superimpose Warner Masters into any other website, sublicense or "syndicate" (as that term is commonly understood in the Internet marketing industry) Warner Masters to any third party.

(h) Warner acknowledges that Licensee may use Authorized Contractors to perform its obligations hereunder in accordance with the provisions of this Agreement, provided that Licensee must maintain control over, and retains liability hereunder for all such obligations, including, without limitation, all Fulfillment Activities. Licensee shall cause each Authorized Contractor to abide by the terms and conditions of this Agreement applicable to Licensee (regardless of whether Authorized Contractors are expressly covered by such obligation). If any Authorized Contractor takes any action or omits to take any action that would breach this Agreement if it were Licensee: (i) Licensee shall promptly notify Warner of same; (ii) upon notice to Licensee from Warner, Licensee shall immediately cease providing any Warner Content to such Authorized Contractor and cease permitting such Authorized Contractor to perform Licensee's obligations hereunder, and such entity shall cease to be an "Authorized Contractor" hereunder; and (iii) Licensee shall be deemed to be in breach of this Agreement as if such action or omission were or were not taken by Licensee.

3. Warner's Rights and Obligations.

(a) Warner shall provide Licensee with all Warner Masters in WMA format at a bit rate of 128 kbps and AAC+V2 format at a bit rate of 30 kbps and 44 kbps, or other mutually agreed format(s). Warner shall provide Licensee a list of Warner Masters that may be used as part of the Licensee Music Service in accordance with the terms and conditions hereunder, and may update it from time to time during the Term in its sole discretion.

(b) Warner shall be responsible for the following: (i) all artist royalties, producer royalties or other record royalties payable to artists and producers and other record royalties, costs, fees or other charges payable to third parties in the Territory resulting from agreements made between Warner and the

relevant performing artists or producers pertaining to Licensee's authorized use of Warner Masters hereunder; and (ii) payments that may be required hereunder pursuant to the American Federation of Musicians (AFM) and/or the American Federation of Television and Radio Artists (AFTRA) collective bargaining agreements applicable to Warner. For the avoidance of doubt Warner shall have no responsibility for obtaining any licenses or permissions to use, or for paying any royalties, fees or other payments (A) for the use of any musical compositions underlying the Warner Content (including, without limitation, mechanical rights and public performance rights) or (B) not expressly assumed by Warner in this Section 3(b), all of which are Licensee's sole responsibility.

(c) Warner may terminate Licensee's prospective rights to use any Warner Content and/or Other Materials at any time by notifying Licensee in writing. Upon receipt of such notice, Licensee shall: (i) cease to offer such materials on a prospective basis as promptly as possible, but in no event later than two (2) days following receipt of notice; and (ii) promptly following such notice, return to Warner or destroy, at Warner's option and in accordance with Warner's instructions, such Warner Content and/or Other Materials (including, without limitation, from Licensee Servers).

(d) Each Party will designate a single contact person to address all technical, marketing or other business issues (other than accounting as contemplated by Exhibit C hereto) relating to this Agreement.

4. Licensee's Security.

(a) Licensee shall at all times during the Term use mutually-agreed, robust "state of the art" (*i.e.*, best available) practices and systems (including without limitation the Security Solution, which the parties agree is deemed acceptable under this Section 4(a) as of the Effective Date of this Agreement) to enforce the territorial, use and other restrictions of this Agreement and to prevent and take prompt and proper remedial action against unauthorized physical or electronic access, copying, modification or distribution of Warner Content, including without limitation the sharing of any End User accounts. In no event shall Licensee modify any part of the Licensee Music Service or its functionality in a manner that would impair the security of Warner Content or otherwise limit any of Warner's rights or Licensee's obligations hereunder. If there is any commercial release of any upgrade, update, repair, patch, new release or modification to software or technology that could materially improve the Security Solution, Licensee shall notify Warner and add it to the Licensee Music Service to the extent commercially practicable.

(b) Licensee shall operate the Licensee Music Service with functionality and features consistent with the description set forth in Exhibit A hereto. Licensee will use commercially reasonable efforts to ensure that all End Users are located within the Territory, which may include the following: (i) verify that the End User has an IP address in the Territory through a reverse domain procedure or similar verification system pre-approved by Warner in writing; and/or (ii) verify that the End User's mailing address as reflected in the files of the financial institution providing such End User's credit card is located within the Territory. Warner may, on its own or through an independent firm, conduct a technical audit of the Authorized Website and Licensee Music Service (including related technical systems, servers, content preparation and functionality) one (1) time per year (or more often, if justified under the circumstances) during reasonable business hours and upon reasonable notice to ensure Licensee's compliance with this Agreement. Licensee shall promptly procure any and all rights and permissions, documentation and availability of personnel of Licensee or any Authorized Contractor necessary for Warner to exercise its audit rights hereunder.

5. Licensee's Obligations.

(a) If Warner, in its sole discretion, requests a parental advisory warning due to explicit lyrics or otherwise for a particular Warner Master, Licensee shall clearly disclose such warning to End Users immediately prior to their playing of the applicable Warner Master. If Warner, in its sole discretion, provides a copyright notice for Warner Masters or Other Materials, Licensee shall include such notice so it can be readily viewed by End Users. Licensee shall take all commercially reasonable steps to ensure that Warner Content contains any current and future signals, identifying codes, watermarks, copy protection codes and similar content or features provided by Warner. Licensee shall institute systems to read any unique identifiers to Warner Masters contained in the Warner Content. Licensee shall not cover, impair or alter in any way any watermark (or similar item) in Warner Masters.

(b) The Licensee Music Service will display the track title and name of the artist for each Warner Master during the playing thereof by an End User.

(c) Licensee will comply with all applicable Laws in its performance of its obligations and exercise of its rights under this Agreement and the operation of its business relating thereto. Licensee shall require all End Users (except for End Users accessing the Service through the Authorized Website for the first 24 hours only prior to registration for an End User account), prior to delivery of any Warner Masters or Other Materials hereunder, to agree to "Terms of Use" that: (i) require End Users to comply with all applicable Laws in their use of Warner Masters and to protect Warner's rights therein; (ii) state that End Users are not granted any commercial, sale, resale, reproduction, distribution or promotional use rights for Warner Masters; and (iii) state that certain Sound Recordings provided through Licensee's Music Service may contain explicit lyrics and that parents of minors should be advised of the same. Licensee shall provide Warner with its End User "Terms of Use" which shall be at least as protective as this Section 4(c) and the terms and conditions on Exhibit A hereto. Licensee shall, on a regular basis, monitor End User activity to ensure compliance with such "Terms of Use."

(d) Except as expressly assumed by Warner in Section 3(b) hereof, Licensee shall obtain and pay for all licenses, rights, permissions and consents and pay all costs relating to the exercise of its rights and performance of its obligations under this Agreement and all Fulfillment Activities, including, without limitation: (i) royalties payable for the performance, reproduction or any other rights in or to musical compositions underlying Warner Masters; (ii) all promotional activities conducted by or on behalf of Licensee; (iii) all activities after Licensee receives any Warner Content, including encoding, hosting and serving such Warner Content; and (iv) obtaining all other rights, clearances and consents relating to any of the foregoing. As between Warner and Licensee, Licensee shall be responsible for obtaining all licenses necessary for the operation of the Licensee Music Service (except as expressly assumed in Section 3(b) hereof). Warner agrees to use commercially reasonable efforts to assist Licensee in obtaining publishing consents and licenses in the Territory, provided that (A) Warner shall have no obligation to pay any costs associated with such consents and licenses and (B) Licensee will reimburse Warner for all reasonable expenses incurred by Warner in assisting to obtain such consents and licenses.

(e) Licensee shall not release any Warner Master to any End User prior to the release date designated by Warner. Licensee will not utilize or leverage any Warner Masters or Other Materials provided by Warner hereunder in connection with any offer other than the Licensee Music Service, and all such materials shall only be made available, as permitted hereunder, from those areas of the Authorized Website dedicated to the Licensee Music Service or the Licensee Servers for the Tiers accessed through a Portable Device.

(f) During the Term of this Agreement and for one (1) year thereafter, Licensee shall maintain in full force and effect, at its own expense, Internet media liability, network security liability or

other suitable insurance with limits of no less than five million dollars (\$3,000,000.00) per claim and five million dollars (\$3,000,000.00) as an annual aggregate to cover technology errors and omissions and negligent acts, with worldwide coverage including, without limitation, loss of data, theft of personal information or Warner Content resulting from hacker attacks or viruses, breaches of security, unauthorized access, credit card liability or other similar loss to Warner (the "Policy"). The Policy shall be with a licensed insurance company with a Best's Rating of no less than A-VIII. Within thirty (30) days from the Effective Date, Licensee shall submit to Warner a certificate of insurance naming Warner, its subsidiaries, affiliates and assigns as additional insured parties, and requiring that the insurer not terminate or materially modify such policy without written notice to Warner at least twenty (20) days in advance thereof. For the avoidance of doubt, insurance required by Warner hereunder shall in no way reduce or limit Licensee's actual obligation to indemnify and defend Warner for claims, suits or allegations brought as a result of, or as related to the performance of this Agreement.

(g) For the avoidance of doubt, (i) all terms set forth herein regarding restrictions on the use of Warner Content, including, without limitation, the content usage rules set forth herein and (ii) the economic terms, shall be applicable to all end users of the applicable Tier of the Licensee Music Service, regardless of whether such end user is considered an "End User" under this Agreement. Payment for such use of Warner Masters shall not relieve Licensee of its obligations hereunder or constitute a waiver by Warner of any rights and remedies it may have under law or equity.

(h) By June 2008, Licensee shall implement a feature whereby Tier 2 customers may access via their Personal Computers a list of tracks saved to such customers' Portable Devices via the "Heart" button, accompanied by the ability to immediately purchase and download such tracks.

6. Promotional Opportunities.

(a) To the extent that Licensee communicates marketing news and information (via emails or otherwise) to End Users as part of the provision of the Licensee Music Service, Licensee will, at Warner's request, communicate marketing news (e.g., announcements regarding new releases of Warner Masters) and information regarding Warner Artists designated by Warner to End Users who have opted to receive such emails or other communications.

(b) If the Licensee offers Promotional Opportunities to other providers of recorded music content to the Licensee Music Service, Licensee shall offer to Warner on a gratis basis Warner's Album Market Share of such Promotional Opportunities on appropriately similar terms. "Album Market Share" means the proportionate share as determined by reference to the number of albums sold by Warner as compared to the number of albums sold by each other Person that is also a provider of recorded music content to the Service in the Territory during the preceding calendar month, in each case, as reported by SoundScan (or another provider of reasonably comparable sales data with reasonably equivalent authority, accuracy and reliability in the event that SoundScan ceases publication of such information). As used herein, "Promotional Opportunities" means, individually and collectively, features, placements, and banner ads.

(c) During the display, playback or other viewing via the Licensee Music Service of each Warner Master and from each area of the Authorized Website where artist, album title and/or song title information for any Warner Master is made available, at Warner's request, Licensee shall include: (i) a direct link to the applicable Warner artist website as designated by or on behalf of, and provided by, Warner to Licensee; and (ii) prominently-placed buttons or links in the Licensee Music Service that seek to encourage End Users to purchase the applicable Warner artist's album or digital download from one or more legally operating third-party providers. In connection with subsection (ii), and while a Warner Master is being Streamed, Licensee shall, at a minimum, provide a link to buy the related album or digital

download. The link requirements provided in subparagraph 6(d)(i) shall not apply to a Portable Device to the extent such type of display is not then generally supported, for which similar requirements shall be mutually agreed upon by Warner and Licensee.

(d) On a weekly basis commencing as of the date that is ninety (90) days after the Effective Date, Licensee will deliver to Warner Aggregate Information compiled by Licensee in connection with the Service in form and format to be mutually agreed upon. For the purposes of this Section 6(e), "Aggregate Information" shall mean information concerning the usage habits, patterns and/or demographic classification of an End User as a group but which does not specify the identity of any individual End User. Subject to applicable Laws and Licensee's privacy policy that has been provided to Warner, and to the extent, in Slacker's sole discretion, End Users are provided with the opportunity to "opt in" to sharing their email addresses with third parties, commencing as of the date that is ninety (90) days after the Effective Date, upon Warner's request, Licensee shall furnish Warner with, in a medium and format mutually agreed upon by Warner and Slacker, (i) the identity, time and date of each Warner Master Streamed via the Licensee Music Service and (ii) the following information relating to each End User: (A) age; (B) gender; (C) zip/postal code; (D) email address; and (E) any additional information relating to End Users or the use of Warner Masters of a type that Licensee provides to any other record companies, on at least the same terms and conditions as it is provided to such other record companies, provided that information with respect to other record company sales shall be provided to Warner on an anonymous, aggregate basis (such subsections (i) and (ii), collectively, "End User Data"). Licensee shall notify Warner of any proposed changes to its privacy policy at least ten (10) days in advance of implementing any such changes.

(e) For purposes of this Agreement, "Warner Information" means information collected in connection with or otherwise concerning Warner Content or Warner artists (whether or not such information personally identifies any End User(s)), including without limitation any End User Data.

(f) If Licensee wishes to disclose Warner Information to or use Warner Information for the benefit of any third party (including without limitation any affiliate of Licensee), or commercially exploit the Warner Information, Licensee must seek Warner's prior written approval, which Warner may provide or withhold in its sole discretion. In the event that any such use or disclosure is approved by Warner, Licensee shall provide to Warner at no charge any copy of Warner Information provided to third parties or otherwise used by Licensee, to the extent that such Warner Information has not already been provided to Warner hereunder. Except as otherwise required by applicable Law, Licensee shall maintain a copy of the Warner Information for a minimum of two (2) years following the termination or expiration of this Agreement (or such longer period as reasonably requested by Warner).

(g) For the avoidance of doubt, End User Data and Warner Information shall be deemed to constitute the Confidential Information (as defined below) of Licensee hereunder, provided that such information may be used for the additional purposes of marketing of Warner Masters to End Users and internal research for marketing and business development purposes.

7. Royalties.

(a) Within ten (10) days after the Effective Date, Licensee shall remit to Warner a non-refundable, non-recoupable content preparation and delivery fee of twenty-five thousand dollars (\$25,000.00) for Warner's preparation and delivery of Warner Masters hereunder. For each Renewal Term, if any, Licensee shall remit to Warner a non-refundable, non-recoupable content preparation and delivery fee of one thousand six hundred sixty-six dollars and sixty-seven cents (\$1,666.67), on the first day of each such Renewal Term.

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(b) Within ten (10) days after the Effective Date, Licensee shall remit to Warner a non-refundable, advance payment in the amount of five hundred thousand dollars (\$500,000.00), which amount shall be fully recoupable from the fees set forth in Section 6(c) hereof (the "Service Fees") hereunder. For each Renewal Term, if any, Licensee shall remit to Warner an additional advance payment in the amount of thirty-three thousand, three hundred thirty-three dollars and thirty-three cents (\$33,333.33) on the first day of each such Renewal Term, which amount shall be fully recoupable against future Service Fees under Section 6(c) hereof.

(c) From March 14, 2007 through the duration of the Term, for each calendar month (or portion thereof), Licensee shall pay to Warner the following amounts:

(i) Fees for End Users of the Tier 1 (Basic Radio Service). The greater of:

(1) Per Play Fees. The product of (x) One Hundred Thirty Percent (130%) of the then-prevailing "statutory rate" payable by so-called "large commercial webcasters" making digital public performances of sound recordings by means of eligible nonsubscription transmissions and for the making of ephemeral copies in furtherance of those digital public performances pursuant to the statutory licenses under 17 U.S.C. Sections 112 and 114, respectively (and the implementing regulations thereunder) that is expressed as a "per play" basis, multiplied by (y) the total number of times that any Warner Masters incorporated into or made available through Tier 1 is Streamed or Cached Streamed by End Users during the applicable calendar month for more than thirty (30) consecutive seconds; or

(2) Gross Revenues. The product of (x) the Warner Share multiplied by (y) twenty-two and one-half percent (22.5%) of Tier 1 Gross Revenues in the applicable month.

(ii) Fees for End Users of Tier 2 (Premium Radio Service). The greater of:

(1) Per Play Fees. The sum of (A) and (B), as follows: (A) equals the product of (x) One Hundred Fifty Percent (150%) of the then-prevailing "statutory rate" payable by so-called "large commercial webcasters" making digital public performances of sound recordings by means of eligible nonsubscription transmissions and for the making of ephemeral copies in furtherance of those digital public performances pursuant to the statutory licenses under 17 U.S.C. Sections 112 and 114, respectively (and the implementing regulations thereunder) that is expressed as a "per play" basis, multiplied by (y) the total number of times that any Warner Masters incorporated into or made available through Tier 2 is Streamed or Cached Streamed by End Users during the applicable calendar month for more than thirty (30) consecutive seconds (excluding Warner Masters covered in (B)); and (B) equals the total number of times that any Warner Masters incorporated into or made available through Tier 2 that have been captured via the "Save Feature" described in Section II of Exhibit A attached hereto are Streamed or Cached Streamed by End Users during the applicable calendar month for more than thirty (30) consecutive seconds multiplied by (b) One and Fifteen One Hundredths Cents (US\$0.0115); or

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- (2) Gross Revenues. The product of (x) the Warner Share multiplied by (y) thirty percent (30%) of Tier 2 Gross Revenues in the applicable month; or
 - (3) Per Subscriber Fee. The product of (x) the Warner Share multiplied by (y) the number of End Users of Tier 2 during such month multiplied by (z) Two Dollars and Twenty-Five Cents (US\$2.25).
- (iii) Fees for End Users of Tier 3 (On Demand for Personal Computer Only Service). The greater of:
- (1) Gross Revenues. The product of (x) the Warner Share multiplied by (y) fifty percent (50%) of Tier 3 Gross Revenues in the applicable month;
 - (2) Per Subscriber Fee. The product of (x) the Warner Share multiplied by (y) the number of End Users of Tier 3 during such month multiplied by (z) Five Dollars (US\$5.00); or
 - (3) Per-play Fees. One cent (US\$0.01) multiplied by the total number of times that any Warner Masters incorporated into or made available through Tier 3 is Streamed or On-Demand Streamed by End Users during the applicable calendar month for more than thirty (30) consecutive seconds.
- (iv) Fees for End Users of Tier 4 (On Demand Portable Service). The greater of:
- (1) Gross Revenues. The product of (x) the Warner Share multiplied by (y) fifty percent (50%) of Tier 4 Gross Revenues in the applicable month;
 - (2) Per Subscriber Fee. The product of (x) the Warner Share multiplied by (y) the number of End Users of Tier 4 during such month multiplied by (z) Seven Dollars and Fifty Cents (US\$7.50); or
 - (3) Per-play Fees. One cent (US\$0.01) multiplied by the total number of times that any Warner Masters incorporated into or made available through Tier 4 is Streamed, Cached Streamed or On-Demand Streamed by End Users during the applicable calendar month for more than thirty (30) consecutive seconds.

(d) All calculations with respect to amounts payable to Warner hereunder shall be made by carrying out all fractional amounts to the fourth digit following the decimal point, completing the necessary additions, and then rounding to the nearest penny (*i.e.*, no number should be rounded to the nearest penny prior to the completion of all necessary additions).

(e) All payments hereunder shall be in U.S. dollars and made by check, wire or ACH. Payments made by check can be sent via regular mail to Warner/Elektra/Atlantic Corporation Dept. CH10125, Palatine, Illinois 60055-0125 or via overnight delivery to Mellon Bank Chicago Regional, Lockbox 5505, North Cumberland Avenue, Suite #301, Chicago, Illinois 60656, Attention: Lockbox #10125. Payments made via wire or ACH should be sent to Mellon Financial Corporation ABA #043000261, for the Account: Warner/Elektra/Atlantic Corporation, 3400 West Olive Avenue, Burbank, California 91505, Account Number: 070-1325, Lockbox Number: 500005. Licensee will pay a finance charge of one and one-half percent (1½%) per month, or the maximum rate permitted by law, whichever is less, from the date that any payment was first due under the Agreement until the date such payment is made; or (ii) the maximum rate of interest allowed by applicable Law, whichever is less.

(f) Licensee shall collect, bear and pay any and all taxes, duties and customs of any kind, however designated, levied or based in any way anywhere in the Territory upon the sale or resale of any products or provision of services by Licensee, including, for the avoidance of doubt and without limitation, all sales, use, excise, purchase, value added or similar taxes (other than U.S. federal and state income taxes payable by Warner on monies earned by Warner hereunder). Licensee shall execute any documents Warner may deem necessary or desirable to evidence Licensee's liability for such taxes. If any claim is made against Warner for such taxes, Licensee shall indemnify and hold Warner harmless for any liability for such sums and shall promptly remit to Warner such sums together with any penalties and interest assessed.

(g) All payments hereunder made by Licensee to Warner shall be made free and clear of, and without deduction or withholding for or on account of any and all taxes, levies, imposts, duties, charges, fees, deductions or withholdings now or hereafter imposed, levied, collected, withheld or assessed by any governmental authorities. If any taxes, levies, imposts, duties, charges, fees, deductions or withholdings are required to be withheld or deducted from any amounts payable to Warner hereunder (except with respect to any U.S. income tax liability against Warner for amounts paid to Warner hereunder), the amounts so payable shall be increased to the extent necessary to yield to Warner the full amount specified hereunder.

(h) Licensee will, and if applicable, will cause all Authorized Contractors to, maintain and preserve in its principal place of business, during the Term and for at least three (3) years thereafter, complete and accurate records of accounts and other records pertaining to its obligations hereunder ("Licensee Records"). At Warner's expense, and during reasonable business hours and upon reasonable notice, Warner may select an independent firm to audit the Licensee Records once during each successive twelve (12) month period beginning on the Effective Date ("Audit"). In the event that an Audit reveals an underpayment by Licensee hereunder, Licensee shall, without limitation of Warner's other rights and remedies, promptly pay to Warner such underpayment, together with interest thereon as calculated in accordance with this Agreement; and, in the event that such underpayment exceeds five percent (5%) of any payment obligations during such period covered by the Audit, Licensee shall, in addition to paying Warner such underpayment and interest, (i) reimburse Warner for all reasonable costs of the audit, including, without limitation, accountants' fees and attorneys' fees incurred in accordance with this Section 6(h) and (ii) permit Warner to conduct an additional Audit of Licensee's accounts and records in accordance with this Section 6(h) during the same twelve (12) month period.

8. Reporting.

(a) Within ten (10) days after each calendar month, Licensee shall deliver to Warner, together with the related payments, statements showing, in a clearly understandable manner and in reasonable detail as may be necessary to calculate the amounts owed to Warner hereunder (and broken down on a Tier-by-Tier basis): (i) the total number of plays of Warner Masters during the applicable calendar month and year-to-date, collectively as well as separately on a Warner Master-by-Warner Master basis and identified using any code or other designation assigned by Warner (e.g., POID, ISRC, UPC or Grid #); (ii) the total Service Fees; (iii) Licensee's total Gross Revenues during the applicable calendar month and year-to-date; (iv) the total number of End Users; (v) any other category of information relating to End Users or their use of Warner Masters as is provided by Licensee to any other music company or record label on the same terms and conditions as such information is provided thereto, and the same data on an anonymous aggregate basis (e.g., no sound recordings, music companies or record labels other than Warner will be identified) for all other music companies or record labels with Sound Recordings used in the Licensee Music Service; (vi) all other information reasonably necessary to calculate the Service Fees hereunder (e.g., the total number of plays of all Sound Recordings); and (vii) any additional information that Warner requires to fulfill any third party reporting or auditing obligation. Such statements shall be

provided to Warner in a mutually agreeable format necessary to satisfy Warner's reporting or auditing obligations to third parties and in a manner that is compatible with Warner's royalty accounting systems. The current version of such format is set forth on Exhibit C hereto.

(b) Commencing as of the date that is ninety (90) days after the Effective Date, on a weekly basis during the Term, Licensee shall provide to Warner throughout the Term, unofficial "flash" reports setting forth for the previous week Streams of Sound Recordings made as part of the Licensee Music Service from Licensee Servers in a form and format to be mutually agreed upon, including at a minimum the average number of tracks saved via the "Heart" button by Tier 2 customers on each applicable Permitted Device.

(c) At Warner's request, at six (6) month intervals from the Effective Date during the Term, Licensee will present to Warner the general strategic marketing plans for the Licensee Interactive Service that Licensee plans to implement for the next six (6) months (the "Marketing Plans"). Licensee will give Warner a meaningful opportunity to comment and reasonably consult on the Marketing Plans.

(d) Licensee shall conduct comprehensive research and testing to better understand consumer preferences related to the music experience of the Licensee Interactive Service.

(e) Licensee shall not determine or otherwise set charges or other consideration for Advertisements or advertising-related services, or otherwise structure its business, so as to reduce the amounts that Warner would otherwise receive from Licensee hereunder.

9. Ownership. The parties acknowledge that, as between the Parties, all right, title and interest in the Warner Content (including, without limitation, all intellectual property rights therein; any digitized files produced by Licensee hereunder; the physical and tangible embodiments thereof; and all intellectual property rights in the foregoing) are and shall remain the sole property of Warner. Licensee shall not contest or assist others in contesting the validity of any property or intellectual property rights owned by Warner pursuant to this Section 9 or otherwise. Notwithstanding anything in this Agreement to the contrary, (a) Licensee shall take possession of Warner Content (including any copy thereof) only for the purpose of facilitating the use of Warner Masters via the Licensee Music Service in accordance with the terms and conditions set forth herein and (b) Licensee shall not be deemed to have taken ownership of or title to any Warner Content (including any copy thereof).

10. Term; Termination.

(a) The initial term of this Agreement shall commence on the Effective Date and expire fifteen months thereafter (the "Initial Term"), unless sooner terminated pursuant to the terms of this Agreement. This Agreement shall renew automatically for additional successive renewal terms of one (1) month each (each, a "Renewal Term"), unless either party gives notice of non-renewal to the other party at least one (1) month prior to the expiration of the then-current Initial Term or Renewal Term or unless sooner terminated pursuant to the terms of this Agreement (the Initial Term and any Renewal Terms, collectively, the "Term").

(b) Warner may terminate this Agreement, effective upon written notice to Licensee, in the event of: (i) Licensee's failure to comply with the payment obligations set forth in Section 7 above and fails to cure such non-compliance within ten (10) days after written notice; (ii) Licensee's use or allows the use of the Warner Content (or any part thereof) other than as expressly authorized herein and the same is not cured within five (5) business days; (iii) Licensee's breach of Section 14(f) hereof; (iv) Licensee repeatedly fails to remove Warner Masters or Other Materials from the Authorized Website and/or Licensee Music Service pursuant to Section 3(c) hereof, notwithstanding Licensee's cure of such breach;

(v) if Licensee fails to maintain a mechanism that permits Licensee to count reliably the number of Streams of Sound Recordings made through the Licensee Music Service so that Warner may reliably audit such count; or (vi) the termination of any other agreement between Licensee and Warner by Warner prior to the expiration of the term thereof due to a breach of such agreement by Licensee.

(c) Each Party may terminate this Agreement, effective upon written notice to the other Party, if the other Party: (i) materially breaches any of the provisions of this Agreement and fails to cure same within thirty (30) days after written notice; or (ii) is unable to pay its debts when due, makes any assignment for the benefit of creditors, files any petition under the bankruptcy or insolvency Laws, has a receiver or trustee to be appointed for its business or property, or is adjudicated bankrupt or insolvent.

(d) Upon any expiration or termination of this Agreement, (i) Licensee shall immediately cease exercise of its rights under Section 2(a) hereof and shall, at Warner's option, promptly destroy or return all materials pertaining to same, including all copies thereof, that are in Licensee's possession or subject to its control (including, without limitation, in the possession or control of Authorized Contractor(s)); and (ii) Sections 1, 2(d), 5(f), 6(g), 8, 9, 10(d), 12, 13 and 14 shall survive any such event. For the avoidance of doubt, any Streams of Warner Masters made by Licensee in violation of the terms of this Agreement or after the expiration or termination of this Agreement for any reason shall be fully subject to, among other things, Warner's rights under 17 U.S.C. § 106(6) and the remedies in 17 U.S.C. § 501 et seq. Expiration of the Term or earlier termination of this Agreement will not relieve Licensee of Licensee's obligation to pay Service Fees for the periods prior thereto in accordance herewith. Notwithstanding the foregoing, Licensee need not destroy the digital files embodying Warner Masters for which Licensee has otherwise procured, by agreement with Warner or by law, all rights required by law (e.g., in connection with DMCA-compliant webcasted radio), and to the extent such rights include the right to use such digital files, so long as Licensee provides Warner with satisfactory evidence of such rights. Notwithstanding the foregoing, after termination of this Agreement, (i) if use of the digital files is contemplated under DMCA-compliant webcasted radio regulations, Licensee shall operate such radio service at a minimum in compliance with 17 U.S.C. § 114 and § 112 with respect to ephemeral copies, and (ii) the right not to destroy the digital files embodying Warner Masters is not intended to enlarge the scope of Licensee's rights under 17 U.S.C. § 112 or the DMCA.

11. Representations and Warranties.

Each Party represents and warrants that it has the right, power and authority to enter into this Agreement and to fully perform its obligations hereunder. EXCEPT FOR THE FOREGOING SENTENCE, WARNER MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THIS AGREEMENT OR THE WARNER CONTENT, AND EXPRESSLY DISCLAIMS ALL SUCH REPRESENTATIONS AND WARRANTIES, INCLUDING ANY WITH RESPECT TO TITLE, NON-INFRINGEMENT, MERCHANTABILITY, VALUE, RELIABILITY OR FITNESS FOR USE. WITHOUT LIMITING WARNER'S OBLIGATIONS AS SET FORTH IN SECTION 12 BELOW AND EXCEPT AS EXPRESSLY SET FORTH HEREIN, LICENSEE'S USE OF WARNER MASTERS OR OTHER MATERIALS IS AT ITS OWN RISK ON AN "AS IS" BASIS.

12. Indemnification.

(a) Warner will defend at its expense, indemnify and hold harmless Licensee and its affiliates and their respective directors, officers, employees, agents and representatives ("Related Parties") from any loss, liability, damage, award, settlement, judgment, fee, cost or expense (including reasonable attorneys' fees and costs of suit) ("Losses") arising out of or relating to any third-party (other than Authorized Contractors or other parties acting on behalf of Licensee) claim, allegation, action, demand, proceeding or suit ("Action") against any of them that arises out of or relates to, and to the extent not covered under Licensee Actions: (i) any breach by Warner of this Agreement or its representations,

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warranties and covenants hereunder; or (ii) any claim that Licensee's use of the Warner Masters as explicitly authorized by this Agreement infringes the intellectual property rights of a third party ("Warner Actions").

(b) Licensee will defend at its expense, indemnify and hold harmless Warner and its affiliates and their respective Related Parties from any Losses arising out of or relating to any third-party Action against any of them that arises out of or relates to, and to the extent not covered under Warner Actions: (i) any breach by Licensee of this Agreement or its representations, warranties and covenants hereunder; (ii) Licensee's operation of its business; or (iii) any claim that Licensee's use of the Warner Content, other than as explicitly authorized by this Agreement, infringes the rights of a third party ("Licensee Actions").

(c) The indemnified Party will promptly notify the indemnifying Party in writing of any Action and promptly tender its defense to the indemnifying Party. Any delay in such notice will not relieve the indemnifying Party from its obligations to the extent it is not prejudiced thereby. The indemnified Party will cooperate with the indemnifying Party at the indemnifying Party's expense. The indemnifying Party may not settle any Action in a manner that adversely affects the indemnified Party without such Party's consent (which shall not be unreasonably withheld or delayed). The indemnified Party may participate in its defense with counsel of its own choice at its own expense.

(d) EXCEPT WITH RESPECT TO (Y) DAMAGES AWARDED OR PAID IN SETTLEMENT TO THIRD PARTIES UNDER THE INDEMNIFICATION OBLIGATIONS OF SECTION 12, AND SECTION 13(A) HEREOF AND (Z) WILLFUL, INTENTIONAL OR GROSSLY NEGLIGENT BREACHES OF SECTION 2(D) HEREOF, NEITHER PARTY WILL BE LIABLE TO THE OTHER PARTY FOR SPECIAL, INDIRECT, CONSEQUENTIAL, STATUTORY, EXEMPLARY, PUNITIVE OR INCIDENTAL DAMAGES (INCLUDING LOST PROFITS OR GOODWILL, BUSINESS INTERRUPTION AND THE LIKE) RELATING TO THIS AGREEMENT, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. EXCEPT WITH RESPECT TO DAMAGES AWARDED OR PAID IN SETTLEMENT TO THIRD PARTIES UNDER THE INDEMNIFICATION OBLIGATIONS OF SECTION 12, IN NO EVENT WILL WARNER'S TOTAL LIABILITY FOR A DISPUTE RELATING TO THIS AGREEMENT EXCEED THE SERVICE FEES RECEIVED BY WARNER FROM LICENSEE UNDER THIS AGREEMENT DURING THE TERM.

13. Security; Confidentiality.

(a) Licensee shall use diligent efforts to prevent any unauthorized copying of Warner Masters or Other Materials, including, without limitation, by implementation of the Security Solution. If Licensee becomes aware of any infringement or misuse of the Warner Content, it shall promptly notify Warner and fully cooperate with Warner to remedy same, at Licensee's expense. With respect to End Users accessing the Licensee Music Service via such End User's Personal Computer, such End User may only Stream Warner Masters when such End User is logged onto his or her End User account, using a unique user name and password, provided that the foregoing shall not be required during the first 24 hours with respect to Tier I. Except with respect to copies residing on Portable Devices, Licensee shall restrict access to all physical or tangible copies of Warner Content solely to essential personnel who are informed of and accept the terms of this Agreement and shall store such items or any hardware or media embodying them in a secure location. If any security breaches occur in connection with this Agreement, the parties shall promptly consult with each other and all applicable third parties and shall cooperate in all appropriate remedial actions. If a security breach that is system-wide, material or otherwise adverse to Warner occurs, Warner may suspend Licensee's rights under Section 2(a) until such breach is remedied. Licensee shall not through its business practices or otherwise take any action that would compromise the efficacy or the security of the Security Solution or the Warner Content distributed hereunder. For the avoidance of doubt, Warner Masters will not be accessible or usable outside the Licensee Music Service.

(b) Neither Party shall disclose, share, communicate or provide access to any non-public, confidential or proprietary information of the other Party including the terms of this Agreement and any confidential information concerning the other Party's business, finances, plans, customers, technology and products) that it learns in connection with this Agreement ("Confidential Information") to anyone other than its employees, directors, consultants or Authorized Contractors who need to know such Confidential Information to exercise such Party's rights or to perform such Party's obligations hereunder and who are obligated to comply with confidentiality provisions no less restrictive than those set forth in this Agreement, or as may be necessary to support third party reporting, royalty or audit obligations (e.g., imposed by Warner artists, publishers or otherwise). Neither Party shall use the other Party's Confidential Information, except as required to exercise such Party's rights or perform such Party's obligations hereunder. Confidential Information shall not include any information which: (i) is or becomes publicly known other than from a breach of this Agreement; (ii) is independently developed or obtained by the receiving Party from another legitimate source; or (iii) is required to be disclosed by Law or the rules of any nationally recognized stock exchange, provided that the receiving Party shall promptly inform the disclosing Party of any such requirement and cooperate with any attempt to procure a protective order or similar treatment. Licensee shall not make or issue any public statement or press release regarding this Agreement or its subject matter without the prior written approval of Warner.

14. General Provisions.

(a) *Independent Contractors.* Warner and Licensee are independent contractors, and shall not be deemed partners, franchisees, agents or joint venturers of each other. Neither Party will have any right or authority to obligate or bind the other Party in any manner whatsoever.

(b) *No Third-Party Beneficiaries.* Nothing in this Agreement shall confer upon any person any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement, and no person (including End Users or Authorized Contractors) shall be deemed a third party beneficiary under or by reason of this Agreement.

(c) *Entire Agreement; Amendment.* This Agreement, including all Exhibits hereto, constitutes the entire agreement between the Parties concerning the subject matter hereof and supersedes any prior understandings and agreements among the Parties with respect thereto. There are no representations, warranties, terms, conditions, undertakings or collateral agreements, expressed, implied or statutory, between the Parties related to the subject matter hereto other than as expressly set forth herein. No amendment of this Agreement, including this Section 14(c) shall be effective unless in writing, executed by both Parties, and expressly identifying the provision(s) to be amended and the changes to be made to such provision(s).

(d) *Waiver.* No waiver of any term of this Agreement will be effective unless executed in writing by the Party charged therewith or will excuse the performance of any acts other than those specifically referred to therein.

(e) *Severability.* If any term of this Agreement is held to be invalid or unenforceable, such holding will not affect the validity or enforceability of any other term hereto, and this Agreement will be interpreted and construed as if such term, to the extent the same will have been held to be invalid or unenforceable, had never been contained herein.

(f) *Assignment.* Licensee may not assign, confer any right in, assume in bankruptcy, pledge, mortgage or otherwise encumber this Agreement (or as applicable, Warner Masters or Other Materials), in whole or in part, without the prior written consent of Warner in its sole discretion. For the avoidance of doubt, a merger, change of control, reorganization (in bankruptcy or otherwise) or stock sale of Licensee shall be deemed an "assignment" requiring such consent, regardless of whether Licensee is the

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surviving entity. Licensee acknowledges that this Agreement is a contract for personal services and that its identity is a material condition that induced Warner to enter into this Agreement. Any attempted action in violation of the foregoing shall be null and void *ab initio* and of no force or effect. Notwithstanding the foregoing, a bona fide underwritten initial public offering of Licensee's common stock will not constitute an assignment that requires Warner's prior written consent.

(g) *Notices.* All notices required hereunder shall be given by hand, overnight delivery service, or facsimile transmission (confirmed by letter sent by registered or certified mail) to the address below. Either Party may amend its address set forth above at any time by written notice to the other Party. All such notices will be deemed given when the same will be delivered, so addressed, by hand, facsimile or overnight delivery service.

To Warner:

Warner Music Inc.
75 Rockefeller Plaza
New York, New York 10019
Attn: Executive Vice President & General Counsel
Fax: (212) 258-3092

To Licensee:

Slacker, Inc.
16935 W. Bernardo Dr., Ste. 101
Attn: General Counsel
Fax: (858) 943-5001

(h) *Governing Law; Consent to Jurisdiction.* This Agreement will be construed in accordance with the laws of the State of New York as applied to contracts made and performed entirely therein. All disputes relating to this Agreement shall be brought solely in the state or federal courts located in the borough of Manhattan, New York, New York. Licensee hereby consents to the exclusive jurisdiction of the State of New York and waives any defense of forum inveniens. EACH PARTY HEREBY EXPRESSLY WAIVES ANY RIGHT TO A TRIAL BY JURY IN ANY ACTION OR PROCEEDING BROUGHT BY OR AGAINST EITHER PARTY IN CONNECTION WITH THIS AGREEMENT.

(i) *Counterparts.* This Agreement may be executed in counterparts, each of which shall be deemed an original and both of which together shall constitute one and the same document.

(j) *Remedies.* The rights and remedies of the Parties provided under this Agreement are cumulative and in addition to any other rights and remedies of the Parties at law or equity.

(k) *Headings.* The titles used in this Agreement are for convenience only and are not to be considered in construing or interpreting the Agreement.

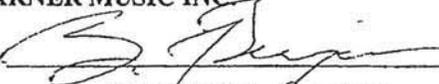
(l) *Further Assurances.* The Parties hereto shall execute such further documents and perform such further acts as may be necessary to comply with the terms of this Agreement and consummate the transactions herein provided.

[SIGNATURE PAGE FOLLOWS]

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IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed as of the Effective Date by their respective offices thereunto duly authorized.

WARNER MUSIC INC.

By: 
Name: STEPHEN BRYAN
Title: VP, Bus. Dev.

SLACKER, INC.

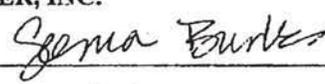
By: 
Name: Seema Burke
Title: Chief Legal Counsel

EXHIBIT ALICENSEE MUSIC SERVICE

Licensee currently offers an interactive music service called "Slacker" with a variety of pre-programmed genre stations and other functionality as follows:

Tier 1: BASIC RADIO FUNCTIONALITY

Basic Radio consists solely of non-interactive, pre-programmed radio stations (except as otherwise set forth below), and shall operate in conformity with 17 U.S.C. § 114 (including conformity with the sound recording performance complement as defined in 17 U.S.C. § 114(j)), subject to the following exceptions, clarifications and other terms set forth below and in the Agreement:

1. **DCMA Performance Complement.** Notwithstanding anything to the contrary, all stations in Tier 1 must follow the DMCA performance complement.
2. **Format stations.** The service may play stations based on traditional radio formulations, genres, subgenres, decades, etc.
3. **MyStation.** The service may monitor user's genre radio station preferences, and thumbs up / thumbs down ratings of particular tracks to create a personalized MyStation. However, the service will use thumbs up / thumbs down ratings solely to influence the frequency with which such tracks are played, and not to influence the programming of a MyStation in any other way.
4. **Artistmatch Stations.** Users may select reference artists to define and play either a single or multiple artist Artistmatch station. Each Artistmatch station will play music from the selected reference artist(s), and music from artists related to the reference artist(s).
5. **More Like This Stations.** Users may select reference tracks to define and play a "More Like This" station. Each "More Like This" station will play the selected reference track(s), and tracks related to the selected reference track(s).
6. **Thumbs up / thumbs down ratings.** Users may rate artists and tracks on a thumbs up / thumbs down scale. Thumbs down bans an artist or track so it will never play again. Thumbs up signifies that an artist or track is a favorite, so it may play more frequently in the appropriate stations. Thumbs up / thumbs down ratings will not otherwise influence the programming of stations.
7. **Sliders Settings:** Users may select slider settings that for any type of station adjust the music that the station will play along one or more continuums. Sliders may include the ability to adjust the stations for the following continuums only (except as amended by mutual written agreement of the parties): 1. newer or older release dates, 2. higher or lower energy levels (i.e., smooth vs hard), 3. more alternative vs more popular, 4. faster or slow tempo, 5. more or less "thumbs up" favorites, 6. various moods, 7. various situations, 8. more or less profanity, and 9. established artists vs. up-and-coming artists.
8. **Station Mixing.** Users may mix together any number of radio stations.
9. **Limited skipping.** Users may skip up to 6 tracks per hour per station.
10. **Other restrictions.** No re-winding or re-starting is permitted on any Tier 1 station. Backward skips are not permitted, and only the next artist (not the next track) may be identified.
11. **Caching.** Users may play cached radio stations even without a live connection, but may not re-wind or re-start a cached radio station once the applicable portion of the station has been played. Devices may be pre-bundled with cached radio tracks. Cached radio stations may be refreshed and updated periodically to match the type of music each given user is playing.
12. **Use on Devices and PCs.** End Users may use their Basic Radio on any one of such End User's Personal Computers at any one given time and one of such End User's Portable Device.

Tier 2: PREMIUM RADIO FUNCTIONALITY

Premium Radio provides all features and functions in Basic Radio, but in addition offers:

1. **Better Skipping.** No maximum on number of forward skips. However, like Basic Radio, backward skips are not permitted, and only next artist, not next track may be identified.
2. **Save Feature.** Customers may save tracks by manually clicking a "Heart" button only while listening to that track in Premium Radio. "Saved Tracks" will be saved to the users device library and favorites playlist, and be accessible as On-Demand Streams. They are locked to the device on to which they were originally saved. At the end of the subscription period, the saved tracks will be disabled, and may not be played again until or unless the subscription is renewed. Users may log into and play saved tracks on any one of such End User's Personal Computers at any given time and any one of such End User's Portable Devices.
3. **No Advertisements.**

Tier 3: ON-DEMAND FOR PERSONAL COMPUTER ONLY FUNCTIONALITY

The On-Demand for Personal Computer Only Service ("On Demand PC Service") shall include all of the functionality and features disclosed in Tiers 1 and 2 above, and the following additional features:

1. **Selection of Tracks.** The End User may request and receive specific Warner Masters as On-Demand Streams.
2. **Stations.** End Users may program the selected On-Demand Streams on Personal Computers into playlists for their own use, without regard to the DMCA performance complement.
3. **Tracks.** End Users shall have on demand control over any Streams, without regard to any DMCA performance complement or other such limitations.

End Users may use their On Demand PC Service on up to three of such End User's Personal Computers.

Tier 4: ON-DEMAND PORTABLE FUNCTIONALITY

The On-Demand Portable Service shall include all of the functionality and features disclosed in Tiers 1 and 2 above, and the following additional features:

1. **Selection of Tracks.** The End User may request and receive specific Warner Masters as On-Demand Streams and/or Conditional Downloads.
2. **Stations.** End Users may program the selected On-Demand Streams and Conditional Downloads on Permitted Devices into playlists for their own use, without regard to the DMCA performance complement.
3. **Tracks.** End Users shall have on demand control over any Streams or Cached Streams, without regard to any DMCA performance complement or other such limitations.

End Users may use their On Demand Portable Service on up to three of such End User's Personal Computers and up to three of such End User's Portable Devices.

EXHIBIT B

CONTENT USAGE RULES

End Users may access Warner Masters and Other Materials, in all instances, for personal, non-commercial use only. End Users are not granted any commercial, sale, resale, reproduction, distribution or promotional use rights for Warner Masters or Other Materials, including any rights for uses that require a public performance license with respect to the underlying musical composition.

SECURITY SOLUTION

See attached

DELIVERY FORMAT

Warner shall provide Licensee with all Warner Masters in WMA format at a bit rate of 128 kbps and AAC+V2 format at a bit rate of 30 kbps and 44 kbps, or other mutually agreed format(s).

Table 1
Summary of Sirius XM Contracts with Independent Labels
Through 11/28/2011

Label	Genre	Royalty Rate	Key Artists
1 101 Records	Folk		Phil Hare, The Family Mahone, Ben & Joe Broughton, Mark Radcliffe
2 12K Records	Electronic		Taylor Deupree, Kenneth Kirschner, Fourcolor, Moss, Marcus Fischer, Ryuichi Sakamoto
3 Adjett Productions	Country		Jett Williams
4 Amherst Records	Pop/R&B		Spyro Gyra, The Stylistics, Glenn Medeiros, The Innocent Bystanders
5 Angel Air Records	Rock		Mott the Hoople, Ian Gillain, Warhorse, Andromeda, Atomic Rooster, Saxon
6 Anjunabeats	Electronic		Arty, Above & Beyond, Super 8 & Tab, Tranquility Base
7 Ape Machine LLC	Rock		Ape Machine
8 Bonsound Records	Pop		Yann Perreau, Radio Radio, Randon Recipe, Monogrenade, Philippe B
9 Boyds Tone Records	Children's		Daddy a Go-Go
10 Bullet Tooth / TrustKill Records	Punk		Bullet For My Valentine, Burn It Down, Crash Romeo, It Dies Today
11 Bulls Eye Records	Bluegrass		Bull Harmon
12 Bumstead Productions	Alternative		The Tress, Two Hours Traffic, Yukon Blonde, k.d. lang
13 Cameron Productions	Christian		Tatiana
14 Captured Tracks	Alternative		Craft Spells, Beach Fossils, Wild Nothing
15 Centricity Music	Christian		Aaron Shust, Andrew Peterson, Downhere, Jason Gray
16 Cleopatra Records	Rock		Sly Stone, L.A. Guns, Ray Charles, Nektar, DoggyStyle, Powerman 5000, Wanda Jackson, BulletBoys, Everclear
17 Cordova Bay Entertainment Grp	Rock		Acres of Lions, David Gogo, Raghav, Krome
18 Delta Groove Productions	Blues		The Mannish Boys, Lynwood Slim, Sean Costello, Philip Walker
19 Earache Records	Metal		Bolt Thrower, Carcass, Deicide, Dillinger Escape Plan, Morbid Angel, Napalm Death, Sleep
20 Eardrum Records ^[1]	Comedy		George Carlin
21 Fader 4 Music	Country		Kenny Ray Horton
22 FatCat Records USA	Alternative		Animal Collective, Dustin O'Halloran, Frightened Rabbit, Sigur Ros
23 Frenchkiss Records	Alternative		Passion Pit, Les Savvy Fav, The Antlers
24 Gotee Records	Christian		Relient K, Sonicflood, Abandon Kansas, House of Heroes, Jamie Grace, Stephanie Smith
25 Grammercy Records	Jazz		Sidney Bechet, Django Reinhardt, Dizzy Gillespie, Bing Crosby
26 Hep Records	Jazz		Buddy DeFranco, Herb Galler, Don Lanphere, Joe Temperley, Jessica Williams
27 Homeland Entertainment Group	Gospel		The Anchormen, Heirline, Toney Brothers, The Songfellows Quartet, Don DeGrate
28 In the Red Records	Punk		The Dirtbombs, Thee Oh Sees, Black Lips, Jay Reatard, The Horrors
29 Indica Records	Alternative		The Dropouts, James Murdoch, John Butler Trio, Joseph Arthur, Phantogram, The Cat Empire
30 Justice Records	Rock		...And You Will Know Us By the Trail of Dead, Nelo, Electric Touch, Greta Gaines
31 K-Tel Records	Re-recorded Oldies		Chubby Checker, Little Richard, Jan & Dean, Ray Price
32 Labrador Records	Alternative		The Radio Dept., Acid House Kings
33 Les Productions Simon Says	Rock		S.E.N.S., Krystel
34 Lonesome Day Records	Bluegrass		Girls Guns and Glory, Julie Neumark, Wildfire

Table 1
Summary of Sirius XM Contracts with Independent Labels
Through 11/28/2011

	Label	Genre	Royalty Rate	Key Artists
35	Magnatune	New Age		Kourosh Dini, Chiwawa, Svava, Jami Sieber
36	Mamanook Music	Kids		Jay Pancoast
37	Master's Records	Christian		Platinum Trend, Nicois
38	Michael Doughty	Alternative		Mike Doughty
39	Michael Viola	Alternative		Mike Viola
40	Milan Records	Soundtracks		Astor Piazzola, West Indian Girl
41	Murderecords	Alternative		Sloan, Local Rabbits, The Inbreds, The Super Friendz
42	Northernblues Music	Blues		Eddie Turner, Watermelon Slim, Zac Harmon, Paul Reddick
43	Nu Groove Records	Jazz		Jay Soto, Darren Rahn, Dee Brown, Eddie Benitez
44	Paracadute	Alternative		OK Go
45	Park The Van Records Phoenix Music	Alternative		Dr. Dog, The Teeth, Generationals
46	International Ltd. (formerly See For Miles Records)	Rock		Sort Machine, The Fool, Family, Nico, Canned Heat
47	Plug Research Music	Alternative		Dntel, Flying Lotus, Mia Doi Todd, John Tejada
48	Pravda Records	Alternative		Glenn Mercer, Andre Williams, New Ducan Imperials, The Civil Tones, Diplomats of Solid Sound
49	PS Classics	Showtunes		Stephen Sondheim, Liz Callaway, Kate Baldwin, Anne Steele
50	Saustex Media	Country		Stevie Nicks, Eric Burdon, The Grateful Dead, Los Gringos
51	SCI Fidelity Records	Alternative		The String Cheese Incident, Keller Williams, Younger Brother, Lotus, The Greyboy Allstars
52	Sharp Nine Records	Jazz		One For All, Joe Locke, Brian Lynch, Mike DiRubbo, Eddie Henderson
53	Shelflife Records	Alternative		The Radio Dept., Acid House Kings, Majestic
54	Smalltown Super Sound	Electronic		Annie, Jaga Jazzist, 120 Days, Mental Overdrive
55	Sonic Unyon Records	Alternative		Tristan Psionic, Sianspheric, Eric's Trip, Shallow North Dakota, Hayden
56	Star 69 Entertainment LLC	Electronic		Chus & Cheballos, David Morales, Robbie Rivera, Suzanne Palmer
57	Stone Table Records	Christian		JJ Heller
58	Temporary Residence Limited	Alternative		Explosions in the Sky, Caroline, Grails, Rob Crow, Pinback
59	TMB Productions	Alternative		They Might Be Giants
60	Tyscot Records	Gospel		VaShawn Mitchell, Shirley Murdock, Rance Allan Group, Joe Pace
61	Warlock Records	Hip-Hop		C-Bo, Jungle Brothers, Todd Terry
62	Yellow Dog Records	Blues		Eden Brent, The Asylum Street Spankers, Mary Flower, The Soul of John Black

Source: Sirius XM License Agreements

Table 2.1
Services Covered by Royalty Agreement Between Last.fm and Warner Music
Effective 2/1/2007

	Tier 1	Tier 2	Tier 3	Tier 4
Description	-Free consumer service -Supported primarily by advertisements -On demand streaming of each song listed by Warner a maximum of 3 times	-Consumer fee service -On demand streaming for a fixed number of songs	-Consumer monthly recurring fee service -Unlimited on demand streaming each month	-Consumer monthly recurring fee service -Consumer can create an interactive station which does not permit on demand streaming -Interactive station cannot consist solely of one artist -Consumer can have a skip option, but no rewind, record, or fast forward option -One recording cannot be played more than once every 90 minutes
Royalty Structure				
A	-Warner's proportionate share of 65% of monthly Tier 1 gross revenues + 50% of Tier 1 direct sale ad revenues	-Warner's proportionate share of 50% of monthly Tier 2 gross revenues + 50% Tier 2 direct sale ad revenues	-Warner's proportionate share of 50% of monthly Tier 3 gross revenues + 50% Tier 3 direct sale ad revenues	-Warner's proportionate share of 25% of monthly Tier 4 retail revenues. Retail revenues only include fees paid to access such tier.
B	-\$0.004 for each Tier 1 play (over 30 seconds) of Warner songs for six months after 2/1/2007 and \$0.01, thereafter	-\$0.02 for each Tier 2 play (over 30 seconds) of Warner songs	-\$0.01 for each Tier 3 play (over 30 seconds) of Warner songs	-\$0.001 for each Tier 4 play (over 30 seconds) of Warner songs
C			-Warner's proportionate share of \$2.50 for each Tier 3 end user	-Warner's proportionate share of \$0.50 for each Tier 4 end user
D				-Warner's proportionate share of 50% of monthly Tier 4 gross revenues (not including retail revenues) + the proportionate share of 50% Tier 4 direct sale ad revenues. Retail revenues only include fees paid to access such tier.
Royalty	Greater of A or B	Greater of A or B	Greatest of A, B, or C	Greatest of (A, B, or C) + D
Current Service:	Free service: Users can choose stations and skip songs. Users are subject to advertisements. Other service features (e.g., creation of interactive station) appear to be consistent with Tier 4 services.			Last.fm subscription (\$3 per month): Includes free services, does not include advertisements, allows use on a mobile application and supported hardware platforms. Also allows access to some extra web material.

Source: Interactive Radio Agreement between Warner Music Inc. and Last.fm Ltd, effective 2/1/2007, Section 7 and Exhibit A; Last.FM website last accessed in October 2011

Table 2.2
Services Covered by Royalty Agreement Between Slacker and Warner Music
Effective 4/17/2007

	Tier 1	Tier 2	Tier 3	Tier 4
Description	<ul style="list-style-type: none"> -Basic radio functionality -Generally non-interactive, pre-programmed radio stations -Users can influence the frequency with which certain songs are played -Max of 6 skips per hour -Users can influence a station's playlist between (1) newer and older release dates (2) higher or lower energy levels (3) more alternative vs. more popular (4) faster or slower tempo (5) more or less "thumbs up" favorites (6) various moods (7) various situations (8) more or less profanity (9) established vs. up and coming artists -Users may also mix radio stations -Basic radio functionality on one portable device 	<ul style="list-style-type: none"> -Includes Tier 1 services -Unlimited forward skips -Ability to save tracks to a device library while listening to it on the station and be accessed as an on demand stream -Saved tracks can be summoned on demand -Saved tracks are disabled upon subscription termination -No advertisements 	<ul style="list-style-type: none"> -Includes Tier 2 services -Unlimited on demand streams -On demand service on up to three personal computers (no portable devices) 	<ul style="list-style-type: none"> -Includes Tier 3 services -On demand service on up to three portable devices -Allows for downloads to computers and portable devices subject to disabling within 30 days of subscription termination
Royalty Structure				
A	-130% of prevailing statutory rate payable by large commercial webcasters for nonsubscription transmissions on a per play basis multiplied by the total number of times a Warner song is played for more than 30 seconds	-150% of prevailing statutory rate payable by large commercial webcasters for nonsubscription transmissions on a per play basis multiplied by the total number of times a Warner song is played for more than 30 seconds (not including songs covered in B below)		
B	-Warner's proportionate share of 22.5% of Tier 1 monthly gross revenues	-\$0.0115 times the number of times a Warner song has been captured via the save feature and played for over 30 seconds	-\$0.01 times the number of times a Warner song has been played for over 30 seconds	-\$0.01 times the number of times a Warner song has been played for over 30 seconds
C		-Warner's proportionate share of 30% of Tier 2 monthly gross revenues	-Warner's proportionate share of 50% of Tier 3 monthly gross revenues	-Warner's proportionate share of 50% of Tier 4 monthly gross revenues
D		-Warner's proportionate share of \$2.25 times the number of monthly Tier 2 users	-Warner's proportionate share of \$5.00 times the number of monthly Tier 3 users	-Warner's proportionate share of \$7.50 times the number of monthly Tier 4 users
Royalty	Greater of A or B	Greatest of (A+B), C, or D	Greatest of B, C, or D	Greatest of B, C, or D
Current Service:	Free service: Allows users to choose stations and to customize and influence stations. A maximum of six song skips per hour is imposed. User is subject to advertisements.	Slacker Radio Plus (\$3.99 per month): Service includes no ads, unlimited song skips, the ability to save a station on a mobile phone to be played without internet access, news radio, and song lyrics. Service is allowed on portable devices. The service does not seem to allow users to save tracks (i.e. songs) which is allowed in the contract under Tier 2.	Slacker Premium Radio (9.99 per month): Service includes Slacker Radio Plus and on-demand songs, albums, and artists. Service also allows for creation of custom playlists. Service allows for on demand services on a mobile phone which does not seem to be allowed in the contract under Tier 3. Service does not allow for downloading of songs. Stations can only be cached on one mobile device at a time.	

Source: Interactive Radio Agreement between Warner Music Inc. and Slacker Inc., effective 4/17/2007, Section 7 and Exhibit A; Slacker website last accessed in October 2011

Table 3
Sirius XM 2010 Delivery Costs
(in thousands)

Cost Category	Amount	Notes
Satellite and Transmission		Satellite infrastructure is completely unique to SXM
Engineering Design and Development		SXM's R&D is primarily related to its unique delivery system
Marketing and Sales		Marketing costs that are specific to SXM's retail channel and OEM distribution channel
Subscriber Acquisition Cost		Hardware costs and other costs associated with SXM's retail and OEM distribution network
Depreciation and Amortization		Depreciation on satellite and related infrastructure
OEM Revenue Share		Revenue share to OEM
Subtotal Sirius XM Unique Delivery Costs		

Source: Sirius XM 10-K filed on 2/16/2011; Sirius XM Financial Cost Information

Table 4
Share of Sirius XM Channels with Significant Sound Recording Plays^[1]

	Sirius Premier	Sirius Select	Sirius Mostly Music	XM Premier	XM Select	XM Mostly Music
Channels with Significant Sound Recording Plays	77	77	61	84	84	62
Music (Including Children's Channels) ^[2]	73	73	61	79	79	62
Comedy Channels ^[3]	4	4	0	5	5	0
Other Channels	74	57	10	81	74	11
Talk Channels	25	23	6	29	24	5
Sports Channels ^[4]	26	12	0	28	26	0
News Channels	23	22	4	24	24	6
Total Channels	151	134	71	165	158	73
% Channels with Significant Sound Recording Plays	51.0%	57.5%	85.9%	50.9%	53.2%	84.9%

Subscribers^[5]

% of Sum

Avg % Channels with Significant Sound Recording Plays

Source: Sirius XM Subscriber Data 11/20/2011; Sirius XM Website Channel Lineup as of 11/21/11

Notes:

[1] Included only channels available from Sirius XM's satellite service.

[2] Included two children's channels, Kids Place Live and Radio Disney.

[3] Included in the count are Blue Collar Radio, Laugh USA, Raw Dog Comedy, The Foxxhole, and Laugh Attack, the last of which is available in XM packages only.

[4] Counts 13 sports play by play channels for Sirius Premier, XM Premier, and XM Select. Counts three sports channels for Sirius Select and zero sports channels for Sirius Mostly Music and XM Mostly Music.

[5] Numbers for Premier packages include All Access subscribers.

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

_____)
In the Matter of)
)
DETERMINATION OF RATES AND TERMS) **Docket No. 2011-1**
FOR PREEXISTING SUBSCRIPTION AND) **CRB PSS/Satellite II**
SATELLITE DIGITAL AUDIO RADIO)
SERVICES)
_____)
)

TESTIMONY OF

JOHN R. HAUSER, SC.D.

November 28, 2011

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I. Introduction

A. Qualifications

1. I am the Kirin Professor of Marketing at the MIT Sloan School of Management at the Massachusetts Institute of Technology (“MIT”). I have served MIT in a number of capacities, including Group Head of the Marketing, Research Director of the Center for Innovation in Product Development, Co-Director of the International Center for Research on the Management of Technology, and Area Head for Management Science at MIT. The Management Science Area at the MIT Sloan School of Management includes, among other groups, the Marketing Group, the Information Technologies Group, and the Statistics Group. The principal focus of my research and teaching at MIT has been in the areas of marketing management, new product and service development, customer satisfaction, marketing research, and competitive marketing strategy. Specifically, my research includes the evaluation of consumer decision-making, product and service development designed around customers’ cognitive styles, and determination of relative feature preferences and implicit product valuations.

2. I am the co-author of two textbooks, *Design and Marketing of New Products* and *Essentials of New Product Management*, as well as over eighty articles and papers, including articles on various methods used to determine the importance of product features in consumer decision-making. I have developed market research techniques that enable predicting the value of individual features in both existing and hypothetical products. These methods have been employed numerous times by academic researchers, as well as practitioners from major international corporations.¹

¹ See, among others, Toubia, Olivier, John Hauser and Rosanna Garcia, “Probabilistic Polyhedral Methods for Adaptive Choice-Based Conjoint Analysis: Theory and Application,” *Marketing Science*, Vol. 26, No. 5, September-October, 2007, pp. 596-610; Urban, Glen L., and John R. Hauser, “‘Listening-In’ to Find and Explore New Combinations of Customer Needs,” *Journal of Marketing*, Vol. 68, No. 2, April 2004, pp. 72-87; Griffin, Abbie and John R. Hauser, “The Voice of the Customer,” *Marketing Science*, Vol. 12, No. 1, Winter 1993, pp. 1-27; and Hauser, John R., Olivier Toubia, Theodoros Evgeniou, Rene Befurt, and Daria Dzyabura, “Disjunctions of Conjunctions, Cognitive Simplicity and Consideration Sets,” *Journal of Marketing Research*, Vol. 47, June 2010, pp. 485-496.

3. I have served as editor-in-chief of *Marketing Science* and have held senior editorial positions with *Management Science*, the *Journal of Marketing Research*, and the *Journal of Product Innovation Management*. I have received numerous awards for excellence in research and teaching in Marketing and was recognized by the American Marketing Association with the Paul D. Converse Award for “outstanding contributions to marketing scholarship.”² In 2001, I received the Parlin Award, which is “the oldest and most distinguished award in the [marketing research] field,” according to the American Marketing Association.³ I am a Fellow of the Institute for Operations Research and Management Science (“INFORMS”) and an Inaugural Fellow of the INFORMS Society of Marketing Science. I have also served as a Trustee of the Marketing Science Institute.

4. I have served as an expert witness or offered consulting services in numerous litigations, including, but not limited to, cases on trademark and patent infringement, copyright infringement, intellectual property, market research, survey design, consumer confusion and false advertisement, product confusion, claims substantiation, and Lanham Act cases. Most of this expert testimony has involved surveys and other market research to measure consumers’ attitudes, beliefs, and intentions. In these prior matters, I have been called upon to project what consumer behavior would have been under different market scenarios, to measure the importance and value of product features, to measure the impact of rumors, to evaluate marketing research with respect to advertising claims, and to investigate the potential for customer confusion. I have provided survey evidence that has been used to estimate the relative value of product features, for example, in both anti-trust cases and in patent infringement cases. I have advised major corporations, including American Airlines, Fidelity Investments, Ford, General Motors, IBM, Proctor

² “The Paul D. Converse Awards,” American Marketing Association, <http://www.marketingpower.com/Community/ARC/Pages/Career/Awards/Converse.aspx>, visited on March 28, 2011; “Previous Recipients,” 16th Paul D. Converse Marketing Symposium, <http://business.illinois.edu/converse/previous.htm>, visited on April 20, 2011.

³ “2009 Charles Coolidge Parlin Marketing Research Award,” American Marketing Association, January 14, 2009, http://www.marketingpower.com/ResourceLibrary/Pages/MarketingThoughtLeaders/MarketingThoughtLeaders11409/Parlin_Marketing_Research_Award.aspx, visited on April 14, 2011; “Charles Coolidge Parlin - Marketing Research Award,” American Marketing Association, <http://www.marketingpower.com/Calendar/Pages/CharlesCoolidgeParlinAward.aspx>, visited on April 19, 2011.

& Gamble, and Xerox. I served as an expert witness in the prior SDARS rate-setting proceeding before the Copyright Royalty Judges, “Adjustment of Rates and Terms for Preexisting Subscription and Satellite Digital Audio Radio Services,” and testified before the Judges on August 21, 2007. My professional qualifications are described in my curriculum vita, which is attached as Appendix A. A list of cases in which I have testified within the last four years at deposition or trial is attached as Appendix B.

5. The subject area headings in this report are intended to assist the reader and no inference should be drawn from the use or omission of any wording or description in these headings.

B. Assignment

6. I was retained by Sirius XM Radio, Inc. (“Sirius XM”) to conduct an Internet survey to examine the value that current subscribers of satellite radio place on music, other types of programming, and non-programming features of satellite radio. It is my understanding that the license at issue in this proceeding covers broadcasts on Sirius XM satellite radio of sound recordings fixed on or after February 15, 1972. My understanding is that it does not include the broadcast of live performances, or music on Sirius XM satellite radio that is received over the Internet or through a cellular telephone or smart phone.

7. The survey was based on scientific principles and was executed according to those principles. The purpose of the survey is to provide an accurate estimate of the value of the music programming at issue in this proceeding.

8. In undertaking this assignment, I utilized my extensive expertise in developing, testing, and analyzing surveys, as well as my experience in interpreting qualitative and quantitative research about consumer attitudes, intentions, and behavior. Appendix C includes a list of materials I have relied upon to date in connection with this particular assignment. To the extent that I review additional information after this report is filed, I will supplement this list.

9. Part of the survey work for this investigation was performed under my direction by Applied Marketing Science, Inc. (“AMS”).⁴ Since 1989, AMS has conducted market research and surveys designed to gauge consumers’ wants and needs for new products in dozens of industries. Since 1994, AMS has been conducting surveys to support expert testimony in litigation. I am a Senior Consultant, Board Member, and Co-Founder of AMS. I am a minority stockholder in AMS, but I do not receive any compensation from AMS that is directly tied to this case. Part of the empirical analysis supporting my opinions in this report was performed by Cornerstone Research working under my direction.

10. My rate of compensation for this assignment is \$800 per hour. My compensation is not contingent on the nature of my findings or on the outcome of this litigation.

11. My work is ongoing; I may update and revise my results and conclusions as I review additional data and information.

II. Summary of Opinions

12. An Internet survey was conducted under my direction between September 16 and 19, 2011 to measure the value consumers place on the various features of satellite radio, including music, non-music entertainment-talk, or comedy shows, news, weather or traffic reports, sports coverage, commercial-free programming, excellent sound quality, and the ability to listen to the same stations everywhere. The survey was carefully designed and executed, adhering to scientific principles of survey research to ensure reliability and validity of the results. A representative sample of 348 satellite radio subscribers was obtained and their responses were analyzed.

13. The survey results demonstrate that respondents are willing to pay \$3.24 for all types of music currently played on XM and Sirius, which is 26% of the anchor price. Moreover, I find that 34.9% of the \$3.24 in willingness to pay for all types of music is

⁴ See <http://www.ams-inc.com>.

attributed to music released before 1970. When the music category is limited to music from 1970 through today, respondents' willingness to pay is reduced to \$2.11.⁵

14. This estimate of willingness to pay of \$2.11 is an upper-bound estimate because only music recorded on or after February 15, 1972 is at issue in this matter, whereas the \$2.11 includes all music recorded during or after 1970. The estimate is also an upper bound because it does not exclude live performances, which are not covered by sound recording rights at issue in this case.

15. The estimated value of music and the estimated parsing of post-1970 music are remarkably similar in the current survey and the survey I conducted for the previous CRB proceeding in 2007. The 2007 survey found the value of music to be \$3.38 (for subscribers, unweighted).⁶ The difference between that figure and the \$3.24 calculated in this survey is not statistically significant.⁷ The relative importance of music from the 70s, 80s, 90s and today, as calculated in the current survey, is 65.1%, compared with 63.9% in the prior study.⁸ The difference between these two values is not statistically significant either.⁹ Using these figures gives a value of \$2.16 for music from 1970 onward for subscribers in the old survey, and \$2.11 from the latest survey. The difference between these two values is not statistically significant.¹⁰

16. In the previous proceeding, the CRB voiced concerns that Dr. Wind's survey was based on "an imperfect snapshot of consumer preferences...at one point in time, without any justification for the implied assumption that such preferences have remained or will remain stable across Sirius' subscribership over time or even over any limited relevant

⁵ As noted above, I understand that the sound recording rights at issue in this case are for sound recordings fixed from February 15th, 1972 onward. I have included sound recordings from January 1, 1970 up through February 14th, 1972 because I believe that it is unlikely that most respondents have sufficient knowledge to be able to judge the value of recordings on a year by year basis (e.g., 1971 versus 1973), let alone on a day by day basis.

⁶ Hauser 2007 report, Exhibit K-1. The value of \$3.38 is unweighted and is for subscribers only.

⁷ t -statistic = -0.327, p -value = 0.743.

⁸ The estimate of 63.9% corresponds to subscribers only. Respondents who reported an importance value of 0 for both pre-1970 and post-1970 music were excluded from this calculation.

⁹ t -statistic = 0.414, p -value = 0.679.

¹⁰ t -statistic = -0.162, p -value = 0.872. The formula for the variance of the product of two independent random variables used in the calculation is $\text{Var}(XY) = [E(X)^2]\text{Var}(Y) + [E(Y)^2]\text{Var}(X) + \text{Var}(X)\text{Var}(Y)$. See, for example, Goodman, Leo A., "On the exact variance of products," *Journal of the American Statistical Association*, December 1960, 708-713.

time period.”¹¹ Although any survey by construction will only provide a snapshot of consumer preferences at that time, there is remarkable consistency between the current survey and the survey I conducted for the previous CRB proceeding in 2007, which demonstrates that my findings are reasonably consistent over time.

III. Survey Methodology

17. Satellite radio, like many other products, is a bundle of features. Consumers’ willingness to pay is defined as the largest amount that consumers will pay for this bundle, which depends on the value consumers place on the various features in the bundle, such as music, non-music entertainment-talk, or comedy shows, news, weather or traffic reports, sports coverage, commercial-free programming, excellent sound quality, and the ability to listen to the same stations everywhere. Notably, consumers might be willing to pay more than the market price for a service – their willingness to pay is not necessarily limited by the market price. Established empirical market research methods, such as the survey described in this report, can be used to determine the value placed by subscribers of satellite radio on the various features of satellite radio. Such methods can be used to parse either the overall willingness to pay or the market price into the contribution that the various features of satellite radio make to the whole. In this exercise, I designed and executed a scientific survey to parse the market price of satellite radio into the contribution from various specific features.

18. In order to understand the survey methodology to determine consumers’ willingness to pay for a specific feature, consider the following thought experiment.¹² Imagine that a consumer is considering purchasing a new automobile, such as a Chrysler 300 SRT8. The consumer might be willing to pay \$50,000 for a Chrysler 300 SRT8, suitably equipped with a powerful engine, a touch-screen navigation system, a state-of-the-art audio system with six premium speakers, and leather seats with heating, among

¹¹ See Final Determination of Rates and Terms in the Matter of Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services, 1/10/08, pp. 44-45.

¹² A thought experiment is an important tool to check the implications of a theory. Many of Einstein’s arguments for relativity are based on thought experiments.

other things. Now consider a feature, such as the touch-screen navigation system, that is separable both in the consumer's mind and as a technological matter. The consumer might be willing to purchase a Chrysler 300 SRT8 without the touch-screen navigation system and the Chrysler Group LLC might be able to provide such a car. Suppose that the consumer is told that the Chrysler 300 SRT8 will come with everything but the touch-screen navigation system. Instead, it will have no navigation system (but will have other "Uconnect" touch controls). The consumer may be willing to pay less for the Chrysler 300 SRT8 without the touch-screen navigation system. If asked in a survey the consumer might be willing to pay, say \$49,000. We can therefore estimate the value to the consumer of the touch-screen navigation system. We do so by comparing the initial willingness to pay for a Chrysler 300 SRT8 (\$50,000) to the willingness to pay (\$49,000) for a Chrysler 300 SRT8 without the touch-screen navigation system. We compute a value of \$1,000 for the incremental value due to the touch-screen navigation system.

19. In this example, the touch-screen navigation system was both separable in the consumer's mind and could be offered separately by the Chrysler Group LLC. However, not all features are separable in this way. For example, to get the full "SRT8 experience," the consumer might want to have leather seats with heating, a premium instrument cluster, and a powerful engine (6.4 liter Hemi V8). If any one of these features were taken away, the consumer might value the Chrysler 300 SRT8 with the remaining features merely as an improved base model – for illustrative purposes, say \$36,000. (The Chrysler 300 starts around \$27,000.) Most of the value of the full package is lost in the consumer's mind from losing the first feature. Taking away another feature might lower the value only another \$2000, to \$34,000, and taking away a third feature might lower the value only another \$2000, to \$32,000. Suppose now that we get to \$36,000, \$34,000, and \$32,000 regardless of the order in which the three features are taken away. It would be reasonable to estimate the value of the three features as the initial price (\$50,000) minus the price without any of the three features (\$32,000). The joint value of the three features would be \$18,000 and, because the order did not matter, we could assign \$6,000 to each of the three features, which is \$18,000 divided by 3 (rather than \$14,000 to one feature and \$2000 to the other two).

20. The three-feature example illustrates a pitfall and suggests a solution. It would be a pitfall to have a pre-defined order. The predefined order would assign \$14,000 to the first feature that is removed and \$2,000 to each of the subsequent features. However, if we get to the same joint valuation independent of order, then it is fair to assign \$6,000 to each of the three automotive features. We can eliminate a prior bias by removing features in a random order and averaging over all orders. This is the strategy that I used in the survey that I designed to remove order bias.

21. The effect of predefined feature orders applies to the features of satellite radio as well. In the case of music, we could get different valuations depending on whether music is removed from the full satellite radio package first (which would estimate too high a value) or last (which would estimate too low a value). The value of satellite radio is enhanced by the joint availability of music, great sound quality, the lack of commercials, and the ability of listen to the same content throughout the country. Removing any one of the features would make satellite radio appear less attractive. Removing music first could have a misleadingly large impact on respondents' willingness to pay for satellite radio, leading to a misleadingly high estimate of the value of music. On the other hand, removing all other features and types of programming first (other than music) would leave a service that is more or less comparable to FM radio. It is reasonable to expect that the consumer could be unwilling to pay more than they pay now for FM radio – \$0 after they have purchased the equipment. Removing music last would cause us to estimate a low value on music. To get an unbiased value of music, it is necessary to remove features in a random order.

C. Survey Design

22. In designing and implementing the survey, I followed standard scientific methods to maximize the reliability of the survey instrument. My survey design adopted the scientific guidelines for surveys conducted for academic, commercial, and litigation purposes.¹³ For example, I used a “blind” methodology and included question and answer

¹³ See, e.g., many of the recommendations in Diamond, Shari S., “Reference Guide on Survey Research,” in Reference Manual on Scientific Evidence, Third Edition, Federal Judicial Center, 2011, pp. 359-423.

options unrelated to the study's objective to avoid any unintended biases or "demand artifacts." Demand artifacts are aspects of the study that influence research results based on the chosen procedure rather than based on the phenomenon under study.¹⁴ I also used screening questions to identify and categorize respondents, "filters," and rotation of answer options when appropriate. To draw statistical inferences for a target population, I ensured that my sample was representative of Sirius XM's customers by using a reliable panel of market research respondents and ensuring a diverse respondent population. The panel is used by major corporations to make important decisions. I have used this panel before and have been satisfied with the results.¹⁵ To ensure that the questions were understood by respondents and relevant to their decision making, the survey was pretested. Respondents understood and could respond accurately to the questions and no demand artifacts were detected. I describe my methodology in greater detail below. For the full sequence of survey questions, see Appendix D.

23. **Double-blind design.** It is standard survey practice to avoid indicating the sponsor and/or purpose of the survey to ensure respondents' objectivity. According to the *Reference Manual on Scientific Evidence*, "the survey instrument should provide no explicit clues (e.g., a sponsor's letterhead appearing on the survey) and no implicit clues (e.g., reversing the usual order of the yes and no response boxes on the interviewer's form next to a crucial question, thereby potentially increasing the likelihood that *no* will be checked) about the sponsorship of the survey or the expected responses" (emphasis in original; footnote omitted). The goal of the survey design is to make the respondent "blind" to the sponsor and purpose of the survey.¹⁶

¹⁴ Demand artifacts are analogous to leading questions asked to a witness during testimony. For a discussion of demand artifacts, see, e.g., Sawyer, Alan G., "Demand Artifacts in Laboratory Experiments in Consumer Research," *Journal of Consumer Research*, 1, 4, March 1975, pp. 20-30; Shrimp, Terence A., Eva M. Hyatt, and David J. Snyder, "A Critical Appraisal of Demand Artifacts in Consumer Research," *Journal of Consumer Research*, 18, 3, December 1991, pp. 273-283.

¹⁵ For example, I recently testified (on October 13, 2011) in the United States District Court for the Eastern District of Texas Tyler Division in the matter *Alcatel Lucent, Inc. v. Amazon.com, Inc. et al.*, about the value of a patented technology. The study upon which that testimony was based used respondents from the same panel I use in this study.

¹⁶ See, e.g., Diamond, Shari S., "Reference Guide on Survey Research," in *Reference Manual on Scientific Evidence*, Third Edition, Federal Judicial Center, 2011, pp. 359-423, at pp. 410-411.

24. The design and administration of my survey can be characterized as blind. Because the survey was administered via the Internet, respondents were not exposed to human interviewers, thereby eliminating the possibility of an interviewer communicating the sponsor or purpose of the survey and influencing the outcome (intentionally or not). An Internet-based survey avoids demand artifacts that might be induced by means of intonation or facial expressions during the delivery of particular questions or answers. An Internet-based survey removes, or at least greatly diminishes, any “interviewer bias” which may arise from the desire of the respondents to please, displease, or impress the interviewer.

25. **Introductory/screener questions.** Introductory or “screener” questions help to identify members of the target population and determine whether respondents meet the criteria (qualify) for inclusion. Such questions may include demographic questions such as age and gender, and questions that help identify the respondents’ ownership of certain products and knowledge about those products. In drafting introductory questions, I was careful not to convey information that would influence responses to the main survey or otherwise provide respondents with information that otherwise would not occur to them.¹⁷

26. The inclusion of unrelated answer options in closed-ended respondent qualification questions serves to distract respondents from an item of interest.¹⁸ Such questions and answer options help to conceal from the respondents the intention of the survey and to minimize the potential for demand artifacts. For example, if a survey is conducted to determine whether respondents might be interested in a particular movie, the survey can ask the respondent to select the movies in which he or she is interested, providing a set of movie options including the movie of interest. The other movies within the option set would help mask the target of the survey, and would therefore serve to

¹⁷ See, for example, Diamond, Shari S., “Reference Guide on Survey Research,” in Reference Manual on Scientific Evidence, Third Edition, Federal Judicial Center, 2011, pp. 359-387, at pp. 386-387; Smith, D.M., N. Schwarz, T.R. Roberts, and P.A. Ubel, “Why are you calling me? How study introductions change response patterns,” *Quality of Life Research*, 15, 2006, pp. 621-630.

¹⁸ “Closed-ended” questions provide the respondent with a set of potential responses (answer options) from which to choose. These are distinct from “open-ended” questions, which allow the respondent to formulate his/her own answers. For a discussion of closed-ended and open-ended questions, see Diamond, Shari S., “Reference Guide on Survey Research,” in Reference Manual on Scientific Evidence, Third Edition, Federal Judicial Center, 2011, pp. 359-423, at pp. 391-394.

distract the respondent from the purpose of the study. To restrict the sample to the target group, i.e., subscribers of satellite radio, I asked respondents in Question S7 “To which of these services, if any, does your household currently subscribe?” To minimize demand artifacts, I provided unrelated options such as satellite TV, broadband internet, and cable TV, in addition to satellite radio.

27. As discussed below (see paragraph 40), demographic criteria such as location , gender, and age group were used to determine whether the participants qualified for inclusion. In addition, participants were required to have accessed the survey from a computer rather than a mobile device, and could not be employed by (or have a member of their household who was employed by) a satellite radio company, a music recording studio, or be an owner of copyrighted music. These screens are standard security questions and do not bias the results. Respondents were also required to have at least one paid satellite radio subscription for Sirius XM, Sirius, or XM, listen to satellite radio on a satellite radio receiver, and play a substantial role in the decision to subscribe to satellite radio. Respondents’ answers to these questions allowed me to include only appropriate respondents in the survey and to tailor my questions to each respondent.

28. **Filters.** To avoid influencing respondents’ answers and survey results and to minimize answers from uninformed respondents, carefully designed surveys include “filters” and “quasi-filters.” Filters are questions and/or answer options that eliminate respondents who are not relevant or who do not have opinions. Quasi-filters avoid speculation and guessing that may arise when a respondent is forced to offer an opinion or answer a question on which he or she has no opinion. For example, typical quasi-filters offer answer options such as “don’t know” or “no opinion.” Quoting from the Reference Manual on Scientific Evidence, “[b]y signaling to the respondent that it is appropriate not to have an opinion, the question reduces the demand for an answer and, as a result, the inclination to hazard a guess just to comply.”¹⁹

29. I used numerous filters in my survey questions and answer options. For example, appropriate questions in the main part of my survey (i.e., after the introductory questions)

¹⁹ Diamond, Shari S., “Reference Guide on Survey Research,” in Reference Manual on Scientific Evidence, Third Edition, Federal Judicial Center, 2011, pp. 359-423, at pp. 389-391.

included quasi-filters (i.e., the option of “Don’t know/Unsure”). The surveys’ screener questions served as full-filters. For example, in Question S11 I ask respondents “Is your ... satellite radio subscription XM or Sirius?” Respondents that say “Don’t Know/Unsure” are terminated.²⁰ By employing filters, I carefully avoided asking questions of respondents that might not be relevant and I avoided asking respondents to express a belief when the respondent had none or was not sure.

30. **Rotation of answer options.** In closed-ended questions with several answer options, respondents might be more likely to choose a certain option simply because it is first or last on the list. Such phenomena are known as “order effects.”²¹ To avoid order effects, I rotated answer options so that different respondents see the options in different orders and any possible order effects cancel out across respondents. There are standard exceptions to the rotation rules. For example, certain options – such as “Other,” “None of the above,” and “Don’t know / Unsure” – always come last in order for the question to preserve logical flow. Another exception to answer rotation occurs when answer options come in a certain logical order, such as those for age or income brackets. In such circumstances, answer options are usually not rotated.

31. I rotated answer options in the introductory questions and closed-ended filter questions, where it was appropriate. For example, in question S9 I asked the respondents “Which of the following type(s) of satellite radio subscriptions does your household currently have?” Although I am interested only in respondents that have a paid subscription directly from Sirius XM, Sirius, or XM, I included other options that respondents could choose from, such as “A trial subscription ... directly from Sirius XM, Sirius, or XM,” and “Sirius XM, Sirius, or XM as part of a package from a third party ...” Not only do these questions filter respondents, but they minimize demand artifacts.

32. **Pretest of the survey.** Questionnaires should use language that respondents find easy to understand and relevant. If the questions of interest are ambiguous or otherwise

²⁰ 12 respondents were eliminated because they chose “Don’t Know/Unsure” for Question S11. They were eliminated to ensure that the respondents in the final sample were knowledgeable about the product they were using.

²¹ For a discussion of order effects, see Diamond, Shari S., “Reference Guide on Survey Research,” in Reference Manual on Scientific Evidence, Third Edition, Federal Judicial Center, 2011, pp. 359-423, at pp. 395-396.

unclear, the results of the survey may be distorted due to guessing or misunderstanding on the part of the respondent. To maximize the clarity of the survey, background research, including secondary-source data and sales data, is useful to gain insight into, for example, how potential respondents think about issues relevant to the target of the study, the extent to which potential respondents are aware of those issues, and the vocabulary used by potential respondents regarding the study target. Similarly, prior to administering the final survey, it is important to evaluate (or “pretest”) the proposed series of questions with a small sample of “the same type of respondents who would be eligible to participate in the full-scale survey.”²² Such pretests help to assess the potential for demand artifacts and to ensure that all survey questions were understood as intended.²³

33. To design the survey properly, I instructed AMS to conduct background research and a pretest of the survey instrument, as summarized below.

34. AMS examined questions that had been asked of respondents in 2007, questions that had been pretested.²⁴ I reviewed documents from Sirius XM (as described in Appendix C) to assure that the basic structure of the questions remained valid. Between September 7 and 12, 2011, at my direction experienced interviewers from AMS pretested the survey with seven adults in the United States. To qualify for a pretest interview, the interviewee was required to have a current subscription to satellite radio. The goal of this evaluation was to ensure that respondents could understand and answer questions as the questions were intended to be asked. Note that these responses were used solely for pretesting and are not included in the final survey results. The pretest interviews themselves are open-ended verbal debriefs of pretest respondents after the respondents have answered the survey questions.²⁵ These results are typically reported to me orally by

²² Diamond, Shari S., “Reference Guide on Survey Research,” in Reference Manual on Scientific Evidence, Third Edition, Federal Judicial Center, 2011, pp.359-423, at pp. 388-389.

²³ Diamond, Shari S., “Reference Guide on Survey Research,” in Reference Manual on Scientific Evidence, Third Edition, Federal Judicial Center, 2011, pp. 359-423, at pp. 387-389.

²⁴ The mall-intercept questionnaire in the 2007 survey was pretested with 16 respondents. See Hauser 2007 report, p. 29.

²⁵ Glen L. Urban and John R. Hauser, *Design and Marketing of New Products*, (Englewood Cliffs, NJ; Prentice-Hall, Inc.), 1980, p. 179: “A sample size of 10 is common. After a question is answered you can ask respondents what they thought each question asked. You can try different forms of the questions. You can watch for careless response or no response. ... You can do whatever is necessary to ensure that what you think is being asked is actually being answered.”

experienced interviewers who debrief respondents under my direction. I have worked with these interviewers before, participated in their training, and provided instructions on how to carry out these pretests.

35. Pretesting continues until respondents answer the survey questions easily, do not find the questions difficult or ambiguous, and feel that their answers represent their opinions. In this instance, seven respondents were sufficient for the purpose of ensuring that the questions were understood. In my experience, seven pretest debriefs are reasonable for a survey that is modified from a previous survey that itself had been pretested.

36. Pretesting provided the appropriate vocabulary used in the survey instrument. Based on the findings from the pretests, AMS fine-tuned the phrasing and words used in the survey to reflect the way in which consumers think about and understand satellite radio. I am confident that the phrasing of the questionnaire was comprehensible and minimized the potential for guessing. Further, information from pretesting helped with the design of instructions and error messages to ensure that the data were reliable.

37. During the pretest debriefs, at my direction, experienced interviewers from AMS tested explicitly for demand artifacts. No demand artifacts were detected in the final phrasing and layout of the questions. Respondents did not find the questions to be leading and respondents were not able to guess that any particular result was desired by the survey designer.

D. Survey Administration and Sample

38. **Use of the Internet for the survey.** The survey was administered via the Internet. Internet surveys are used widely by major corporations to make substantial business decisions. I have extensive experience with online surveys in the contexts of litigation, corporate applications, and academic research.²⁶ In my experience, if best practices are

²⁶ For many years, I headed the Virtual Customer Initiative (VCI), a key initiative within MIT's Center for Innovation in Product Development. The VCI studies the use of Internet-based surveys and methods that are developed explicitly for such surveys. An article on the virtual customer that I co-authored (Dahan, Ely, and John R. Hauser, "The Virtual Customer," *Journal of Product Innovation Management*, 19, 2002, pp. 332-353) is highly cited. I have won many awards for research that relied upon Internet-based surveys. Another article compares respondents' answers in an Internet survey to their actual choices of a product worth approximately \$100. In addition, projections from the study were compared to market-place results.

followed, Internet-based samples are representative of target populations and can be used to project to target populations both reliably and validly. Online survey instruments have many benefits: they eliminate interviewer bias (i.e., they create a “blind” environment); they produce acceptable response rates; and, due to the anonymous nature of the Internet, they allow for truthful responses, particularly when the subject matter is sensitive. Online survey instruments allow researchers instant access to results and enable the use of advanced design capabilities, such as complex randomization, screening logic, and error checking. Internet surveys are an increasingly common form of market research. Over 77.3% of the U.S. population has access to the Internet.²⁷ The largest corporations use Internet surveys to support multi-million dollar marketing decisions.²⁸ Courts accept the results of Internet surveys in a wide range of cases.^{29,30} I have personal prior experience in formulating Internet surveys for litigation which have been accepted by the courts.

39. The Internet survey was conducted by contracting with one of the numerous companies that have pre-recruited potential respondents who have indicated their willingness to participate in market research surveys. In this case, I selected Research Now, a well-established international market research service firm that maintains an invitation-only panel of over 3.6 million consumers in the United States and over 6 million panelists worldwide.³¹ Both AMS and I have worked with Research Now on a number of other projects. We have each found them to be consistently reliable and a high quality supplier of qualified survey respondents. As part of the panel recruitment process, all panel members complete a questionnaire that includes basic demographic information (age, gender, etc). In addition, panel members have the option to answer questions about

This article is highly cited and has won international awards. (See Toubia, Olivier, Duncan I. Simester, John R. Hauser, and Ely Dahan, “Fast Polyhedral Adaptive Conjoint Estimation,” *Marketing Science*, 22, 3, Summer 2003, 273-303.)

²⁷ <http://www.internetworldstats.com/stats14.htm> as of June 30, 2010 (viewed 10/6/2010)

²⁸ According to an annual study conducted by Inside Research®, 46% of the dollars spent for survey research in the U.S. was on online surveys in 2010.

²⁹ Robert H. Thornburg, *Trademark Surveys: Development of Computer-Based Survey Methods*, 4 J. Marshall Rev. Intell. Prop. L. 91 (2005)

³⁰ Gabriel M. Gelb and Betsy D. Gelb, “Internet Surveys for Trademark Litigation: Ready or Not, Here They Come,” *The Trademark Reporter*, 97, 5, September-October, 2007, p. 1073

³¹ Research Now, owned by e-Rewards, Inc., is a leading online sampling and online data collection company (see “e-Rewards, Inc. Announces Agreement to Acquire Peanut Labs,” Research Now, September 27, 2010, <http://www.researchnow.com/en-US/PressAndEvents/News/2010/10/Peanut%20Labs%20Aquisition.aspx>, visited on October 5, 2011)

their personal habits and behaviors (e.g., drinking habits, cell phone usage). Using this information, Research Now was able to target survey invitations to people who had indicated that they subscribe to satellite radio.³² This invitation included a link to the actual survey which was hosted on a website maintained by Bernett Research, Inc.³³ This link contained an embedded identification number that assured that only invited respondents could answer the survey and that each respondent could only complete the survey once. I describe below how I assured that the survey was not completed automatically by a computer “bot.” Respondents who qualified and completed the survey were awarded \$2.50 in e-Rewards (Research Now) currency. In my experience, such honoraria are common in survey research and do not influence the accuracy of the responses.

40. **Identification of the target population.** I understand that the target population in this matter includes United States residents over the age of 18 who subscribe to satellite radio. To ensure the representativeness of the survey population the inbound sample was “click-balanced” (i.e., targeting a representative sample from the market research panel based on the distribution of individuals by validated demographics) using U.S. Census data based. The demographic variables used for balancing were gender, age, and census region.³⁴

41. **Survey rollout.** The pretest interviews ensured that the questions were understood by the respondents. To ensure that the survey operated properly, AMS, at my direction, extensively tested the links, skip logic, and screening questions.

42. An invitation to participate in the survey was emailed to 13,222 potential participants. (See Appendix F for the text of the email.) The invitation included the personally encoded link that established survey security. The responses to the survey were recorded between September 16 and 19, 2011.

³² Research Now projects having over 165,000 of its members with a satellite radio subscription.

³³ www.bernett.com. Bernett Research programmed and hosted the survey.

³⁴ Gender, age, and census region quotas for the Consumer Survey were set using U.S. Census Bureau data from 2005 to 2009 and applied to inbound “clicks” (i.e., responses to the survey invitation) (see “2005-2009 American Community Survey 5-Year Estimates,” U.S. Census Bureau, http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS; and “Census Regions and Divisions of the United States,” U.S. Census Bureau, http://www.census.gov/geo/www/us_regdiv.pdf).

43. After clicking on the link from the email invitation, respondents were prompted to a browser window with a CAPTCHA challenge to ensure that responses were not computer-generated.³⁵ After completing the CAPTCHA challenge, respondents moved to the survey.

44. **Validation.** The validation process for an Internet survey is different from that for telephone, mall or mail surveys, because only the Internet panel provider is allowed to contact the respondents. The security steps described above assure that only panel members receive invitations, that the survey is not answered by a “bot,” and that the survey taker cannot take the survey more than once. In addition, Research Now is a reputable panel provider which itself employs security procedures.³⁶ To provide further validation, each respondent’s age, gender and state of residence were compared to values for those respondents in the panel provider’s database. Any respondents whose stated age, gender, and state of residence did not match the values in the database were terminated from the survey.

45. Ultimately, 348 qualified respondents completed the survey.³⁷ This sample size was adequate to enable me to provide statistically significant estimates of the value of music. (Confidence intervals on key estimates are reported in Appendix I) Detailed screening statistics are shown in Appendix G. Response rates and complete rates are discussed in a subsequent paragraph.

³⁵ A CAPTCHA challenge refers to a program that protects websites against bots (i.e., computer-generated responses) by generating and grading tests that humans can pass, but current computer programs cannot. The acronym CAPTCHA stands for Completely Automated Public Turing Test To Tell Computers and Humans Apart. See, e.g., “CAPTCHA: Telling Humans and Computers Apart Automatically,” CAPTCHA, <http://www.captcha.net/>, visited on October 5, 2011.

³⁶ Research Now uses several techniques to identify legitimate respondents. They have an extensive panel member verification process, and use “Digital Fingerprinting” to ensure that multiple responses are not obtained from the same computer. They also use “Geo-IP Validation” to identify the geographic location of the respondent. If there is a discrepancy between the targeted location of the survey and the location of the respondent’s computer, the respondent is blocked from taking the survey. See: <http://www.researchnow.com/en-gb/Panels/PanelQuality/ResearchIntegrity.aspx> (accessed on November 2, 2011).

³⁷ A small number of respondents were eliminated from the survey based upon what I judged to be unreasonable responses. Inclusion of such responses would have lowered the value of music, so their exclusion favors SoundExchange. See paragraphs 56-58 for details.

E. Survey Procedure

46. Respondents' answers to the survey questions provided the basis for my analysis and opinions. Using skip logic, questions were tailored to respondents in a logical way based on their answers to previous questions. The skip logic enabled me to tailor questions to respondents based on (1) whether they had one or multiple subscriptions to satellite radio;³⁸ (2) whether their primary subscription was with XM or Sirius;³⁹ and (3) whether they subscribed to Select or Premier service.

47. After responding to initial screener questions, respondents were asked to specify how often they pay for their primary satellite radio subscription.⁴⁰ This information was used, along with the information previously provided about the service provider (Sirius or XM) and level (Select or Premier) of a respondent's subscription, to provide a relevant monthly anchor market price for evaluating the value of satellite radio subscription features.⁴¹ The standard monthly prices did not include any taxes, promotional discounts, multiple receiver discounts, feeds, music royalty fees, or add-on services such as Internet listening. This amount represented the anchor market price upon which future responses regarding willingness to pay would depend.

48. Customers who currently pay based on a promotional pricing program indicated whether they would be willing to pay the standard monthly fee upon the expiration of their promotional term.⁴² Those respondents who replied affirmatively were associated with an anchor market price reflective of their service provider, service type, and payment cycle. Those who indicated that they would not be willing to pay the standard

³⁸ The difference between the two groups for the value of music and the relative proportion of post-1970 music is not statistically significant. For the value of music, t -statistic = 0.142, p -value = 0.887. For the relative proportion of post-1970 music, t -statistic = -0.650, p -value = 0.516.

³⁹ The difference between the two groups for the value of music and the relative proportion of post-1970 music is not statistically significant. For the value of music, t -statistic = 0.012, p -value = 0.990. For the relative proportion of post-1970 music, t -statistic = 0.918, p -value = 0.360.

⁴⁰ Question 1: "Which of the following best describes how often you pay for your [primary] satellite radio subscription?"

⁴¹ Respondents paying monthly, quarterly, and upfront for one, two, or three years comprise over 90% of Sirius XM self-pay customer base. Respondents with non-standard billing cycles (e.g., semi-annual or lifetime) were excluded from the survey. Source: Sirius XM Consolidated – Package Report, November 23, 2010, sheet "Consolidated Plan Detail."

⁴² Question 5: "Would you be willing to pay the standard price of [FILL BASED ON PAYMENT CYCLE] per month for your [FILL 'Sirius' or 'XM'] when the promotional period ends, or would you cancel your subscription when the promotional period ends?"

market price upon the expiration of the promotional period were asked how much they would pay before deciding the subscription was too expensive.⁴³ This amount became the anchor reservation price upon which future willingness-to-pay responses would depend for this subgroup of respondents.⁴⁴

49. Next, respondents were asked a series of seven questions to measure how much they would be willing to pay under a number of different conditions. The conditions involved the randomized removal of various programming and non-programming features of satellite radio one at a time.⁴⁵ These conditions built cumulatively upon one another, with each question including all the conditions in the previous question.⁴⁶ For example, in Q7b a respondent was asked “How much would you pay per month for satellite radio if ... You couldn’t listen to the same stations everywhere AND Sound quality was only equal to that of standard FM radio you can listen to ...” Following this question, the respondent was asked in Q7c “How much would you pay per month for satellite radio if ... You couldn’t listen to the same stations everywhere AND Sound quality was only equal to that of standard FM radio you can listen to AND There were as many commercials as on AM or FM radio ...” All conditions were presented in random

⁴³ Question 6: “You just indicated that you would cancel your satellite radio service if the price were [FILL MONTHLY anchor price]. What is the most you would be willing to pay monthly for your [primary] satellite radio subscription before deciding it was too expensive; in other words, if the price was any higher you would cancel your subscription?”

⁴⁴ Individuals currently paying a standard price, and those currently paying a promotional price but indicated willingness to pay the standard price when the promotion period ends, were asked to specify a reservation price later in the survey sequence.

⁴⁵ Example text for Question 7, including all conditions and one randomized order is: “How much would you pay per month for satellite radio if...

- o You couldn’t listen to the same stations everywhere AND
- o Sound quality was only equal to that of standard FM radio you can listen to AND
- o There were as many commercials as on AM or FM Radio AND
- o There was no music available, not even your favorite channels AND
- o There weren’t any non-music entertainment-talk or comedy shows available, even those with your favorite hosts AND
- o There was no sports coverage available, not even your favorite teams AND
- o There were no news, weather or traffic reports available

Please assume that all other aspects of satellite radio would remain the same.”

⁴⁶ Respondents were instructed to think only about their primary subscription for satellite radio that they listen to over a satellite radio receiver, excluding any satellite radio programming listened to over the Internet on a computer or cell phone.

order and the respondents were asked how much they would be willing to pay relative to their anchor price or their previous response.⁴⁷

50. The availability of music programming based on when the music was recorded and released (not necessarily composed or written) is relevant to these proceedings. To parse the willingness to pay over different periods, respondents reported the relative importance of being able to listen to music that was recorded and released from the 1970 through today, compared with the ability to listen to music what was recorded and released before 1970.⁴⁸ Pretesting indicated that this phrasing was natural to respondents and that they felt that it enabled them to express their opinions more accurately. Based on the pretests and prior survey-research experience, I judged that it was most accurate to have only a moderate number of features to be removed in Question 7. Thus, I did not parse the time frame in Question 7.

51. Respondents also self-reported the number of online surveys they had completed in the past three months with Research Now or any other survey panel provider. These data enable me to evaluate any potential effect related to the varied frequency of taking online surveys.

IV. Analysis of Survey Results

A. Overview of Qualified Survey Responses

52. Through the survey, I was able to collect data on the value that satellite radio subscribers attribute to the availability of music programming. A total of 1,358 respondents started filling out the survey (representing a response rate of approximately 10%). Of these, 354 respondents completed the survey. Out of these 354 respondents, six respondents were dropped because of straight-lining or unreasonable responses (see

⁴⁷ Instructions and error messages permitted the respondent to pay the same amount or less per month for their satellite radio subscription based on the current set of conditions. If the individual was no longer inclined to pay for his/her subscription based on the latest condition, he/she was instructed to enter \$0.00 and did not evaluate further conditions.

⁴⁸ Question 9: "Please allocate 100 percentage points based on the relative importance of each statement below regarding your decision to subscribe to satellite radio.

I can listen to music that was recorded and released (not necessarily composed/written) from 1970 through today

I can listen to music that was recorded and released (not necessarily composed/written) before 1970."

paragraphs 57-58), resulting in a sample of 348 qualified respondents.⁴⁹ This represents a qualification rate of approximately 26% and a completion rate of approximately 97%.⁵⁰ These response and completion rates are within the rates normally observed in Internet surveys.

53. To increase the precision of the study, prior to analyzing the results of the survey, I considered respondents with results and responses that suggested that it was possible that they may not have been sufficiently engaged in the survey to provide reliable and accurate answers. I describe below the basis for evaluation and, when deemed appropriate, the exclusion of certain respondents to obtain the final sample 348 respondents.

54. **Analysis of time taken to complete the survey.** Based on my experience conducting surveys, extremely long completion times suggest that respondents may have been interrupted. This does not necessarily bias the results, but it is appropriate to examine the results carefully in such a situation. On the other hand, extremely short completion times suggest that either respondents were sure of their answers and answered rapidly or that respondents may not have paid attention to the questions or may not have been sufficiently engaged in the survey. This, too, does not necessarily bias the results, but it is appropriate to examine the results carefully. Hence, responses provided by respondents with extremely long and extremely short completion times should be examined more closely. I examined the times that each respondent took to complete the survey. The median time to complete the survey was 7.2 minutes. I compared the willingness to pay for music (Q7) for the group comprising of the fastest 5% respondents (17 respondents with less than 3.92 minutes completion time) and slowest 5% respondents (18 respondents with more than 17.58 minutes completion time) with the willingness to pay for music for the remaining 90% and did not find any significant

⁴⁹ A total of 962 respondents did not qualify because (1) they did not have a current satellite radio subscription (296 respondents), (2) they did not meet other screening criteria (e.g., insufficient decision influence) (578 respondents), or (3) their response to introductory questions regarding age or gender could not be validated (88 respondents). An additional 42 respondents began the survey but opted not to complete it. Quotas were used to demographically balance the incoming sample (see paragraph 40). Decisions on quotas were made prior to any data analysis.

⁵⁰ Out of 1,358 respondents only 42 chose to terminate the survey themselves, resulting in a completion rate of approximately 97%.

differences.⁵¹ In addition, the responses of the fastest and slowest respondents, upon examination, were not qualitatively out of line compared to those of other respondents. Including these 35 individuals raised the average willingness to pay for music slightly, thus it was directionally conservative (favoring SoundExchange) to include the fast and slow respondents. Therefore, no respondents were removed because of the amount of time it took to execute the survey.

55. **Analysis based on number of surveys completed.** Being part of an online respondent panel provides the opportunity for individuals to receive a range of invitations to participate in studies for which they might qualify. To ensure that the results are not dependent on the overall survey participation propensity of respondents, i.e., to ensure that responses of respondents who participate very frequently in surveys are not different than responses of respondents who do not, I examined the data about how many surveys each respondent participated in the past three months. The median number of surveys completed in this timeframe was seven. The value of music did not differ statistically significantly between the top 20 most prolific survey participants (with 30 or more surveys) and the other respondents.⁵² Including these 20 individuals was directionally conservative. An additional sensitivity analysis was conducted, splitting the sample into two groups – one group who answered up to and including the median number of surveys (7 surveys) and one group who answered more than the median number of surveys. Based on this split, I compared the effect of the number of surveys taken on the value of music. Again, there was no statistically significant difference.⁵³ Therefore, no respondents were removed because of the number of surveys the respondent had completed in the past three months.

56. **Quality control by the exclusion based on inconsistent or unlikely answers.** Prior to the analysis of any data and based on a review of the screener criteria, I removed from the study respondents who provided answers that were internally inconsistent and/or

⁵¹ t -statistic = -1.099 , p -value = 0.273 . This test was conducted for all types of music – released before and after 1970.

⁵² t -statistic = -0.348 , p -value = 0.728 . The 95th percentile of the number of surveys taken by respondents in the past 3 months was 30.

⁵³ t -statistic = -0.189 , p -value = 0.850 . This test was conducted for all types of music – released before and after 1970.

unlikely, as described below. In each case, removal of the respondents was conservative in the sense of favoring SoundExchange. The removal of these respondents increased the overall average willingness to pay for music slightly.⁵⁴

57. I removed one respondent who indicated that the most that respondent would be willing to pay per month is \$0.01 for a satellite radio subscription once the respondent's promotional period ended. Although it is theoretically possible that a respondent would place only a 1 cent valuation on satellite radio, removing this respondent raises the value of music and therefore favors SoundExchange.

58. I removed five respondents whose willingness to pay did not change even after removing a series of satellite radio features from their subscription. This "straight-lining" (filling in a series of data with the same response value) suggests that these respondents were not engaged in the survey. Removing these respondents raises the value of music and therefore favors SoundExchange.

B. Willingness to Pay for Music

59. To calculate the willingness to pay for the music programming, I subtracted the amount each respondent was willing to pay for satellite radio in Question 7d, after music was removed,⁵⁵ from the amount each respondent was willing to pay just before music was removed in Question 7c. Recall that the order of the removal of the features of satellite radio in Question 7 was randomized across respondents. This randomization is an unbiased method to deal with the potential that the valuation of music is not always independent of all other features. For example, music might be valued at one level when satellite radio provides a high sound quality, with stations that are available everywhere, and with no commercials. Music might be valued differently in the absence of these features. When the randomization was such that music was the first item removed for a respondent, the amount the respondent was willing to pay after music was removed was

⁵⁴ WTP inclusive (all respondents) = \$3.19; WTP exclusive of the respondent with the \$0.01 response = \$3.20; WTP exclusive of the five respondents who straight-lined (that is, filling in a series of data with the same response value) = \$3.24.

⁵⁵ The exact wording in the survey for the removal of music in Question 7d was "...There was no music available, not even your favorite channels."

subtracted from the anchor market price gathered in Question 3 (“The standard price for your ... satellite radio subscription ... is [FILL WITH ANCHOR FROM CHART BASED ON ANSWER TO Q1] ... Are you currently paying the standard price ... for your ... satellite radio subscription, or are you on a special promotional price ...”) or Question 6 (“You just indicated that you would cancel your satellite radio service if the price were [MONTHLY ANCHOR PRICE]. What is the most you would be willing to pay monthly for your ... satellite radio subscription before deciding it was too expensive ...”) The resulting willingness to pay for music programming was then averaged across respondents.

60. For example, assume a respondent indicates in Question 3 that he or she pays the standard price of \$12.95 per month as part of his or her monthly subscription plan. This price then becomes the anchor price for that respondent for subsequent questions. Some respondents are asked first about music while other respondents are asked first about other features of satellite radio. Suppose that this respondent is one of the respondents who, when asked Question 7, is a respondent who answers the question with music being the first item to be removed. As an illustration, assume the respondent indicates that he or she would be willing to pay \$2.95, which implies that the respondent’s conditional willingness to pay for music programming is \$10.00. The \$10.00 is numerically equal to \$12.95 minus \$2.95. Now, as a second illustration, assume there is another respondent who is also paying the standard price of \$12.95 per month as part of his or her monthly subscription and is asked the same sequence of questions. This respondent indicates that he or she would be willing to pay \$1.95. Using parallel arithmetic computations we compute that respondent’s conditional willingness to pay for music programming as \$11.00. These two examples are illustrative. In the actual survey 43 respondents were asked first about music. When we average the implied conditional willingness to pay over these 43 respondents we obtain a first-removal conditional estimate of \$10.37. Because of arguments advanced earlier in this report, this conditional estimate of the value of music includes the complementary effect of other features of satellite radio. It is a conditional estimate given one of many randomized removal scenarios. To obtain a fair estimate we must consider all possible conditional orders of removal.

61. We now consider other respondents who had music removed last. As an illustration suppose that non-music entertainment-talk, or comedy shows, news, weather or traffic reports, sports coverage, commercial-free programming, excellent sound quality, and the ability to listen to the same stations everywhere had already been removed. This is another of the possible randomizations in the questioning sequence. Suppose that a respondent had indicated that he or she would pay only \$1.00 for such a hypothetical satellite radio service. We then ask that respondent what he or she would pay when music was removed. As an illustration, suppose that the respondent says he or she would pay \$0.50. We would then estimate that respondent's conditional willingness to pay as $\$0.50$ computed by $\$1.00$ before music was removed minus $\$0.50$ after music was removed. Like the music-first scenario, this conditional estimate represents one of many randomized removal scenarios. In the actual survey 43 respondents were asked about music last. When we average the implied conditional willingness to pay over these 43 respondents we obtain a last-removal conditional estimate of $\$0.51$. We can continue to compute these conditional willingness-to-pay estimates for all of the randomized removal orders in the survey. Because these removal orders were randomized the resulting estimate of willingness to pay is an unconditional estimate, that is, an estimate that is not conditional on the removal order. This unconditional estimate is a fair estimate of the value of music that takes into account the complementary nature of music, complementary with respect to the other features of satellite radio.

62. Appendix H summarizes two conditional willingness-to-pay estimates (first in the order, last in the order) and the unconditional willingness-to-pay estimates for music. For completeness and for a relative comparison to the other features in the survey, Appendix H provides conditional and unconditional willingness-to-pay estimates for all features in the survey. The unconditional estimate of the value of music is $\$3.24$, which is larger than for other forms of programming taken one at a time and larger than other features of satellite radio. The unconditional estimate of the value of other programming (non-music entertainment-talk, or comedy shows, news, weather or traffic reports, sports coverage) is $\$3.60$, slightly larger than the value of music. The value of commercial-free

programming, excellent sound quality, and the ability to listen to the same stations everywhere is together \$5.63.

63. Finally, the summed value of all of the features of satellite radio is \$12.47. This value is close to the standard monthly price of \$12.95. The fact that the summed value of various features included in the survey is close to the standard monthly price corroborates the robustness of my survey design. It suggests that the features used in the survey are a relatively complete set of features and that the value of satellite radio can be decomposed into this set of features. The summed value of individual features is not equal to \$12.95 for two reasons. First, not everyone was paying the full price and their reservation price may not have been \$12.95. For example, approximately 22% of the respondents were paying a special promotional price.⁵⁶ Second, there is sometimes a residual value due to the other features of satellite radio, e.g., a value that might be due to the quality of the music programming. For example, the residual value was 25 cents or less for over 95% of the respondents; the average residual value was 13 cents. The small magnitude of the observed residual value for almost all respondents suggests that the residual value due to other features is not large and, hence, the list of included features is reasonably complete.

64. The unconditional willingness to pay based on the feature-removal questions estimates the unconditional value for all music broadcast on satellite radio. I am informed that there is music broadcast on satellite radio that is not subject to the license at issue in this proceeding. Specifically, rights to music recorded prior to February 15, 1972 are not covered by the license, nor are rights for live studio performances or live concerts.

65. To parse the value of music further, I asked an additional question of respondents. I asked respondents to:

Please allocate 100 percentage points based on the relative importance of each statement below regarding your decision to subscribe to satellite radio. Make sure the total adds up to 100%. If you don't know or are unsure, please check the box.

66. Prior to being asked this question, respondents were asked to read the preamble:

⁵⁶ Based on the responses to Question 3: "... Are you currently paying the standard price ... for your ... satellite radio subscription, or are you on a special promotional price that lowers the cost of your subscription for a limited period of time..."

Now, think about the music that can be found on satellite radio. After a song has been written, it can be recorded many times, by the same artist or different artists. Some examples include classical music being recorded and released long after it was originally composed, popular artists releasing cover versions of previously recorded songs, and technology advances making it possible to re-release music with improved sound quality.

Once again, when giving your answers to the following questions, please think only of satellite radio that you listen to over the satellite receiver. Do not consider any satellite radio programming that you listen to over the Internet on a computer or on a cell phone.

67. Respondents then allocated the 100% between “music that was recorded and released (not necessarily composed/written) from 1970 through today” and “music that was recorded and released (not necessarily composed/written) before 1970.” I chose 1970 instead of 1972 because pretests suggested that consumers could not fully parse music by year, but appeared to be able to express opinions about decades. The choice of 1970 is also conservative, i.e., it is likely to favor SoundExchange, because it includes music recorded from January 1, 1970 to February 14, 1972 (e.g., “Stairway to Heaven” by Led Zeppelin was recorded in 1971), live studio performances, and live concerts.

68. Based on the results of Question 9, I estimate that at most 65.1% of the value of music is due to music recorded on or after February 15, 1972.

69. Combining the unconditional willingness to pay for music from the feature-removal questions with the relative valuation of post-1970 music from Question 9, I estimate that the net value of music as claimed by SoundExchange is at most \$2.11.⁵⁷ The statement “at most” reflects that I have made data inclusion and coverage inclusion decisions to favor SoundExchange.

⁵⁷ If we make this calculation on an individual basis and then take the overall mean, we get a value of \$2.19. The two estimates of \$2.11 and \$2.19 are not significantly different (t -statistic = 0.286, p -value = 0.775). Moreover, the relative valuation of post-1970 music does not systematically vary depending on the order in which satellite radio features were removed. A chi-square test of order effects in the relative valuation of post-1970 music did not yield statistically significant results (Pearson chi-square statistic = 141.196, p -value = 0.551). Therefore, it may be appropriate to use either of the two calculations.

C. Consistency of Survey Findings

70. In 2007 I conducted a survey to estimate the value of music for satellite radio. There was no guarantee that the numbers estimated in 2007 would be the same as 2011. For example, changes in music usage, changes in the way music is delivered (such as iTunes and streaming music websites), changes in hardware (such as iPods, other digital music players, and smart phones), and even changes in the particular music content could explain differences between the value of music in 2007 and 2011. Also, there is now relatively more music created after 1970 (31 years) than there was in 2007 (27 years).⁵⁸ There were also differences in sampling methods (Internet survey vs. mall-intercept survey) and the detailed wording of the questions.⁵⁹ Finally, there was a difference in the manner in which the construct of willingness to pay was measured. As I explain below, my 2007 survey anchored respondents to their stated reservation price while my 2011 survey anchored respondents to the market price. Despite these differences, the estimated value of music and the estimated parsing are remarkably similar.

71. In my 2007 survey I estimated the value of music to be at most \$3.38.^{60,61} In my 2011 survey, I estimate the value of music to be at most \$3.24. The difference between these two values is not statistically significant.⁶² The relative importance of music recorded in 1970 or later was estimated in the 2011 survey to be 65.1%. This estimate

⁵⁸ This is an increase of approximately 15% more years. It may or may not mean 15% more music. It is also possible that recent music is valued either more highly or less highly than prior music and it is possible that recent music plays a larger or smaller role in the respondents' music valuations. Thus, the effect of increased years can be ambiguous.

⁵⁹ Both mall-intercept and Internet surveys can provide representative samples when done to high standards. I opine that both were done to high standards and, hence, both should be representative.

⁶⁰ Hauser 2007 report, Exhibit K-1. The value of \$3.38 is unweighted and is for subscribers only.

⁶¹ In my 2007 report I reported two estimates. One was an unweighted estimate that reflected the population average. The other was an estimate that adjusted for a filter question that was used in a survey by Wind. As detailed in my 2007 report such filter questions enhance accuracy and lower the estimate of willingness to pay. However, while such filter questions are feasible for a situation when only one feature is removed, they are not feasible when there are multiple features removed sequentially. Because the filter questions lower the estimate and favor SoundExchange, my decision not to use such questions means that the estimate is at most \$3.38. Furthermore, this estimate of \$3.38 is the appropriate comparison to the estimates that I obtain in my 2011 survey. (Reweighting to account for Dr. Wind's filter question results in an estimate of \$2.87 rather than \$3.38.) Using the unweighted estimates in the 2011 survey is likewise conservative in the sense that it favors SoundExchange.

⁶² t -statistic = -0.327, p -value = 0.743.

compares to 63.9% in the 2007 survey.⁶³ The difference between these two values is not statistically significant.⁶⁴ Using these figures gives a value of \$2.16 for music from 1970 onward for subscribers in the old survey, and \$2.11 from the latest survey. The difference between these two values is not statistically significant.⁶⁵

72. When comparing the 2007 and the 2011 surveys there was a difference in the manner in which the construct of willingness to pay was measured. The difference is in the initial anchors. In my 2007 survey, I anchored the first feature-removal question to the respondents' "reservation price," that is, the most that that respondent would be willing to pay without canceling his or her subscription. In my 2011 survey I anchored the first feature-removal question to the respondents' revealed market price. Both measures are indicators of a type of willingness to pay and, given the definition of the construct, the questions that were used to measure these constructs were valid. As a marketing research expert, I have provided the best estimate of the value of music based on the choice of the initial-price anchor. My decision to use the market price is based on a request of the economics and royalty expert in this case. The market-price anchor has the advantage that it parses the market price among the various features of satellite radio. This is indicated in Appendix H – the unconditional values of the seven features parse the approximately \$12.95 market price of satellite radio.

73. As I mentioned earlier, in the previous proceeding, the CRB voiced concerns that Dr. Wind's survey was based on "an imperfect snapshot of consumer preferences...at one point in time, without any justification for the implied assumption that such preferences have remained or will remain stable across Sirius' subscribership over time or even over any limited relevant time period."⁶⁶ Although any survey by construction will only provide a snapshot of consumer preferences at that time, there is remarkable consistency

⁶³ The estimate of 63.9% corresponds to subscribers only. Respondents who reported an importance value of 0 for both pre-1970 and post-1970 music were excluded from this calculation.

⁶⁴ t -statistic = 0.414, p -value = 0.679.

⁶⁵ t -statistic = -0.162, p -value = 0.872. The difference between the value of music calculated at the individual level (\$2.19) and \$2.16 is also not statistically significant (t -statistic = 0.083, p -value = 0.934). The formula for the variance of the product of two independent random variables used in the calculation is $\text{Var}(XY) = [E(X)^2]\text{Var}(Y) + [E(Y)^2]\text{Var}(X) + \text{Var}(X)\text{Var}(Y)$. See, for example, Goodman, Leo A., "On the exact variance of products," *Journal of the American Statistical Association*, December 1960, 708-713.

⁶⁶ See Final Determination of Rates and Terms in the Matter of Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services, 1/10/08, pp. 44-45.

between the current survey and the survey I conducted for the previous CRB proceeding in 2007, which implies that my findings are reasonably consistent over time.

V. Conclusions

74. The Internet survey conducted under my directions shows that, in general, respondents are willing to pay \$3.24 for music, which is reduced to \$2.11 when music is limited to music recorded since 1970.⁶⁷

Professor John R. Hauser

November 28, 2011

⁶⁷ I understand that the sound recording rights at issue in this case are for sound recordings created from February 15, 1972 onward. The sound recording rights at issue do not cover sound recordings prior to February 15, 1972 nor do they cover studio performances and live concerts.

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

_____)	
In the Matter of)	
)	
DETERMINATION OF RATES AND TERMS	)	Docket No. 2011-1
FOR PREEXISTING SUBSCRIPTION AND	)	CRB PSS/Satellite II
SATELLITE DIGITAL AUDIO RADIO)	
SERVICES)	
_____)	

DECLARATION OF JOHN R. HAUSER, SC.D

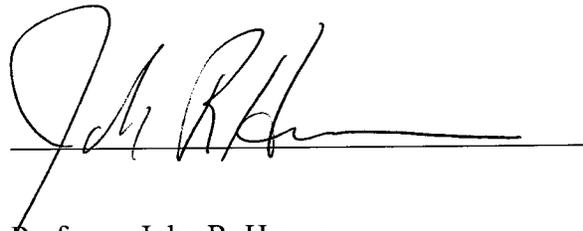
I, John R. Hauser, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this ___ day of November 2011 at New York, NY.

John R. Hauser, SC.D

between the current survey and the survey I conducted for the previous CRB proceeding in 2007, which implies that my findings are reasonably consistent over time.

V. Conclusions

74. The Internet survey conducted under my directions shows that, in general, respondents are willing to pay \$3.24 for music, which is reduced to \$2.11 when music is limited to music recorded since 1970.⁶⁷

A handwritten signature in black ink, appearing to read "John R. Hauser", is written over a horizontal line. The signature is fluid and cursive.

Professor John R. Hauser

November 28, 2011

⁶⁷ I understand that the sound recording rights at issue in this case are for sound recordings created from February 15, 1972 onward. The sound recording rights at issue do not cover sound recordings prior to February 15, 1972 nor do they cover studio performances and live concerts.

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

<hr/>)	
In the Matter of)	
)	
DETERMINATION OF RATES AND TERMS FOR PREEXISTING SUBSCRIPTION AND SATELLITE DIGITAL AUDIO RADIO SERVICES	)	Docket No. 2011-1 CRB PSS/Satellite II
<hr/>)	

DECLARATION OF JOHN R. HAUSER, SC.D

I, John R. Hauser, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 28 day of November 2011 at New York, NY.



John R. Hauser, SC.D

Appendix A

Curriculum Vitae of Prof. John R. Hauser

ACADEMIC VITA (long version)

John R. Hauser

Address

MIT Sloan School of Management
Massachusetts Institute of Technology, E62-538
Cambridge, Massachusetts 02142
(617) 253-2929 Fax: (617) 258-7597
hauser@mit.edu; web.mit.edu/hauser/www

Education

Sc.D. M.I.T., 1975, Operations Research Dissertation: "A Normative Methodology for Predicting Consumer Response to Design Decisions: Issues, Models, Theory and Use."

Advisor: John D. C. Little. Committee members: Glen L. Urban and Moshe Ben-Akiva.

S.M. M.I.T., 1973, Civil Engineering (Transportation Systems Division)

S.M. M.I.T., 1973, Electrical Engineering

S.B. M.I.T., 1973, Electrical Engineering
Joint Thesis (S.M.'s and S.B.): "An Efficient Method to Predict the Impacts of Operating Decisions for Conventional Bus Systems." Advisor: Nigel Wilson.

Lifetime Achievement Awards

Parlin Award 2001, The American Marketing Association describes this award as "the oldest and most distinguished award in the marketing research field."

Converse Award 1996, the American Marketing Association, for "outstanding contributions to the development of the science of marketing."

Churchill Award 2011, the American Marketing Association, Market Research Special Interest Group, for "Lifetime achievement in the academic study of marketing research."

Fellow of the Institute for Operations Research and Management Science (INFORMS)

Inaugural Fellow of the INFORMS Society of Marketing Science (ISMS)

Highly Cited Researcher (ISI Web of Science), Since 2006.

Awards for Published Papers

INFORMS:	ISMS Long Term Impact Award, 2011, Finalist
	John D.C. Little Best-paper Award, 2009, Finalist
	John D.C. Little Best-paper Award, 2003, First Place
	John D.C. Little Best-paper Award, 1998, Finalist
(formerly The Institute	John D.C. Little Best-paper Award, 1994, Finalist

of Management Science)	<p>John D.C. Little Best-paper Award, 1993, First Place John D.C. Little Best-paper Award, 1990, Honorable Mention Best paper in Marketing Sciences Literature, 1984, Honorable mention. Best Paper in Marketing Sciences Literature, 1983, First Place. Best Paper in Marketing Sciences Literature, 1982, First Place.</p> <p style="text-align: center;">Two published articles</p> <p>were cited in 2007 as one of “the top 20 marketing science articles in the past 25 years.</p>
American Marketing Association:	<p>Explor Award (Leadership is on-line market research), 2004, First-Place Finalist, Paul Green Award for contributions to marketing research, 2004 MSI Award for Most Significant Contribution to Practice of Marketing in 1996. Finalist, O'dell Award for best paper in the <i>Journal of Marketing Research</i>, published in 1986, awarded in 1991.</p> <p>One of the top 50 most prolific marketing scholars (top journals) in the last 25 years (1982-2006). Total articles, rate of publication, and author-adjusted rate.</p>
Product Development Management Assoc. <i>Innovation Management.</i>	<p>Best Paper Award, Finalist, 2003. Best Paper Award, Finalist, 2002. One of ten most-cited papers in the <i>Journal of Product Innovation Management.</i></p> <p>One of the top articles in educational citations in the last twenty years.</p>
Sawtooth Software Conference	Best Presentation and Paper, 2006; Runner-up, 2008.
European Society of Marketing Research:	Best Paper at Rome conference, September 1984.
Emerald Management Reviews papers in 2009)	2010 Citation of Excellence (top 50 of 15,000 published
Doctoral Consortia Faculty	<p style="text-align: center;">American Marketing Association, 1979, 1984, 1985, 1986, 1988, 1989, 1991, 1993, 1995, 1997, 1998, 2001, 2003, 2004, 2005, 2006, 2007, 2008, 2009.</p> <p style="text-align: center;">INFORMS Society of Marketing Science, 2002 (founding member), 2003, 2004.</p> <p>European Marketing Academy, 1985</p>
<i>Awards, Teaching</i>	
MIT Sloan School of Management: 2008.	<p>Nominated for Excellence in Teaching Award 2000, 2007,</p> <p>Named "Outstanding Faculty" by <i>Business Week Guide to the Best Business Schools</i> (1995). Excellence in Teaching Award 1994 (Awarded by the Master's</p>
Student class).	
<i>Awards for Thesis Supervision</i>	

American Marketing Association (Ph.D.): Winner John Howard Dissertation Award (2010, Matt Selove, Committee)
Co-winner John Howard Dissertation Award (2005, Olivier Toubia)

1st Place (1981, Ken Wisniewski)
Honorable Mention (1979, Patricia Simmie).

INFORMS (Ph.D.)
awarded 2005)
awarded 1995)

Winner of the Frank Bass Award (2004, Olivier Toubia,
Winner of the Frank Bass Award (1989, Abbie Griffin,

MIT Sloan School of Management (Ph.D.): 1st Place (1987, Peter Fader)

MIT Sloan School of Management (Master's): 1st Place (1991, Jon Silver and John Thompson)
1st Place (1983, Steve Gaskin)
Honorable Mention (1982, Larry Kahn).

Awards, Other

Who's Who in America Since 1997

Who's Who in Management Science Since 2000

Who's Who in Economics Since 2003

Who's Who in Finance and Business Since 2009

Harvard Business School: Marvin Bower Fellow, 1987 - 1988.

National Science Foundation Fellowship: 1971 - 1974.

M.I.T.: National Scholar, 1967 - 1971.

Honor Societies: Tau Beta Pi, Eta Kappa Nu, Sigma Xi

Directorships, Trustee, Advisory Board

1988 – Present Founder, Principal, Board Member, Applied Marketing Science, Inc.

March 2003 – July 2009 Trustee, Marketing Science Institute

Academic Appointments

January 1989 - Present: Kirin Professor of Marketing
MIT Sloan School of Management
Massachusetts Institute of Technology

July 2010 – June 2011 Head, Marketing Group

July 2005 – June 2009: Area Head, Management Science Area

July 1988 – June 2003: Head, Marketing Group

September 1993 - May 2000: co-Director, International Center for Research on the Management of
Technology

September 1997 - May 2000: Research Director, Center for Innovation in Product Development

June 2001 – June 2006: Virtual Customer Initiative Leader, Center for Innovation in Product Development

July 1984 - January 1989: Professor of Management Science
MIT Sloan School of Management
Massachusetts Institute of Technology

July 1987 - June 1988: Marvin Bower Fellow
Harvard Business School

Cambridge, Massachusetts 02163

March 1985 - May 1985: Visiting Lecturer
European Institute of Business Administration
Fontainebleau, FRANCE

September 1980 - June 1984: Associate Professor of Management Science

Massachusetts Institute of Technology
Cambridge, Massachusetts 02142

September 1975 - August 1980: Assistant Professor of Marketing and of Transportation
(granted tenure and promoted in 1980)
Graduate School of Management and Transportation Center
Northwestern University
Evanston, Illinois 60201

Teaching Interests

Marketing Management, New Product and Service Development, Competitive Marketing Strategy, Marketing Models, Measurement and Marketing Research, Research Methodology.

Research Interests

Virtual customer methods for rapid customer feedback via the web; polyhedral methods, Greedoid methods, and related theory for the analysis of non-compensatory decision making; customer satisfaction measurement and incentive systems; quality function deployment and customer driven engineering; market measurement, especially voice of the customer; marketing strategy, especially positioning, pricing, and advertising strategy; consumer behavior including information search, agendas, and market structure; prelaunch forecasting and information acceleration for new products; and design and marketing of new products and services, hierarchical Bayes methods for continuous-time Markov processes, website morphing, logical analysis of data, cognitive complexity.

Texts

Urban, Glen L. and John R. Hauser, *Design and Marketing of New Products*, Prentice-Hall, Second Edition 1993.

A comprehensive text that integrates advanced, state-of-the-art techniques to provide graduate-level students and marketing professionals with an understanding of the techniques and an operating ability to design, test, and implement new products and services.

This text has been honored by being selected for both the Prentice-Hall International Series in

Management and the Series in Marketing. It has been adopted at a number of major universities. In a 1988 survey it was identified as the most widely used new product textbook at the graduate level.

The revision includes new material on designing for quality, reduced cycle times, prelaunch forecasting, quality improvement, defensive and competitive strategy, value mapping, the integration of marketing and engineering, new issues of organization, customer satisfaction, and new international examples. It is available in Korean and is being translated into Japanese and Chinese.

Third most cited work in the *Journal of Product Innovation*, 1984-2004. (Cited May 2010.)

Urban, Glen L., John R. Hauser, and Niki Dholakia, *Essentials of New Product Management*, Prentice Hall, 1986.

This is an undergraduate textbook which presents the essential concepts but written for a non-technical audience. It has been translated to Japanese and has sold well in Japan.

Hauser, John R., *Applying Marketing Management: Four Simulations*, Scientific Press, 1986.

This mini-text and software package contains four tutorial exercises for marketing management concepts. With this package students learn positioning, competitive strategy, new product development, and life cycle forecasting while using the personal computer to simulate marketing management problems. A detailed instructor's manual and transparency masters are also available. It is available in Japanese.

Hauser, John R., *ENTERPRISE: An Integrating Management Exercise*, Scientific Press, 1989.

This mini-text and software package contains a comprehensive competitive simulation. Students compete in six markets by making marketing and production decisions. A detailed instructor's manual and administrative software is also available. It is available in Japanese.

Journal Editor

Marketing Science, Editor-in-Chief for volumes 8, 9, 10, 11, 12, and 13 (1989-1994). Four issues per year including periodic editorials and journal management. Processed about 120 new papers per year.

Journal Publications (January 2011 Citation counts including books, articles in the first five years of Marketing Science, and total cites to "House of Quality" (e.g., "Defensive Marketing Strategy" has 184 cites). ISI: 3,920, H-index 30 (automatic H-index is 27), Google Scholar, 9,655, H-index 40, using "Publish or Perish".

Dzyabura, Daria and John R. Hauser (2011), "Active Machine Learning for Consideration Heuristics," *Marketing Science*, 30, 5, (September-October), 801-819.

Hauser, John R. (2011), "A Marketing Science Perspective on Recognition-Based Heuristics (and the Fast and Frugal Paradigm)," *Judgment and Decision Making*, 6, 5, (July), 396-408.

Hauser, John R. (2011), "Consideration-Set Heuristics," forthcoming, *Journal of Business Research*.

Ding, Min, John Hauser, Songting Dong, Daria Dzyabura, Zhilin Yang, Chenting Su, and Steven Gaskin (2011), "Unstructured Direct Elicitation of Decision Rules," *Journal of Marketing Research*, 48, (February), 116-127.

Hauser, John R., Olivier Toubia, Theodoros Evgeniou, Daria Dzyabura, and Rene Befurt (2010),

“Cognitive Simplicity and Consideration Sets,” *Journal of Marketing Research*, 47, (June), 485-496.

Urban, Glen L., John R. Hauser, Guilherme Liberali, Michael Braun, and Fareena Sultan (2009), “Morph the Web to Build Empathy, Trust, and Sales,” *Sloan Management Review*, 50, 4, (Summer), 53-61.

Hauser, John R., Glen L. Urban, Guilherme Liberali, and Michael Braun (2009), “Website Morphing,” *Marketing Science*, 28, 2, (March-April), 202-224. Lead article with commentaries by Andrew Gelman, John Gittins, and Hal Varian. Includes rejoinder.

Finalist, John D. C. Little Award for Best Article in the Marketing Sciences Literature, 2009.

2010 Emerald Management Reviews Citation of Excellence for one of best articles published in the top 400 business and management journals in 2009. (Top 50 of 15,000 articles.)

Toubia, Olivier, John R. Hauser and Rosanna Garcia (2007), “Probabilistic Polyhedral Methods for Adaptive Choice-Based Conjoint Analysis: Theory and Application,” *Marketing Science*, 26, 5, (September-October), 596-610.

Co-winner, American Marketing Association, John Howard Dissertation Award, 2005

Yee, Michael, Ely Dahan, John Hauser, and James Orlin (2007), “Greedoid-Based Non-compensatory Two-Stage Consideration-then-Choice Inference,” *Marketing Science*, 26, 4, (July-August), 532-549.

First Place, American Marketing Association Explor Award, 2004

Toubia, Olivier and John R. Hauser (2007), “On Managerial Efficient Designs,” *Marketing Science*, 26, 6, (November-December), 851-858.

Garcia, Rosanna, Paul Rummel, and John R. Hauser (2007), “Validating Agent-Based Marketing Models Using Conjoint-Analysis,” *Journal of Business Research*, 60, 8, (August), 848-857.

Hauser, John R., Gerald Tellis, and Abbie Griffin (2006), “Research on Innovation: A Review and Agenda for Marketing Science,” *Marketing Science*, 25, 6, (November-December), 687-717.

Cited by Thomson Reuters’ Essential Science Indicators as a Fast Breaking Paper in Economics and Business in April 2009.

Hauser, John R. and Olivier Toubia (2005), “The Impact of Utility Balance and Endogeneity in Conjoint Analysis,” *Marketing Science*, 24, 3, (Summer), 498-507.

Glen L. Urban and John R. Hauser (2004), “‘Listening-In’ to Find and Explore New Combinations of Customer Needs,” *Journal of Marketing*, 68, (April), 72-87.

Toubia, Olivier, John R. Hauser, and Duncan Simester (2004), “Polyhedral Methods for Adaptive Choice-based Conjoint Analysis,” *Journal of Marketing Research*, 41, 1, (February), 116-131.

Finalist, Paul Green Award for contributions to the practice of marketing research.

Toubia, Olivier, Duncan I. Simester, John R. Hauser, and Ely Dahan (2003), “Fast Polyhedral Adaptive Conjoint Estimation,” *Marketing Science*, 22, 3, (Summer), 273-303.

First Place, John D. C. Little Award for Best Article in the Marketing Sciences Literature, 2003

First Place, Frank M. Bass Award for Best Article Based on a Dissertation, 2005.

Finalist, INFORMS Society for Marketing Science Long Term Impact Award, 2011

Dahan, Ely and John R. Hauser (2002), "The Virtual Customer," *Journal of Product Innovation Management*, 19, 5, (September), 332-354.

Finalist, PDMA Best Paper Award in 2003.

Hauser, John R. (2001), "Metrics Thermostat," *Journal of Product Innovation Management*, 18, 3, (May), 134-153.

Finalist PDMA Best Paper Award in 2002.

Cited by the PDMA in 2007 as one of the top articles in the last twenty years in educational citations.

Simester, Duncan I, John R. Hauser, Birger Wernerfelt, and Roland Rust (2000), "Implementing Quality Improvement Programs Designed to Enhance Customer Satisfaction: Quasi-experiments in the United States and Spain," *Journal of Marketing Research*, 37, 1, (February), 102-112.

Hauser, John R. (1998), "Research, Development, and Engineering Metrics." *Management Science*, 44, 12, December, 1670-1689.

Hauser, John R. and Gerry Katz (1998), "Metrics: You Are What You Measure!." *European Management Journal*, 16, 5, (October), 516-528. Highlighted in "A Round-up of Important Articles from Business Periodicals," in *Mastering Management Review* published by the *Financial Times*.

Hauser, John R., Duncan I. Simester, and Birger Wernerfelt (1997), "Side Payments in Marketing," *Marketing Science*, 16, 3, 246-255.

Finalist, John D. C. Little Award for Best Article in the Marketing Sciences Literature, 1997.

Urban, Glen L., John R. Hauser, William J. Qualls, Bruce D. Weinberg, Jonathan D. Bohlmann and Roberta A. Chicos (1997), "Validation and Lessons from the Field: Applications of Information Acceleration," *Journal of Marketing Research*, 34, 1, (February), 143-153.

Hauser, John R. and Florian Zettelmeyer (1997), "Metrics to Evaluate R,D&E," *Research Technology Management*, 40, 4, (July-August), 32-38.

Griffin, Abbie, and John R. Hauser (1996), "Integrating Mechanisms for Marketing and R&D," *Journal of Product Innovation Management*, 13, 3, (May), 191-215.

One of ten most-cited papers in the *Journal of Product Innovation Management* (JPIM 24, 3, 2007, p.209)

Hauser, John R., Duncan I. Simester, and Birger Wernerfelt (1996), "Internal Customers and Internal Suppliers," *Journal of Marketing Research*, 33, 3, (August), 268-280.

Urban, Glen L., Bruce Weinberg and John R. Hauser (1996), "Pre-market Forecasting of Really-New Products," *Journal of Marketing*, 60,1, (January), 47-60. Abstracted in the *Journal of Financial Abstracts*, 2, 23A, (June) 1995.

1996 MSI Award for the most significant contribution to the advancement of the practice of marketing.

Hauser, John R., Duncan I. Simester, and Birger Wernerfelt (1994), "Customer Satisfaction Incentives," *Marketing Science*, 13, 4, (Fall), 327-350.

Finalist, John D. C. Little Award for Best Article in the Marketing Sciences Literature, 1994.

Hauser, John R., Glen L. Urban, and Bruce Weinberg (1993), "How Consumers Allocate their Time When Searching for Information," *Journal of Marketing Research*, 30, 4, (November), 452-466.

Hauser, John R. (1993), "How Puritan Bennett Used the House of Quality," *Sloan Management Review*, 34, 3, (Spring), 61-70. Reprinted in *Taiwan Philips News* (in Chinese), 23, 1, (Feb), 1994.

Griffin, Abbie and John R. Hauser (1993), "The Voice of the Customer," *Marketing Science*, 12, 1, (Winter), 1-27.

First-place, John D. C. Little Award for Best Article in Marketing Sciences Literature, 1993.

First Place, Frank M. Bass Award for Best Article Based on a Dissertation, 1995.

Cited in 2007 by the INFORMS Society of Marketing Science as one "of the top 20 marketing science articles in the past 25 years.

Griffin, Abbie and John R. Hauser (1992), "Patterns of Communication Among Marketing, Engineering, and Manufacturing -- A Comparison between Two New Product Teams," *Management Science*, 38, 3, (March), 360-373.

One of the 500 most-cited articles in the first 50 years of *Management Science*.

Urban, Glen L., John R. Hauser, and John H. Roberts (1990), "Prelaunch Forecasting of New Automobiles: Models and Implementation," *Management Science*, 36, 4, (April), 401-421. Reprinted in *Modeling for Management, Vol. 1*, George P. Richardson, ed., Dartmouth Publishing Co., Hampshire England.

INFORMS (TIMS) Finalist, Best Article in Marketing Science Literature, 1990.

Hauser, John R. and Birger Wernerfelt (1990), "An Evaluation Cost Model of Consideration Sets," *Journal of Consumer Research*, 16, (March), 393-408.

Hauser, John R. and Birger Wernerfelt (1989), "The Competitive Implications of Relevant-Set/Response Analysis," *Journal of Marketing Research*, 26, 4, (November), 391-405.

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Hauser, John R. and Robert L. Klein (1988), "Without Good Research, Quality is a Shot in the Dark," *Marketing News*, Vol. 22, No. 1, January 4. Page 1.

Hauser, John R. (1986), "'Defender' Helps Mature Brands Ward off New Foes," *Marketing Educator*, 5, 3, (Fall), 5.

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Liberali, Guilherme, Glen L. Urban, and John R. Hauser (2011), "Providing Unbiased Competitive Information to Encourage Trust, Consideration, and Sales: Two Field Experiments," (Cambridge, MA: MIT Sloan School of Management), September, under review at the *International Journal of Research in Marketing*.

Hauser, John R., Glen L. Urban, and Guilherme Liberali (2011), "Website Morphing 2.0: Technical and Implementation Advances Combined with the First Field Experiment of Website Morphing," (Cambridge, MA: MIT Sloan School of Management), July, under review at *Marketing Science*.

Selove, Matthew and John R. Hauser (2011), "The Strategic Importance of Accuracy in Conjoint Design," (Cambridge, MA: MIT Sloan School of Management), July, under review *Marketing Science*.

Hauser, John R., Songting Dong, and Min Ding (2011), "Self-Reflection and Articulated Consumer Preferences," (Cambridge, MA: MIT Sloan School of Management), July, under review *Journal of Product Innovation Management*.

Draft Working Papers

Ding, Min, John R. Hauser, and Lixin Huang (2009), "Sleuthing Game," draft working paper, (Cambridge, MA: MIT Sloan School of Management).

Older Working Papers (Support published papers with additional information)

Braun, Michael, Clarence Lee, Glen L. Urban, and John R. Hauser (2009), "Does Matching Website Characteristics to Cognitive Styles Increase Online Sales?," (Cambridge, MA: MIT Sloan School of Management).

Zettelmeyer, Florian and John R. Hauser (1995), "Metrics to Evaluate R&D Groups: Phase I, Qualitative Interviews," Working Paper, International Center for Research on the Management of Technology, MIT, Cambridge, MA, 02142.

Hauser, John R. (1991), "Comparison of Importance Measurement Methodologies and their Relationship to Consumer Satisfaction," (Cambridge, MA: MIT Sloan School of Management).

Research in Progress

Review of consideration set research. With Don Lehmann.

Review of incentive alignment in marketing research. With Min Ding and Joel Huber.

Genetic Algorithms for Understanding Consumer Preferences with Kamal Malek and Kevin Karty.

Advertising morphing. With Glen Urban and Gui Liberali.

Applications of conjunctive decision rules for managerial strategy in the auto industry. With Glen Urban and Gui Liberali.

Research Reports (not otherwise listed)

Hauser, John R. (1996), "R&D Metrics: An Annotated Bibliography," ICRMOT Working Paper, M.I.T., Cambridge, MA 02142. (June) Also available as a Marketing Science Institute Working Paper (November).

Hauser, John R. and Greg Cirmak (1987), "Consumer Driven Engineering for the CHEK Automobiles," Information Resources, Inc. Report to General Motors, Inc. Details the results of a major study on consumer perceptions and preferences of luxury automobiles. April.

Hauser, John R. (1983), "Critique of Market Studies for Cellular Radio Telephone:. Affidavits before the FCC evaluating market studies, June and September.

Hauser, John R. (1983), "Forecasts of Demand and Cellular Radio Telephone,.: Affidavits before

the FCC for five major and nine minor markets. June and April.

Hauser, John R., and J. Bertan (1982), "Auto Show Interviews," Internal Report to Buick Division of General Motors, June.

Hauser, John R., and Kenneth J. Wisniewski (1981), "Monitoring the Implementation of Innovative Transportation Services, Phase I: Final Report," Technical Report to the Urban Mass Transit Administration, Research Grant IL-11-0012, May.

Hauser, John R. and Kenneth J. Wisniewski (1979), "Consumer Analysis for General Travel Destinations," Technical Report, Transportation Center, Northwestern University, March.

Hauser, John R. and Steven M. Shugan (1978), "Designing and Building a Market Research Information System," Technical Report, Transportation Center, Northwestern University, February.

Hauser, John R. (1978), "Forecasting and Influencing the Adoption of Technological Innovations," Technical Report, Transportation Center, Northwestern University, October.

Hauser, John R., Alice M. Tybout and Frank S. Koppelman (1978), "Consumer-Oriented Transportation Services Planning: The Development and Implementation of a Questionnaire to Determine Consumer Wants and Needs," Technical Report, Transportation Center, Northwestern University, October.

Tybout, Alice M., Frank S. Koppelman and John R. Hauser (1977), "Consumer Views of Transportation in Evanston: A Report Based on Focus Group Interviews," Technical Report, Transportation Center, Northwestern University, June.

Koppelman, Frank S., John R. Hauser and Alice M. Tybout (1977), "Preliminary Analysis of Perceptions, Preferences, Beliefs and Usage of Transportation Services for Travel to Downtown Evanston," Technical Report, Transportation Center, Northwestern University, May.

Hauser, John R. (1977), "Results of the Focus Group Interviews for Shared Ride Auto Transit," Cambridge Systematics Consultant's Report, May.

Hauser, John R. (1976), "Report on the Applicability of Attitudinal research for Improving the Effectiveness of Transportation Demand Models," Position Paper commissioned by Cambridge Systematics, Inc., April.

Wilson, Nigel, R. W. Weissberg and John R. Hauser (1976), "Advanced Dial-a-Ride Algorithms--Final Report," M.I.T. Department of Civil Engineering Technical Report, April.

Hauser, John R., et al. (1974), "The Chemung County Transit Survey." Volunteers in Technical Assistance (a division of VISTA) publication for Chemung County, NY, June. (Includes analysis of transportation options based on the results of the survey designed and implemented by the technical team.)

Hauser, John R. (1974), "A Cost Model for RTS (Rochester, NY) Conventional Bus Routes," M.I.T., Department of Civil Engineering Report, January.

Hauser, John R. (1973), "An Efficient Model for Planning Bus Routes in Communities with Populations Between 20,000 and 250,000," M.I.T., Operations Research Center Working Paper OR-029-993, November.

Research Grants

July 2007 – June 2008	Understanding Non-compensatory Decision Making for Consideration Decisions (under Consortium with MIT Center for eBusiness and General Motors, Inc.
June 2000 – May 2006	Center for Innovation in Product Development, MIT, Initiative Leader, Virtual Customer.
January 2001 – May 2002	eBusiness Center at MIT. Design and Delivery of Online Promotions. (with John Little, Duncan Simester, and Glen Urban).
January 1997 – May 2000	Center for Innovation in Product Development, Engineering Research Center Grant from the National Science Foundation. Research Director. In addition, research grants for non-monetary incentives, procurement metrics, and virtual customer methods.
June 1999 – May 2000	“Metrics Thermostat,” International Center for Research on the Management of Technology (Principal Investigator).
June 1999- May 2001	“New Product Metrics at Ford and the US Navy,” Center for Innovation in Product Development
June 1999- May 2001	“Lean Sustainment Metrics at the USAF,” Lean Sustainment Initiative at MIT
June 1994 - May 1999	"Metrics to Value R&D," International Center for Research on the Management of Technology (Principal Investigator). General topic. Detailed proposals were for various aspects of the problem.
June 1991 - May 1994	"Customer Needs, Customer Satisfaction, Sales, and Profit: Providing the Right Incentives to Engineering and R&D," International Center for Research on the Management of Technology (co-Principal Investigator with Birger Wernerfelt)
January 1990 - June 1992	"Information Acceleration and Preproduction Forecasting of New Autos, Phases I and II." General Motors Electric Vehicle Project. (Associate)
December 1988 - June 1990	"Improved Methodologies to Measure Consumer Needs," Procter & Gamble Company. (Principal Investigator)
September 1981 - December 1985	"Prelaunch Forecasting System for New Consumer Durables and Its Applications to Auto Purchases," General Motors, Buick Division (co-Principal Investigator with Glen L. Urban).
January 1981 - May 1981	"Marketing Approaches in Travel Demand," United Parcel Service Grant (Faculty Advisor).
January 1979 - August 1980	"Monitoring the Implementation of Innovative Public Transportation Services" from University Research Program

	of the Urban Mass Transportation Administration (Principal Investigator).
July 1975 - September 1977	"Consumer-Oriented Transportation Service Planning." from the Program of University Research, U.S. Department of Transportation (Faculty Associate).
September 1977 - January 1978	"Consumer-oriented Transportation Service: Modification and Evaluation" from Program of University Research, USDOT (Faculty Associate).
May 1976 - September 1978	"Enhancement of Communications with a Small Scientific Community Using Slow-Scan Televideo Terminals and Voice-Grade Telephone Lines" from the National Science Foundation (Faculty Associate).
January 1976 - December 1976	"A Method for Assessing Pricing and Structural Changes on Transport Mode Use," U.S. Department of Transportation (Faculty Associate).
September 1976 - June 1977	"Prediction of Urban Recreational Demand" from the National Science Foundation (Faculty Consultant).

Invited Lectures (Outside the Sloan School)

Wharton School, University of Pennsylvania, April 2009, "Website Morphing"

Max Planck Institute for Human Development, Center for Adaptive Behavior and Cognition, Summer Institute on Bounded Rationality in Psychology and Economics, August 2006, "Greedoid-Based Non-Compensatory Consider-then-Choice Inference."

Northwestern University, Evanston, IL, April 2006, "Greedoid-based Non-compensatory Inference."

University of Michigan, Seminar Series, October 2004, "Table Stakes: Non-compensatory Consideration-then-Choice Inference."

Management Roundtable Special Conference on "Taking the Voice of the Customer to the Next Level," Boston, MA October 2004, "The Virtual Customer."

Marketing Science Institute Research Generation Conference, Atlanta, GA, May 2004, "New Products/Innovation," (with Gerry Tellis).

Marketing Science Institute Conference on Emerging Approaches for Successful Innovation, Chicago, IL, May 2003, "'Listening-In' to Find Unmet Customer Needs and Solutions."

University of California at Los Angeles, "Polyhedral CBC (and other fun stuff), February 2003

New York University, "Polyhedral Methods," March 2003.

Industrial Liaison Program – Research Directors' Conference, April 2002, "The Virtual Customer."

University of Maryland, "Polyhedral Methods for Conjoint Analysis," March 2002.

Marketing Science Institute Trustees Meeting on Marketing Outside the Silo, Boston, MA, April

2002, "Challenges and Visions for Marketing's Role in Product Development Processes."

Managing Corporate Innovation -- ILP Symposium celebrating ten years of Management of Technology Research at MIT. "Dealing with the Virtual Customer: Fast Web-based Customer Input." April 2001

Epoch Foundation, Cambridge, MA, October 2000, "The Virtual Customer."

Yale University Research Seminar in Marketing, New Haven, CN, March 2000, "Metrics Thermostat."

Analysis Group Economics Seminar, Boston, MA, December 1999, "The Use of Marketing Research in Litigation." Also New York, NY, March 2000 and Washington, D. C., March 2002.

Boston Chapter of the Society for Concurrent Engineering, Waltham, MA, October 1999, "Metrics Thermostat."

University of Michigan DuPont Distinguished Speakers' Series, Ann Arbor, MI, March 1998, "New Product Metrics."

Kirin Brewery Co. Limited, Tokyo, JAPAN, December 1998, "You Are What You Measure!" and "Scientific Studies of the Voice of the Customer."

NEC Corporation, Tokyo, JAPA, December 1998, "Scientific Studies of the Voice of the Customer."

University of California at Los Angeles, Los Angeles, CA, February 1997, "Research, Development, and Engineering Metrics"

Stanford University, Stanford, CA, December 1996, "Metrics to Value R,D&E"

University of California at Los Angeles, Los Angeles, CA, February 1997, "Research, Development, and Engineering Metrics"

Duke University, Durham, NC, "Internal Customers and Internal Suppliers," Nov. 1995.

University of Minnesota, Minneapolis, MN, "Voice of the Customer," "Internal Customers and Captive Suppliers," May 1995.

Winter Retreat, University of Florida, Gainesville, FL, "Internal Customers and Captive Suppliers," December 1993.

Product Development Association - Boston, "Design and Marketing of New Products II: Advances in Product Development Management over the Last 13 Years," May 1993.

3M, Minneapolis, MN, "Incentives to Encourage a Long-term Perspective and a Customer Focus," Workshop on "Towards a World-class Research, Development, and Engineering Organization," November 1992.

Baxter Health Care, Orange County, CA, "The Voice of the Customer," August 1992.

TIMS College on the Practice of Management Science (*New Directions in Management Science*), Cambridge, MA: "The Voice of the Customer," October 1991.

IBM, Inc., Boca Raton, FL: "Voice of the Customer for Performance Graphics," May 1991.

Kirin Brewery Company, Ltd. Tokyo, JAPAN: "New Product Development" and "Customer Satisfaction and Customer Needs," April 1991.

American Iron and Steel Institute, Detroit, MI: "Satisfying the Customer -- Technical Issues," February 1991.

Warner Lambert, Inc., Mountain Laurel, PA: "Communication Among R&D and Marketing," October 1990.

Digital Equipment Corporation, Maynard, MA: "Voice of the Customer," May 1990.

Life Insurance Marketing and Research Association, Inc.: 31st Research Planning Conference, Boston, MA, "The House of Quality." June 1989.

University of Illinois: "Customer Driven Engineering." April, 1988.

Marketing Science Institute and IBM Thornwood Educational Facility: Quality through Customer Driven Engineering." April, 1988.

Harvard Business School: "Customer Driven Engineering: Integrating Marketing and Engineering." February, 1988.

Vanderbilt University: "Competitive Price and Advertising Strategies" and "Customer Driven Engineering." October, 1988.

Columbia University: "Price, Positioning, and Advertising Games: To Equilibrate or Not, Does it Pay to be Smart?" May, 1987.

New York Marketing Modelers' Club: "Would You Really Rather Have a Buick?: Prelaunch Forecasting of New Automobiles," May 1987.

M.I.T. Applied Economics: "Competitive Product Selection and Advertising Models." April, 1987.

Northwestern University: "Agendas and Consumer Choice," August, 1986.

AMA Faculty Consortium on Marketing Strategy at the University Tennessee, Knoxville. "Defender: Analyses for Competitive Strategy," July, 1986.

Ohio State University: "Defensive and Competitive Strategy." May, 1986.

Boston University: "Research in Competitive Strategy." November, 1985.

Midwest Electronics Association, Minneapolis, MN: "New Products for High-Tech Firms." October, 1985.

University of Pennsylvania: "Agendas and Consumer Choice," August, 1985.

Herstein Institute, Vienna Austria: "Competitive Strategy," May, 1985.

Cadbury-Schweppes, Birmingham, England: "New Product Development and Defensive Strategy." May, 1985.

Rhone-Poulenc and Aluminum Pechiney, Paris, France: "New Product Development." April, 1985.

University of Michigan: "Defensive and Competitive Strategy." February, 1985.

Marketing Science Institute Special Mini-Conference: "Defensive Marketing Strategies for Consumer Firms." September 1983.

University of Chicago, Graduate School of Business, Chicago, IL. "Agendas and Consumer Choice," May 1984.

European Institute for Business Administration (INSEAD), Fontainebleau, FRANCE. "Agendas and Consumer Choice," June 1984.

University of Connecticut. "Defensive Marketing: Theory, Measurement, and Models," April, 1983.

University of Osaka, JAPAN "Defensive Marketing: Theory, Measurement, and Models," August, 1983.

Kao Soap, Ltd., Tokyo, JAPAN: "Defensive Marketing," August, 1983.

Johnson & Johnson, K. K., Tokyo, JAPAN: "Defensive Marketing," August, 1983.

Analog Devices, Inc., Norwood, MA. "New Product Development," May, 1982.

University of Rochester Research Seminar, "Prelaunch Forecasting of New Consumer Durables," April 1982.

Frito-Lay R & D Laboratory, Dallas, TX, "Marketing and R & D for New Products," October 1981.

University of California at Los Angeles Research Seminar, "Defensive Marketing Strategies," July, 1981.

Purdue University Research Seminar, "Product Realization," October 1979.

Stanford University Research Seminar, "Product Realization," October 1979.

Elrick and Lavidge, Inc., Chicago, Illinois, "Product Realization," October 1979.

Booz, Allen and Hamilton, Inc., Chicago, Illinois, "New Service Planning for Hospitals," April 1979.

Cornell University Research Seminar, "Intensity Measures of Consumer Preference," February 1979.

University of Rochester Research Seminar, "Product Realization: Synthesis of Marketing and Economic Theory," December 1978.

Region VI Center of Health Planning, New Orleans, LA, "Finding the Linkage Through Marketing,": August 1978.

Nebraska Hospital Association, Kearney, NE, "Hospital Marketing Surveys," May 1978.

Executive Development Group, Waterloo Management Education Centre, Toronto, Ontario, Canada, "Designing New Industrial Products," February 1978.

Academic Update, Xavier University Graduate Program in Hospital and Health Administration,

Cincinnati, OH, "Designing Hospital Services: A Marketing Approach," October 1977.

The Hospital Marketing Workshop, Ireland Educational Corporation, Chicago, Illinois, "Analyzing the Hospital Markets," January 1977 and May 1977.

Association for College Unions - International, 1976 Fall Conference in Green Bay, WI, Keynote Speech - "Designing Successful Services: A Marketing Approach," October 1976.

University of Chicago, Graduate School of Business, Research Seminar, "Testing Probabilistic Models," April 1976.

Council for the Advancement and Support of Education, Conference on Marketing Alumni Program, New York, NY, Keynote Speech, February 1976.

Presentations at Professional Meetings (No published proceedings, some co-presented or presented by co-author[s])

New England Marketing Conference, Cambridge, MA, October 28, 2011. Gui Liberali, Glen L. Urban and John R. Hauser, "Providing Unbiased Competitive Information to Encourage Trust, Consideration, and Sales: Two Field Experiments."

Yale School of Management, Center for Customer Insight, The Customer Insights Conference, New Haven, CT, May 12-14, 2011. John R. Hauser and Matthew Selove*, "The Strategic Importance of Accuracy in the Relative Quality of Conjoint Analysis."

INFORMS Marketing Science Conference, Cologne, Germany, June 2010 (*indicates primary presenter if not me)

- Liberali, Guilherme*, John R. Hauser, and Glen L. Urban, "Optimal Time-to-Morph and Cognitive Costs of Morphing."
- Liberali, Guilherme, Glen L. Urban, and John R. Hauser, "Do Competitive Test Drives and Product Brochures Improve Sales?"
- Urban, Glen L.*, Jong Moon Kim, Erin MacDonald, John R. Hauser and Daria Dzyabura, "Developing Consideration Rules for Durable Goods Markets."

2010 Advanced Research Techniques Forum, San Francisco, CA, June 6-9, 2010, "Unstructured Direct Elicitation of Non-compensatory and Compensatory Decision Rules," with Min Ding, Songting Dong*, Daria Dzyabura (listed as Silinskaia), Zhilin Yang, Chenting Su, and Steven Gaskin.

2009 AMA Sheth Foundation Doctoral Consortium, J. Mack Robinson College of Business, Georgia State University, June 2009. E-Commerce and Digital Marketing Topics.

INFORMS Marketing Science Conference, Ann Arbor, MI, June 2009 (* indicates primary presenter if not me)

- "An Empirical Test of Incentive-Compatible Direct Elicitation of Heuristic Decision Rules for Consideration and Choice," with Min Ding, Songting Dong, Daria Dzyabura, Zhilin Yang, Chenting Su, and Steven Gaskin
- "Adaptive Profile Evaluation to Identify Heuristic Decision Rules in "Large" and Challenging Experimental Designs," with Daria Dzyabura (formerly Silinskaia)* and Glen L. Urban..
- "Morphing Websites in the Presence of Switching Costs," with Guilherme Liberali* and Glen L. Urban.
- "Continuous-Time Markov-Process with Misclassification: Modeling and Application to Auto Marketing," with Glen L. Urban* and Guilherme Liberali.
- "An Incentive-Aligned Sleuthing Game For Survey Research," with Min Ding*
- "Would You Consider a Buick Even if It Were #1 in JD Power?" with Erin MacDonald* and

Glen Urban

- “Cognitive Simplicity and Consideration Sets,” with Rene Befurt*, Daria Dzyabura, Olivier Toubia, and Theodoros Evgeniou
- “John D. C. Little, a Pioneer in Marketing Science (Festschrift paper),” with Glen L. Urban

INFORMS Marketing Science Conference, Vancouver, B.C., June 2008 (* indicates primary presenter if not me)

- “Cognitive Styles and Website Design,” with Michael Braun, Glen L. Urban, and Clarence Lee.
- Modeling Cognitive Complexity to Predict Consideration Sets,” with Daria Dzyabura (formerly Silinskaia)*, Theodoros Evgeniou, Olivier Toubia, and Rene Befurt.
- “Morphing Websites to Match Individual Cognitive Styles,” with Michael Braun*, Glen L. Urban, and Guilherme Liberali

Sawtooth Software Conference, Delray, FL, March 2009, “A Critical Review of Non-compensatory and Compensatory Models of Consideration-Set Decisions,” with Min Ding and Steven Gaskin

AMA Doctoral Consortium, Robert J. Trulaske, Sr. College of Business, University of Missouri, June 2007, “Looking Ahead: Directions for Scholarly Research in Marketing” and “Building Teaching Effectiveness: Stimulating Student Interest.”

Sawtooth Software Conference, Santa Rosa, CA, October 2007, “Two-Stage Models: Identifying Non-Compensatory Heuristics for the Consideration Set then Adaptive Polyhedral Methods Within the Consideration Set,” with Steven Gaskin, Theodoros Evgeniou, Daniel Bailiff.

AMA Advance Research Technologies Forum, Sante Fe, New Mexico, June 2007, “Two-Stage Models: Identifying Non-Compensatory Heuristics for the Consideration Set then Adaptive Polyhedral Methods Within the Consideration Set,” with Steven Gaskin, Theodoros Evgeniou, and Daniel Bailiff.

AMA Doctoral Consortium, W. P. Carey School of Business, Arizona State University, May 2007, “Consideration The New Battlefield in Product Development.”

Agent-based Models of Market Dynamics and Consumer Behaviour, University of Surrey, Guildford, UK, January 2006, “Co-opetition for the Diffusion of Resistant Innovations: A Case Study in the Global Wine Industry using an Agent-based Model.” with Rosanna Garcia. Also presented at the American Marketing Association’s Advanced Research Techniques (ART) Forum in June 2006 at Monterrey CA.

AMA Doctoral Consortium, University of Maryland, College Park, MD, July 2006, “Creating Value: Products and Brands.”

Marketing Science Conference, University of Pittsburgh, Pittsburgh, PA, June 2006, “A Truth-telling Sleuthing Game for Survey Research,” with Min Ding.

Marketing Science Conference, University of Pittsburgh, Pittsburgh, PA, June 2006, On Managerially Efficient Experimental Designs, with Olivier Toubia.

Sawtooth Software Conference on Conjoint Analysis, Delray Beach, FL, March 2006, “Must Have” Aspects vs. Tradeoff Aspects in Models of Customer Decisions,” with Michael Yee, James Orlin, Ely Dahan.

AMA Doctoral Consortium, University of Connecticut, Storrs CT, June 2005, “The Virtual

Customer.”

Marketing Science Conference, Emory, Atlanta, GA, June 2005, “Direct, Nonparametric Product Optimization Using Interactive Genetic Algorithms,” with Kamal Malek and Kevin Karty.

Marketing Science Conference, Emory, Atlanta, GA, June 2005, “Non-Deterministic Polyhedral Methods for Adaptive Choice-Based Conjoint Analysis: Application to the Diffusion of the New Wine Cork,” with Olivier Toubia and Rosanna Garcia.

Marketing Science Conference, Emory, Atlanta, GA, June 2005, “Greedoid-Based Non-compensatory Two-Stage Consideration-then-Choice Inference,” with Michael Yee, Jim Orlin, and Ely Dahan.

Marketing Science Doctoral Consortium, Rotterdam, The Netherlands, June 2004, “Research that Has Impact.”

Marketing Science Conference, Rotterdam, The Netherlands, June 2004, “Improving Choice-Based Polyhedral Methods by Taking Response Error into Account,” with Olivier Toubia.

Marketing Science Conference, Rotterdam, The Netherlands, June 2004, “The Dream Versus Reality of CRM,” with Glen L. Urban, Eric Bradlow, and Mahesh Kumar.

Marketing Science Conference, Rotterdam, The Netherlands, June 2004, “Non-compensatory Consideration-then-Choice Adaptive Conjoint Analysis,” with Michael Yee and James Orlin.

AMA Doctoral Consortium, Texas A&M University, College Station, TX, June 2004, "Virtual Customer Initiative."

AMA Advanced Research Techniques Forum, June 2004, “Conjoint Adaptive Ranking Database System (CARDS),” with Ely Dahan, James Orlin, and Michael Yee.

AMA Doctoral Consortium, University of Minnesota, Minneapolis, MN, June 2003, "The Review Process."

Marketing Science Doctoral Consortium, University of Maryland, June 2003, “Roots of Marketing Science Thought,” with John Little.

Marketing Science Conference, University of Maryland, June 12-15, 2003, "Individual-level Adaptation of Choice-Based Conjoint Questions: More Efficient Questions and More Accurate Estimation," (with Olivier Toubia and Duncan Simester).

Marketing Science Conference, University of Alberta, Canada, June 28, 2002, "Configurators, Utility Balance, and Managerial Use," (with Duncan Simester and Olivier Toubia).

Marketing Science Doctoral Consortium, University of Alberta, Canada, "Helping Managers Structure and Make Decisions," June 27, 2002. (Founding Consortium).

Marketing Science Conference, University of Alberta, Canada, June 28, 2002, "Adaptive Choice-Based Conjoint Analysis with Polyhedral Methods," (with Duncan Simester and Olivier Toubia*).

Advances in Marketing Research and Modeling: The Academic and Industry Impact of Paul E. Green, Wharton, Philadelphia, PA, May 2002, "New Methods of Data Collection and Estimation Using Polyhedral Estimation Techniques."

Production and Operations Management Society (POMS) Conference 2002 - High Tech POM, San Francisco, CA, April 2002, "The Virtual Customer," (with Ely Dahan*).

Product Development Association (PDMA) International Research Conference, Santa Clara, CA, October 2001, "The Virtual Customer," (with Ely Dahan*).

New England Marketing Conference, Cambridge, MA, September 2002, "Fast Polyhedral Adaptive Conjoint Estimation," (with Ely Dahan, Duncan Simester, and Olivier Toubia).

Marketing Science Conference, Wiesbaden, Germany, July 2001, "Empirical Test of Web-based Conjoint Analysis Including ACA, Efficient Fixed Designs, Polyhedral Methods, and Hybrid Methods," (with Ely Dahan, Duncan Simester, and Olivier Toubia*)

Marketing Science Conference, Wiesbaden, Germany, July 2001, "Evaluation of Fast Polyhedral Adaptive Conjoint Estimation," (with Duncan Simester and Olivier Toubia).

The 12th Annual Advanced Research Techniques Forum, Amelia Island, Florida, June 2001, "The Virtual Customer: Communication, Conceptualization, and Computation," (with Ely Dahan*).

AMA Doctoral Consortium, University of Miami, June 2001, "Role of Technology in Marketing."

Marketing Science Conference, UCLA, June 2000, "Applications of the Metrics Thermostat."

Marketing Science Conference, UCLA, June 2000, "The Virtual Customer." (with Ely Dahan and Duncan Simester).

Marketing Science Institute Marketing Metrics Workshop, Washington, D.C. October 1999, "Metrics for New Product Development: Making Agency Theory Practical," Plenary Speaker.

Marketing Science Conference, Syracuse, NY, May 1999, "Balancing Customer Input, Speed to Market, and Reduced Cost in New Product Development: What is the Most Profitable Strategy?"

ICRMOT Conference on Technology Alliances and New Product Development: A Cross-cultural Perspective, Mishima, JAPAN, December 1998, "You Are What You Measure!"

AMA Doctoral Consortium, Athens, Georgia, August 1998, "Quantitative Advances in Marketing Models."

AMA Winter Educators' Conference, Austin, TX, February 1998 (Plenary Speaker), "New Challenges in the Marketing-Product Development Interface."

AMA Doctoral Consortium, Cincinnati OH, August 1997, "Working with Industry."

Marketing Science Conference, Berkeley CA, March 1997, "Cultivating Technological Managers for Customer Expertise."

Marketing Science Institute Conference on Interfunctional Interfaces: The Management of Corporate Fault Zones, Palo Alto, CA, December 1996, "Multi-Stage Modeling of R&D/Marketing Interfaces in New Product Development."

Marketing Science Conference, Berkeley CA, March 1997, "Cultivating Technological Managers for Customer Expertise."

Envisioning the Future on Internet Marketing: Research and Strategy Implications, M.I.T., September 1996, "Agents and Intermediaries: Roles, Trust, and Value."

"Can R&D be Evaluated on Market-Driven Criteria?," (with Florian Zettelmeyer). Marketing Science Conference, University of Florida, Gainesville, March 1996

"Information Acceleration," (with Glen Urban, William Qualls, Bruce Weinberg, Jon Bohlmann, and Roberta Chicos). Wharton Conference on Innovation in Product Development, Philadelphia, PA, May 1995.

"Metrics by Which Managers Evaluate R&D Groups," (with Florian Zettelmeyer). Association of Consumer Research, Boston, MA, October 1994.

"Satisfying the Internal Customer," (with Birger Wernerfelt and Duncan Simester) Marketing Science Conference, University of Arizona, Tucson, AZ, March 1994.

"Customer-Satisfaction Based Incentive Systems," AMA Educator's Conference, Boston, MA, August 1993.

"Marketing in the 1990s: Emerging Issues," AMA Doctoral Consortium, University of Illinois, August 1993.

"Quality Function Deployment and the Voice of the Customer," Pharmaceutical Management Science Association, Phoenix AZ, May 1993.

"In a World of Active Time-constrained Customers, How Can a Firm be the Great Communicator," (with Birger Wernerfelt), Marketing Science Conference, Washington University, St. Louis, MO, March 1993.

"Customer Needs, Customer Satisfaction, Sales, and Profit," (with Birger Wernerfelt, Ronit Bodner, and Duncan Simester), ORSA/TIMS Joint National Conference, San Francisco, CA, November 1992.

"Customer Satisfaction and Employee Rewards," (with Birger Wernerfelt, Ronit Bodner, and Duncan Semester), Marketing Science Conference, London, England, June 1992.

"Information Acceleration and Preproduction Forecasting of Electric Autos," (with Glen L. Urban and Bruce Weinberg), Marketing Science Conference, London, England, June 1992.

"The Voice of the Customer and Customer Satisfaction," ORSA/TIMS Joint National Meeting, Anaheim, CA, October 1991.

"Modeling Marketing Phenomena," AMA Doctoral Consortium, University of Southern Calif. August 1991.

"Relationship of Satisfaction to Customer Needs and to Market Share," 1st Congress on Customer Satisfaction and Market-Driven Quality, American Marketing Association, Orlando FL, May 1991.

"Time Flies When You're Having Fun: How Consumers Allocate Their Time When Evaluating Products" (with Bruce Weinberg, Glen Urban, and Miguel Villas-Boas), Marketing Science Conference, Wilmington, DL, March 1991.

"Information Acceleration and Preproduction Forecasting of New Autos," (with Glen Urban, and Bruce Weinberg), Marketing Science Conference, Wilmington, DL, March 1991.

"Beyond Quality Function Deployment," ORSA/TIMS Joint National Meeting, Philadelphia, PA October 1990. (Conference-wide Tutorial)

"Competitive Marketing Strategies," Operations Research 1990 (Osterreichische Gesellschaft fur Operations Research), Vienna, Austria, August 1990. (Invited Speaker)

"New Product Development: A Quantitative Analysis of Interfunctional Communication" (with Abbie Griffin), Marketing Science Conference, Urbana, IL, March 1990.

"Integrated Product Development: New Methodological Developments" (with Abbie Griffin), Marketing Science Conference, Durham, N.C., March 1989.

"Customer Driven Engineering" (with Gregory Cirmak and Robert Klein), ORSA/TIMS Joint National Meeting, Washington, D.C., April 1988.

"Competitive Advertising and Pricing in Duopolies" (with Birger Wernerfelt), Marketing Science Conference, Seattle, Washington, March 1988.

"Customer Driven Engineering" (with Abbie Griffin), Marketing Science Conference, Seattle, Washington, March 1988.

"Customer Needs," Visions of Design Practices for the Future, Newton, MA, October 1987.

"Effective Strategies in Oligopoly" (with Peter Fader), ORSA/TIMS Joint National Meeting, Miami Beach, Florida, November 1986.

"Competitive Strategy Contest: Result and Analysis" (with Peter Fader), Marketing Science Conference, Dallas, TX, March 1986.

"The PC As a Tool to Teach Complex Marketing Science Concepts," Marketing Science Conference, Dallas, TX, March 1986.

"The Coming Revolution in Marketing Theory," Plenary Speaker, European Marketing Conference, Bielefeld, West Germany. April 1985.

"Defensive Strategy" Confer. on Economics of the Firm, Universite de Paris X, Nanterre, France, April 1985.

"Competitive Marketing Strategies" Marketing Science Conference, Nashville, Tennessee, March 1985.

"Developing New Product Management: Past Progress, Current Efforts, Current Needs" (Panel) Marketing Science Conference, Nashville, Tennessee, March 1985.

"Testing Competitive Marketing Structures: Theory and Applications" (with Glen Urban) ORSA/TIMS Joint National Meeting, Dallas, TX November 1984.

"Competitive Strategy," ORSA/TIMS Joint National Meeting, Dallas, Texas, November 1984.

"Forecasting Automobile Sales: An Application of a Value Priority Algorithm," (with Glen Urban), John Roberts and John Dabels), TIMS XXVI International Meeting, Copenhagen, Denmark, June 1984.

"Consumer Durables: The Actual Consumer Budgets Compared to the Value Priority Model," (with Glen Urban), Marketing Science Conference, Chicago, Illinois, March 1984.

"Defensive Strategy Models: Application and Predictive Text," (with Steven Gaskin, and Karl Irons) ORSA/TIMS Joint National Meeting, Orlando, Florida, November 1983.

"New Product Research: Focus on Defensive strategies," Roundtable Program, ORSA/TIMS Joint National Meeting, Orlando, FL, November 1983.

"Intensity of Preference," (with Steven Shugan) ORSA/TIMS Joint National meeting, San Diego, CA, October 1982.

"Measurement Error Theories for von Neumann-Morgenstern Utility Functions," (with Jehoshua Eliashberg) ORSA/TIMS Joint National Meeting, San Diego, CA, October 1982.

"Consumer Preference Models: Axioms and Statistics," ORSA/TIMS Joint National Meeting, Houston, Texas, October 1981.

"Economic Models of Consumer Behavior," (panel discussion), ORSA/TIMS Joint National Meeting, Houston, Texas, October 1981.

"Defensive Marketing Strategies, Part II," (with Steven Shugan), ORSA/TIMS Joint National Meeting, Houston, Texas, October 1981.

"Agendas and Choice Probabilities," (with Amos Tversky), Association of Consumer Research, St. Louis, Missouri, October 1981, and Special Conference on Choice Theory, Durham, North Carolina, June 1981.

"Strategic Response to Competitive New Products," (with Steven Shugan), ORSA/TIMS Joint National Meeting, Toronto, Ontario, Canada, May 1981.

"Applications of a Dynamic Semi-Markov Model of Consumer Choice," (with Ken Wisniewski), ORSA/TIMS Joint National Meeting, Colorado Springs, Colorado, November 1980.

"Models of Consumer Behavior," (panel discussion), ORSA/TIMS joint National Meetings, Colorado Springs, Colorado, November 1980.

"Dynamic Semi-Markov Models of Consumer Behavior," (with Ken Wisniewski) TIMS International Conference on Marketing, Paris, June 1980.

"Profit Maximizing Perceptual Positioning," (with Patricia Simmie) TIMS International Conference on Marketing, Paris, June 1980.

"An Error Theory for von Neumann-Morgenstern Utility Assessment," (with Jehoshua Eliashberg), ORSA/TIMS Joint National Meeting, Washington, D.C., May 1980.

"Defender: Defensive Strategies Against New Products" (with Steven Shugan), ORSA/TIMS Second Special Interest Conference on Marketing Measurement and Analysis, Austin, Texas, March 1980.

"Adaptive Control of New Product Launches," (with Ken Wisniewski), ORSA/TIMS Joint National Meeting, Milwaukee, Wisconsin, October 1979.

"The Value of Up-front Research in New Products," (with Glen Urban), TIMS International Meeting, Honolulu, Hawaii, June 1979.

"Methods for Computing Probabilities of Choice," (with Steven Shugan), TIMS International Meeting, Honolulu, Hawaii, June 1979.

"Forecasting and Improving the Adoption of New High Technology Products," (with Pat Lyon), ORSA/TIMS Joint National Meeting, New Orleans, Louisiana, May 1979.

"A Methodology for Product Realization: Multi-method Procedures," (with Patricia Simmie), ORSA/TIMS Joint National Meeting, Los Angeles, California, November 1978.

"Searching for Marketing Segments" (with Ken Wisniewski), ORSA/TIMS Joint National Meeting, New York, New York, May 1978.

"P.A.R.I.S.: An Interactive Market Research System," (with Steven Shugan), ORSA/TIMS Joint National Meeting, New York, New York, May 1978.

"Extended Conjoint Analysis," (with Steven Shugan), ORSA/TIMS Joint National Meeting, Atlanta, Georgia, November 1977.

"Consumer Preference Functions: Theory, Measurement, Estimation, and Application," (with Steven Shugan), ORSA/TIMS Joint National Meeting, Atlanta, Georgia, November 1977.

"Measuring Consumer Preferences for Health Care Plans," (with Glen Urban), ORSA/TIMS Joint National Meeting, San Francisco, California, May 1977.

"Improved Transportation Design with Consumer Response Models: An AMTRAK Example" (with Frank Koppelman), ORSA/TIMS Joint National Meeting, Miami, Florida, November 1976.

"A Comparison of Statistical and Direct Multiattribute Utility Assessment Procedures," (with Glen Urban), ORSA/TIMS Joint National Meeting, Las Vegas, Nevada, November 1985.

"Measuring Consumer Preferences: An Axiomatization for Describing Choice," ORSA/TIMS Joint National Meeting, Las Vegas, Nevada, November 1975.

"Modeling Consumer Response to Innovations," (1) Milwaukee Chapter of ORSA/TIMS, November 1985; (2) Chicago Chapter of ORSA/TIMS, December 1975.

"Modeling Decisions of Choice Among Finite Alternatives: Applications to Marketing and to Transportation Demand Theory," ORSA/TIMS Joint National Meeting, San Juan, Puerto Rico, October 1974.

"An Efficient Model for Planning Bus Routes in Medium Sized Communities," ORSA/TIMS Joint National Meeting, San Diego, CA, November 1973.

Professional Affiliations

The Institute for Operations Research and Management Science

American Marketing Association

Product Development and Management Association, Certified New Product Development Professional

Association for Consumer Research

Professional Services

Secretary, INFORMS Society of Marketing (January 2002 – December 2005). Founding Officer.

Advisory Council, INFORMS College of Marketing (1994 - 2002)

Council of The Institute of Management Sciences (1987 - 1989)

Associate Editor for Marketing, *Management Science*, (1980 - 1981)

Department Editor for Marketing, *Management Science*, (1982 - 1988)

Editor-in-Chief, *Marketing Science*, (1989 - 1994)

Editorial Advisory Board, *Sloan Management Review* (2000-2002).

Associate Editor, *Journal of Marketing Research* (April 2006 – June 2009). First time in journal history that Area Editors have been appointed.

Senior Advisory Board, *Journal of Marketing Research* (July 2009 on). First time such an advisory board was formed.

Editorial Boards, *Marketing Science*, (1980 – 1988, Editor 1989-1995, 2003- 2008, including acting Area Editor), *Journal of Product Innovation Management* (1997 - present), *Journal of Marketing* (2005- present, outstanding reviewer 2006), *European Management Journal* (advisory, 1998 - 2002), *International Journal for Research in Marketing* (2007 – present).

Reviewer: *Advances in Consumer Research*, *Applications in Management Science*, *European Journal of Research in Marketing*, *Journal of the Academy of Marketing Science*, *Journal of Consumer Research*, *Journal of Marketing*, *Journal of Marketing Research*, *Journal of Mathematical Psychology*, *Journal of Product Innovation Management*, *Management Science*, *Marketing Science*, *Operations Research*, *Review of Marketing*, *Sloan Management Review*, *Transportation Research Record*, *Transportation Science*, AMA Dissertation Prize, AMA Educators' Conference, American Institute of Decision Sciences Dissertation Prize, Nicholson Dissertation Prize, Marketing Science Institute Dissertation Award, Product Development Management Association Dissertation Prize, Prentice-Hall Books, National Science Foundation.

Conference Chairman: Conference Chair, Profitable Customer-Driven Organizations: Developing the Blueprint, Management Roundtable, May 1994.

Segment Chairman: Yale School of Management, Center for Customer Insight, The Customer Insights Conference, New Haven, CT. May 12-14, 2011. New Product Innovations.

Non-traditional Models of Consumer Preference and Choice, Adaptive Preference and Estimation, Optimizing Product Design and Customer Targeting, Obtaining Information From or About Consumers (Atlanta, GA, 2005, co-chair four sessions)

TIMS International Meeting, Copenhagen, Denmark, June 1984 (two sessions).

TIMS College of Marketing, Houston, Texas, October 1981 (twelve sessions).

TIMS College of Marketing, Milwaukee, Wisconsin, October 1979 (five sessions).

American Marketing Association Educator's Conference, Chicago, Illinois, August 1978, (three sessions).

INFORMS Marketing Science Conference, Atlanta GA, June 2005 (four sessions)

Session Chairman: *INFORMS* (Previously named *ORSA* or *TIMS*)

Virtual Customer Initiative (Rotterdam, The Netherlands, 2004)

New Approaches to Mapping (University of Maryland, 2003)

The Virtual Customer (University of Alberta, Canada 2002)

The Virtual Customer (Wiesbaden, Germany 2001)

Building Competitive Advantage Through Product Quality and R&D
(Gainesville, FL 1996)

Customer Satisfaction and Its Role in Global Competition (San Francisco, CA
1992)

Competitive R&D (Washington, D.C., April 1988)

Competitive Marketing Strategy, (St. Louis, Michigan, November 1987)

Competition in Multiattributed Spaces (Atlanta, Georgia, November 1985).

Marketing: Consumer Measurement (Copenhagen, Denmark, June 1984)

Marketing: Dynamic Structures (Copenhagen, Denmark, June 1984)

Product Policy (Orlando, Florida, November 1983)

Product Policy (San Diego, California, October 1982)

New Product Introduction and Defense in Competitive Environments, (Detroit,
Michigan, April 1982)

New Product and Product Policy Models, (Houston, Texas, October 1981)

New Product Models (Toronto, Ontario, Canada, May 1981)

Models of Consumer Behavior (Colorado Springs, Colorado, November 1980)

New Product Realization and Selection (Los Angeles, California, November
1978).

Session Chairman: *Association of Consumer Research*

Mathematical Theories of Consumer Behavior (St. Louis, Missouri, October
1981)

Committee Memberships

Editor Selection Committee, *Marketing Science*, INFORMS College of Marketing, 2001 (chair),
2004 (chair), 2007.

Editor Selection Committee, *Journal of Marketing Research*, American Marketing Association,
1999.

Conference Steering Committee, Duke Invitational Symposium on Choice Modeling and
Behavior, June 1993.

Editor Selection Committee, *Management Science*, TIMS.

Founding Committee for *Marketing Science*, TIMS College of Marketing, (1979 - 1982).

Management Science Roundtable, TIMS, (1982 - 1988)

Marketing Strategy Steering Committee, Marketing Science Institute, (1983 - 1984).

Organizing Committee for Conference on Economics of the Firm, April 1985, Universite de Paris X Nanterre.

Organizing Committee for 1985 Conference in Bielefeld, West Germany, European Marketing Academy.

Publications Committee (1980 - 1982), Operations Society of America.

Scientific Committee for 1986 Conference in Helsinki, Finland.

Student Affairs Committee (1978 - 1979), Operations Society of America.

*Litigation Consulting (on behalf of, *deposition testimony, †court, commission, or arbitration testimony)_*

Alcatel-Lucent USA Inc. v. Amazon.com, Inc. et al. (Patent Infringement)* †

Allergan, Inc. Engagement. (Off-label Prescriptions),

American Express Travel Related Services, Inc. v. Visa USA, Inc., et. al.* (Evaluation of marketing research).

American Multi-Cinema, Inc. v. American Movie Classics Company, Inc., et. al. (Confusion),

Amway v. Procter & Gamble (Damages)*,

Atlantic Recording Corporation, et. al. v. XM Satellite Radio, Inc. (Copyright infringement).

Axcan Scandipharm, Inc. V. Global Pharmaceuticals And Impax Laboratories, Inc. (False Advertising).

Berlex v. Biogen, Inc. (Damages)*,

Blue Mountain Arts, Susan Polis Schutz, and Stephen Schutz v. Hallmark Card, Inc. (Trade Dress),

James And Lisa Camenson, et al.; v. Milgard Manufacturing Inc., et. al. (Class action)

Comm-Tract Corp. v. Northern Telecom, Inc. (Advice only),

Computer Aid, Inc. v. Hewlett Packard (damages)*,

Creative Laboratories, Inc. v. Apple Computer, Inc. (Intellectual Property),

CTC Communications Corporation v. Bell Atlantic Corporation (Damages),

Curt Schlesinger and Peter Lore, on behalf themselves and the Certified Class, Plaintiffs,

v. Ticketmaster* (Class action, false advertising, confusion)

Dayna Craft, et al. v. Philip Morris Companies, Inc. and Philip Morris Inc. (Class Action).*

EPD v. Curtis (Product Confusion)†,

Stephen S. Gallagher, et. al. v. State Farm Mutual Automobile Insurance Company, et al. (Class Action)

Geico v. Google and Overture Services (Yahoo), Inc. (Trademark Infringement),

Gillette v. S. C. Johnson (Patent Infringement),

Heublein vs. Seagrams and Gallo (Liability),
Hewlett-Packard, Inc. v. Factory Mutual Insurance Company (Insurance Coverage)*
Intel v. Advanced Micro Devices (Damages)*,
J. B. D. L. Corp. d/b/a, Beckett Apothecary v. Wyeth-Ayerst Laboratories, Inc. and
American Home Products Corporation, (Class Action),
Jerry Jacobs, et. al. v. Osmose Inc., et. al. (Class Action)*,
Jay Kordich, et. al. v. Salton Maxim Housewares, Inc., et. al. (Trademark)†,
In RE J.P. Morgan Chase Cash Balance Litigation (Class Action)*,
Lending Tree, Inc. v. The Gator Corporation (Intellectual Property),
Lotus v. Borland (Damages)*,
Louis Vuitton Malletier, S. A. v. Hyundai Motor America (Trademark Infringement)*,
Marvin Lumber and Cedar Company v. PPG Industries, Inc., et. al. (Survey Design),
MasterCard International, Inc. v. First National Bank of Omaha (Product Confusion)*,
Mayo Foundation v. Mayo Health Facilities (Product Confusion)†,
Mead Johnson Nutritionals v. unnamed party (False Advertising),
Merck & Co. (Lanham Act Advice)
In Re Microsoft Corporation Antitrust Litigation (Multi-district Litigation)*,
Pacific Bell Telephone Company in New Regulatory Framework Review of Customer
Satisfaction before the California Public Utility Commission†,
Luciano F. Paone v. Microsoft Corporation (Patent Infringement)*.
Pfizer Consumer Healthcare (Lanham Act Advice)
Playtex v. Procter & Gamble (Claims Substantiation)*†
Procter & Gamble v. Amway (Liability and Damages)*†,
Procter & Gamble v. Haugan, et. al. (Liability and Damages)†,
Putnum Fund Trustees, (Investment Fraud, advice on market research)
Ram Broadcasting, Inc. (Cellular Telephone Filings),
RealPlayer, Inc. v. Microsoft Corporation (Anti-trust)
Roberts et. al. v. Enterprise Rent-a-Car Company of Boston, Inc.,
The Republic of Columbia v. Diageo North America, et al. (Anti-trust).
St. Clair Intellectual Property Consultants, Inc. v. Research in Motion, Ltd. and General
Imaging Co. (Patent infringement)
Barbara Schwab, et. al. v. Philip Morris, USA (Class Action)*
SoundExchange, Inc. vs. Sirius Satellite Radio, Inc. and XM Satellite Radio, Inc.: In the
Matter of Adjustment of Rates and Terms for Preexisting Subscription Services and
Satellite Digital Radio Services*, †
State of Colorado, et. al. v. Warner Chilcott Holdings Company III, Ltd., et. al. (Anti-trust)*
State of Florida and Plaintiff States Antitrust Litigation for Disposable Contact Lenses (Survey

Analysis)†,
Stipic, et. al. v. Behr Process Corporation and Masco International (Class Action)*,
Straumann Company v. Lifecore Biomedical, Inc. (Product Confusion)*,
Sun Microsystems, Inc. v. Microsoft Corporation (Anti-trust),
Tivo, Inc. v. Echostar Communications Corporation, et. al*.
Tropicana Products, Inc. v. Vero Beach Groves, Inc. (Lanham Act)†,
Wal-Mart Stores, Inc (and other retailers) v. Mastercard International, Inc. (Liability and Damages, Anti-trust)*,
We Media, Inc. v. We: Women's Entertainment, LLC. (Product Confusion)*.

Marketing, Marketing Research, and Product Development Consulting

American Home Foods, Inc.; American Airlines; American Hospital Supply Corporation; Analog Devices, Inc; Andersen Consulting, Inc. (Accenture), Applied Marketing Science, Inc.; A.T.&T.; Avon; Barton-Aschmann Associates; Baxter Cardiovascular Group, Booz Allen Hamilton, Inc., Cambridge Systematics, Inc.; Colgate-Palmolive; Costello Associates, Inc.; Economics' Laboratories, Inc.; Elrick and Lavidge, Inc.; Evanston Hospital; Evanston, Illinois and Schaumburg, Illinois (Transportation Planning); Fidelity Investments; French's Inc., G.D. Searle, Inc.; General Foods, Inc.; General Motors, Inc., Buick Division, Chevrolet Division, Marketing and Product Planning; Gillette; IBM, Inc.; Information Resources, Inc.; Intel, Inc., Johnson & Johnson; Kodak; Macromedia, Inc., Management Decision Systems, Inc.; M/A/R/C, Inc.; Merck, Inc., Navistar International, Inc.; Pacific Gas and Electric Company, Pepsi-Cola, Inc.; Polaroid; Procter & Gamble Company; Product Genesis, Inc.; RAM Broadcasting, Inc.; Regional Transportation Authority; Richardson-Vicks, Inc.; Southern Company Services, Inc.; Time-Life Books; Volunteers in Technical Assistance, and Wyeth-Ayerst Laboratories, Inc. Co-founder, principal, and board member, Applied Marketing Science, Inc., Advisory Board, Affinova, Inc.

M.I.T. or MIT Sloan Committee Work

Committee on the Undergraduate Program, 2003 – 2005.

MIT Sloan Committee on Educational Technology, 2004 – 2006.

Center for Innovation in Product Development

Leader, Virtual Customer Initiative, 2000 - 2006

Research Director, 1997 – 2000

Center for Transportation Studies, 1981 - 1982.

Master of Science in Transportation Committee.

Committee to Investigate Sloan-Logo Research Notes (MIT Sloan, chair), 2001-2002.

Associated Faculty Committee to Review the Organizational Learning Center (MIT Sloan), 1995.

Dean's Consultation Committee (MIT Sloan), 2008-2009.

Dean Search Committee (MIT Sloan), 1993

Building Committee for the E51 Expansion, MIT Sloan, 1992, Ad Hoc

Organization Committee for the New MIT Sloan Building, E62, (2007- 2009)

Executive Educational Programs Committee (MIT Sloan), 1983 – 1985, 1998-1999, 2007

Faculty Admissions Committee, 2004-2009

Faculty Council (MIT Sloan), 1999

International Center on Research for the Management of Technology (MIT Sloan)

Co-Director, (1993 - 2000).

Joint Steering Committee (1990 - 1993).

Management Science Area, MIT Sloan School of Management

Area Head, (2005- 2009)

Chairman of Subcommittee on Peer Group Comparisons, (1981 - 1982)

Committee on Management Science Curriculum Redesign, (1982 - 1983)

Marketing Group Head (1986, 1988 – 2003, 2010-2011)

Management of Technology Program Committee (MIT Sloan), 2001- 2003

Master's Program Committee, MIT Sloan, (1980 – 1987, 2007 – 2011))

Chairman: Subcommittee On Placement, (1981 - 1982).

Core Curriculum Reassessment Committee (1991-1992)

Core Curriculum Implementation Committee (1992-1994)

Subcommittee on Admissions, Special Consideration, (2007 – 2009).

Subcommittee on the Management Science Core, (1982 - 1983).

Subcommittee on Entrepreneurship and Innovation Evaluation (Chair, 2008).

Subcommittee on Tracks (2008-2009)

Ad hoc committee to develop a Marketing, Operations and Strategy Track (2011).

Subcommittee on Strategy Curriculum (2009)

Subcommittee on Course Ratings (2011)

Operations Research Center

Admissions Committee, (1981 - 1982).

Associated Faculty (1980 – present)

Operations Research Committee (2001- 2003)

President's Committee (1984).

Personnel and Policy Committee, MIT Sloan (Executive Committee, 2005 – 2009)

Chair of ad hoc committees for reappointment, promotion, and tenure (1983 - present)

Member of ad hoc committees for reappointment, promotion, and tenure (1981 - present)

Symposium Director, Marketing Center, MIT Sloan School, M.I.T., (1981 - 1982).

Zannetos Dissertation Award Committee, MIT Sloan, (1981-82, 1996-97, chair 1997-1998).

M.I.T. Subjects Taught (often multiple sections)

15.810, Marketing Management (Core) Spring 1990, 1991, 1992, 1993, 1994, 1995, 1997, 1998, 1999, 2001, 2004, 2005, 2006. Fall 1999, 2006, 2007, 2008, 2011.

(Teaching awards listed on page 2 of vita.)

15.812, Marketing Management (UG) Fall 1981, 1982, 1984, 1985, 1986. Spring 1981, 1984, 2006.

15.813, Marketing Management in Public Sector Fall 1980.

15.814, Marketing Mgmt (Mgmt of Technology) Fall 1988, 1993, 1999, 2001.

15.820, Advanced Marketing Management Spring 1990

15.828, New Product Development Spring 1981, 1982, 1989; Fall 1982, 1984; 1985.

15.838, Ph.D. Seminar (Various Topics) Spring 1986, 1997, 2002, 2006, 2011.

15.839, Marketing and Statistics Workshop Spring 1982; Fall 1982, 1984.

15.TH4. Thesis Project on Competitive Strategy Spring 1985, 1986.

Summer Session, ILP, and External Executive

A.T.&T Course on New Product Development, 1986.

European Institute for Business Administration (INSEAD) European Marketing Programme, 1985.

Greater Boston Area Executive Program, 1982, 1983.

M.I.T. Civil Engineering, Demand Theory, 1980, 1981, and 1982.

M.I.T. ILP, Marketing Strategy and Models in the Information age, 1983.

M.I.T., Management of R&D, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999.

M.I.T. Marketing Science Symposium, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988.

M.I.T./M.I.P. Executive Program, 1992.

M.I.T. New Product Development, 1997.

Pedagogical Developments.

In 1990 and 1991, Prof. John D. C. Little and I redesigned the core curriculum in Marketing Management and taught the course to the entire Master's class. As structured the course builds upon the strengths of M.I.T. (international, strong disciplinary base, functional integration, and information technology) and combines case studies, problem assignments, and lectures in an eighteen-session course.

In the 1991-1992 I was part of a committee of six faculty members that redesigned the core curriculum at the Sloan School. I supervised the voice-of-the-customer analyses of students and recruiters and encouraged the committee to design a program that these customers would find exciting. The new core was implemented in the 1993-1994 academic year. Student satisfaction increased significantly.

Teaching Notes

Note on Defensive Marketing Strategy (2005, for 15.810, Marketing Management)

Note on Product Development (2005, for 15.810, Marketing Management)

Note on the Voice of the Customer (2005, for 15.810, Marketing Management)

Note on Consumer Behavior (2005, for 15.810, Marketing Management)

Note on Life Cycle Diffusion Models (2005, for 15.810, Marketing Management)

Note on Engineering Product Design (2006, for 15.810, Marketing Management)

Note on Conjoint Analysis (2007, for 15.810, Marketing Management)

M.I.T. Thesis Supervision

(a) *Sloan School of Management, Master's Theses*

Hafiz Adamjee (joint with John Scaife), "The Face of the Customer: The Use of Multimedia in Quality Function Deployment," - (1993). This product was subsequently commercialized and was a finalist for the *New Media* Invision 1994 Multimedia award at COMDEX/Spring '94.

Ramay Akras, "Competitive Strategy in the Marketing of Small DDP Computers: an Analysis of Emerging Price and Product Position Patterns," - (1986).

Frederic Amerson, "Strategic Marketing Simulation: Improvements to the Enterprise Integrating Exercise," - (1989).

Andrivet, Sébastien (Sloan Fellows Program), "Customer research, customer-driven design, and business strategy in Massively Multiplayer Online Games," - (2007)

Andrew Anagnos (joint with Karen Van Kirk), "A Framework for Analyzing Quality in the News Media," - (1991)

Allen Aerni, "Measurement of Customer Satisfaction," - (1994).

Joel Berez, "An Investigation of Decision Hierarchies" - (1981).

Harel Beit-on, "Competitive Strategy for Small Business Jet Aircraft," - (1985).

Willy Biberstein (SDM Program), "Framework for Customer Interaction Throughout the Automotive Product Development Process," (February 2002).

Andre Borschberg (joint with Webb Elkins), "Defensive Marketing Strategy: Its Application to a financial Decision Support System" - Reader (1983).

Philippe Bosquet, "European Airline Deregulation: Defining Air France's Strategy for the 1990's," - Reader (1989)

Jill A. Christians, (joint with Cheryl M. Duckworth), "Expectations and Customer Satisfaction: A Market Research Study for Plimoth Plantation," Reader (1994).

Poh-Kian Chua (MOT Program), "R,D&E Metrics: Shaping the Outcomes of Your R,D&E Investment," – (1998).

Leslie K. Cooper, "The Structure of Recruiter Needs at the Sloan School of Management: A Quantitative Assessment," - (1992).

Teruyuki Daino (Sloan Fellows Program), "How a Leading Company Can Overcome a Competitive Challenge: A Case Study of Anheuser-Busch Company." – (1998).

Laura E. Donohue, "Software Product Development: An Application of the Integration of R&D and Marketing via Quality Function Deployment" - (1990)

Cheryl M. Duckworth (joint with Jill A. Christians), "Expectations and Customer Satisfaction: A Market Research Study for Plimoth Plantation," Reader (1994).

Webb Elkins (joint with Andre Borschberg), "Defensive Marketing Strategy: Its Application to a Financial Decision Support System" - Reader (1983).

Rasheed El-Moslimany (LFM Program), "Getting Value from the Value Chain: Comfort Choice," Co-Advisor. (June 2002)

Julio Faura (MOT Program), "Contribution to Web-based Conjoint Analysis for Market Research," (2000).

Richard Feldman, "Decision Support Systems for Forecasting Communications in the Home," - Reader (1985).

Anders T. Fornander, "The Continuing Operating System Battle in the Personal Computer Industry," - Reader (1994).

Carl Frank (MOT Program), "Metrics Thermostat for Strategic Priorities in Military System Acquisition Projects," (2000).

Mihaela Fulga, "Competitive Pricing and Positioning Strategies in the Dating Service Market," -

(1986).

Steven P. Gaskin, "Defender: Test and Application of a Defensive Marketing Model" - (1986). 1st Place, Brooks Award.

Peter N. Goettler, "A Pre-market Forecasting Model of New Consumer Durables: Development and Application," - Reader (1986).

Patti N. Goldberger, "Competitive Strategy in the Market for Running Shoes," - (1985).

Akhil Gupta, "The Personal Computer Industry: Economic and Market Influences on Product Positioning Strategies," - (1986).

Michael Halloran (joint with Marc Silver), "Defensive Marketing Strategy: Empirical Applications" - (1983).

Carla Heaton, "Competitive Strategy in the Facsimile Market," - (1985).

Judith Hee, "Determining Manufacturer's Coupon Strategies" - Reader (1981).

Jonathan E. Higginson, "Understanding Dependencies in Research and Development at the Charles Stark Draper Laboratory." - (1997).

Scott D. Hill, "Correlation of Core Competencies with Market-Driven or Self-Guided Research," - (1995).

Dan Isaacs, "Competitive Pricing and Positioning Strategies in the Imported Beer Marketing," - (1986).

Francois Jacques, "Marketing Strategies in Innovative Industries: The Case of Package/Document Delivery Services," - Co-Advisor (1985).

Lawrence Kahn, "Competitive Positioning: A Study of Recruiter's and Employer's Perceptions of the Sloan School of Management" - (1982). Honorable mention Brooke's Thesis Prize.

D. Darcy Kay, "Competitive Strategy for Anti-arthritis Drugs" - (1985).

Young Joo Kim (MOT Program), "R&D Management Applications of The Dynamic Metrics Framework" - (1998)

Sidney A. Kriger, "The Effect of Quality Function Deployment on Communications of the New Product Development Teams," - (1989)

Yasuke Kume, "New Marketing Strategy of Telecommunications in Japan" - Reader (1981).

Elvind Lange, "Measuring Market Response to Marketing Mix Variables Using Dynamic Modeling and Its Implications for Brand Strategy" - Reader (1981).

Stephen P. Langhans, "Defensive Marketing Strategy: A Consumer Semi-Durable Case Example" - (1983).

In-Kyu Lee, "Evaluating System for the Upstream Center of R&D for being Market-Oriented in a Consumer Electronics Company," - (1995).

Michael Leslie (joint with Joel Wachtler), "A Methodology for Making International Marketing Mix Decisions," - Reader (1985).

Kit Mee Lim, "Competitive Strategy among Companies Offering Credit Cards," - Reader (1985).

James A. Lutz, "Competitive Marketing Strategy in the CAD Marketplace," - (1985).

Larry D. Lyons, "Forecasting the Impact of Competitive Entries on Sales of a New Consumer Durable" - Reader (1984).

Arpita Majundar (SDM Program), "Strategic Metrics for Product Development at Ford Motor Company," - (2000).

Catherine E. Manion, "A Survey of Customer Satisfaction Incentive Systems for Salespersons," - (1993).

Maureen E. Matamoros, "Information Overload," – Reader (1986).

Meghan McArdle (LFM Program), "Internet-based Rapid Customer Feedback for Design Feature Tradeoff Analysis," – co-Advisor (2000)

Fernando Motta, "Competitive Strategy Among Panamanian Banks," - (1985).

Neil Novich, "Price and Promotion Analysis Using Scanner Data" - Reader (1981).

Kenji Nozaki, "Marketing and Technology Strategy for the Japanese Architectural Design Company," - (1989).

Seiji Nozawa, "Voice of the Customer Analysis in the Japanese Beer Market." - (1997).

Minho Park (MOT Program), "R&D Matrix at LG Electronics." - (1997)

Stephen Pearse, "Production and Sales Forecasting: A Case Study and Analysis" - Reader (1982).

Ning P. Peng, "An Exploration of the Impact and Success of Customer Satisfaction Programs," - (1994).

Homer Pien (MOT Program), "Competitive Advantage through Successful Management of R&D." - (1997)

Susan B. Poulin, "Defensive Strategy in the Automatic Test Equipment Industry" (1984).

Jill W. Roberts, "MBA Recruiters' Needs: Voice of the Customer Analysis," - (1992).

Lisa Gayle Ross, "A Voice of the Customer Analysis of M.B.A. Schools: The Student Segment," - (1992). Lisa was a runner-up for the George Hay Brown Marketing Scholar of the Year in 1992.

Tamaki Sano, "Strategy for Kirin as a Global Brand" – (2009) Sloan Fellow.

John Scaife (joint with Hafiz Adamjee), "The Face of the Customer: The Use of Multimedia in Quality Function Deployment," - (1993). See award listed under Adamjee.

Paul E. Schoidtz, "Advertising, Price, and Positioning Equilibria," - (1986).

Hongmei Shang, "A Simulation Analysis of Optimal Task Assignment for Growing Managers from R&D Labs," – (February 2000).

Rosemarie Shield, "Competitive Pricing and Positioning Strategies in the Chromatographic Instruments Market," - , (1986).

Jon Silver (joint with John C. Thompson, Jr.), "Beta-binomial Analysis of Customer Needs -- Channels for Personal Computers," - (1991). 1st Prize, Brooks Award.

Marc Silver (joint with Michael Halloran), "Defensive Marketing Strategy: Empirical Applications" - (1983).

Lisa Silverman, "An Application of New Product Growth Modeling to Automobile Introductions" - (1982).

Sheryl Sligh, "An Assessment of the Analog Modem Market," - (1991).

Jamie Smith, "Industrial Buying Process of Pension Funds for Real Estate," - (1982).

Yoshihito Takahashi (MOT), "Analysis of Strategy in an Ethical Drug Industry," – Reader (2000).

Genevieve Tchang, "A Methodology for Planning and Evaluating External Relations at Business Schools" - Reader (1982).

John C. Thompson, Jr. (joint with Jon Silver), "Beta-binomial Analysis of Customer Needs -- Channels for Personal Computers," - (1991). 1st Place, Brooks Award.

V. Mullin Traynor, "The Dissemination and Adoption of New Technology: Control Data's Computer-Based Training System, Plato, and the Electric Utilities" - (1982).

Karen Van Kirk (joint with Andrew Anagnos), "A Framework for Analyzing Quality in the News Media," - (1991)

Joel Wachtler (joint with Michael Leslie), "A Methodology for Making International Marketing Mix Decisions," - Reader (1985).

Tamao Watanabe, "Customer Analysis of the U.S. Cardiovascular Drug Market: Focusing on Physician's Drug Choice" - (1991)

Stephen L. Weise, "Expert Decision Support Systems for Marketing Management," – Reader (1986).

Nancy Werner, "Competitive Price and Positioning in the Integrated Office Automation Systems Market" - (1986).

Julie Wherry, "Pre-Test Marketing: Its Current State in the Consumer Goods Industry and Its Effect on Determining a Networked Good." - (2006).

Ali Yalcin, "The Potentials and Limitations of Customer Satisfaction Indices in Captive Customer-Supplier Environments," - (1995)

Sandra Yie, "The Core Curriculum at Sloan: Establishing a Hierarchy of Needs," - (1992).

Judy Young, "Responsive Marketing Strategy at AT&T" - (1982).

(b) *Aeronautics S.M. Theses*

Keith Russell (LSI), "Reengineering Metrics Systems for Aircraft Sustainment Teams: A Metrics Thermostat for Use in Strategic Priority Management," (February 2001).

(c) *Electrical Engineering, S.B. and M.Eng. Theses*

Chan, Christine W. Y. (M. Eng), "Measuring Non-Monetary Incentives Using Conjoint Analysis," Co-Advisor (1999).

Emily Hui (M.Eng.), "Application of Polyhedral Conjoint Analysis to the Design of Sloan's Executive Education Programs." June 2003.

Brian T. Miller (S. B.), "A Verification of Price Equilibria Based on Non-Zero Conjectural Variation," (1986).

(d) *Mechanical Engineering, Master's Theses*

Burt D. LaFountain, "An Empirical Exploration of Metrics for Product Development Teams" – (1999)

Tina Savage, "The Virtual Customer: A Distributed Methodology for Linking Product Design and Customer Preferences." Co-Advisor (1998).

(e) *Operations Research Center, Master's Theses*

Jeffrey Moffit (ORC), "Applying the Metrics Thermostat to Naval Acquisitions for Improving the Total Ownership Cost – Effectiveness of New Systems," (2001)

Olivier Toubia (ORC), "Interior-point Methods Applied to Internet Conjoint Analysis," (February 2001), Co-Advisor.

(f) *Urban Studies, Master's Theses*

Marijoan Bull, "Affirmative Fair Housing Marketing" - Committee Member (1982).

Barry Cosgrove, "Marketing Analysis for the Brockton Area Transportation Authority" – Committee Member (1981).

(g) *Sloan School of Management, Ph.D. Theses*

Makoto Abe, "A Marketing Mix Model Developed from Single Source Data: A Semiparametric Approach." Committee member (August 1991). Abe is on the faculty at the University of Tokyo.

Daria Dzyabura, "Essays on Machine Learning in Marketing (tentative title)," Chairman (expected June 2012).

Peter Fader, "Effective Strategies in Oligopolies," Chairman (February 1987). Sloan School of Management, Zannetos Prize, 1st Place. Fader is on the faculty at the University of Pennsylvania.

Fred Feinberg, "Pulsing Policies for Aggregate Advertising Models" Committee Member (August 1988). Feinberg is on the faculty of the University of Michigan.

Dave Godes, "Friend or Foe?: The Relationship Between Learning and Incentives and two additional essays in marketing," (June 2000), Committee Member. Primary advisor on listed essay. Zannetos Prize, 1st Place. Godes is on the faculty of the University of Maryland.

Abbie Griffin, "Functionally Integrated New Product Development: Improving the Product Development Process Through Linking Marketing and Technology Development," Chairman. (June 1989). Griffin is on the faculty at the University of Utah and was editor of *Journal of Product Innovation Management* from 1997-2003 Frank Bass Dissertation Award (INFORMS).

Gurumurthy Kalyanaram, "Empirical Modeling of the Dynamics of the Order of Entry Effect on Market Share, Trial Penetration and Repeat Purchases for Frequently Purchased Consumer Goods," Committee Member (March 1989). G. K. was on the faculty at the University of Texas, Dallas.

Eriko Kitazawa, "Customer Satisfaction at Japanese Utility Franchises," Committee Member (1996).

John H. Roberts, "A Multiattributed Utility Diffusion Model: Theory and Application to the Prelaunch Forecasting of Autos". Committee Member (February 1984). Roberts is on the faculty at the London Business School.

Matt Selove, "The Strategic Importance of Accuracy in Conjoint Design," Committee Member (June 2010). Selove is on the faculty at the University of Southern California. John Howard Dissertation Award (AMA), 2010.

Duncan I. Simester, "Analytical Essays on Marketing," Committee Member, (June 1993). Sloan School of Management, Zannetos Prize, Honorable Mention. Simester is on the faculty of M.I.T.

Olivier Toubia, "New Approaches to Idea Generation and Consumer Input in the Product Development Process," (June 2004). Toubia is on the faculty of Columbia University. Frank M. Bass Dissertation Award (INFORMS), 2005, John Howard Dissertation Award (AMA), 2005.

Miguel Villas-Boas, "On Promotions and Advertising Policies: A Strategic Approach." Committee member (February 1991). Villas-Boas is on the faculty at the University of California, Berkeley.

Bruce Weinberg, "An Information-Acceleration-Based Methodology for Developing Preproduction Forecasts for Durable Goods: Design, Development, and Initial Validation." Committee Member. (August 1992). Weinberg was on the faculty at Boston University.

Florian Zettelmeyer, "Three Essays on Strategic and Organizational Uses of Information in Marketing." Committee Member. Zettelmeyer is on the faculty of Northwestern University.

(h) *Civil Engineering, Ph.D. Thesis*

Karla Karash (Ph.D.), "An Application of the Lens Model in Measuring Retail Attractiveness and the Effects of Transportation Programs" - Committee Member (August 1983). Karash was at the MBTA.

(i) *Mechanical Engineering, Ph.D. Thesis*

Javier Gonzalez-Zugasti (Mechanical Engineering, Ph.D.), "Models for Product Family Design and Selection," (June 2000), Committee Member.

(j) *Operations Research Center, Ph.D. Thesis*

Yee, Michael (Operations Research, Ph.D.), "Inferring Non-Compensatory Choice Heuristics," (June 2006), Co-Advisor. Yee is at MIT's Lincoln Laboratories.

Northwestern University Ph.D. Thesis Supervision (1975 - 1980 Academic Years)

Steven M. Shugan, "A Descriptive Stochastic Preference Theory and Dynamic Optimization: Applications Toward Predicting Consumer Choice" Chairman (September 1977). Shugan is on the faculty at the University of Florida and current editor of *Marketing Science*.

Patricia Simmie, "Product Realization: Theory, Models, and Application" - Chairman (June 1979), American Marketing Association Dissertation Prize, Honorable Mention. Simmie was at York University.

Ken J. Wisniewski, "A Semi-Markov Theory of Consumer Response: New Theoretical Properties, Simulation Testing, and Empirical Application" Chairman (June 1981). American Marketing Association Dissertation Prize, First Place. Wisniewski was on the University of Chicago.

Appendix B

Testimony

John R. Hauser
Expert Testimony (2006-2011)

Luciano F. Paone v. Microsoft Corporation, Case No. CV-07-2973, United States District Court, Eastern District of New York. Deposition Testimony, September 23, 2011.

Alcatel Lucent, Inc. v. Amazon.Com, Inc., et al., Civil Docket No. 6:09-CV-422. United States District Court For The Eastern District Of Texas Tyler Division, Deposition testimony, June 3, 2011, Trial testimony, October 13, 2011.

Louis Vuitton Malletier v. Hyundai Motor America, Case Number 10-CIV-1611-PKC, United States District Court, Southern District of New York. Deposition testimony, May 6, 2011.

Curt Schlesinger, et al. v. Ticketmaster, Case No. BC30456, Superior Court of the State of California for the County of Los Angeles. Deposition testimony, November 19, 2010.

St. Claire Intellectual Property Consultants, Inc. v. Research In Motion LTD., et al., Research In Motion Corporation, Civil Action No. 08-371-JJF-LPS, United States District Court for the District of Delaware. Deposition testimony, February 26, 2010.

Dayna Craft, et al. v. Philip Morris Companies, Inc. and Philip Morris Inc., Case No. 002-00406-02, Division No. 6, Missouri Circuit Court, Twenty-Second Judicial Circuit (City of St. Louis). Deposition testimony, November 11-12, 2009.

Playtex Products, Inc. v. The Procter & Gamble Company, Case No. 08 Civ. 1532 (WHP). Deposition testimony, February 25, 2009. Trial testimony, March 19, 2009.

In RE J.P. Morgan Chase Cash Balance Litigation, Master File No. 06. Div. 0732 (HB), United States District Court, Southern District of New York. Deposition testimony, December 10, 2008.

American Express Travel Related Services Company, Inc. v. Visa U.S.A., Inc., et al., No. 04 CV08967 (BSJ) (DFE), *Discover Financial Services, LLC v. Visa U.S.A., Inc., et al.*, No. 04 CV 97844 (BSJ) (DFE), United States District Court, Southern District of New York. Deposition testimony, November 9 and 10, 2007.

In the Matter of Adjustment of Rates and Terms for Preexisting Subscription Services and Satellite Digital Radio Services, Docket No. 2006-1 CRB DSTRA, Before the Copyright Royalty Judges, Librarian of Congress. Deposition testimony, August 11, 2007. Trial testimony, August 21, 2007.

Hewlett-Packard Company v. Factory Mutual Insurance Company, Case No. 04-CV-02791 (TPG) : (ECFCASE), United States District Court, Southern District Of New York. Deposition testimony, June 28, 2007.

The Procter & Gamble Company, et al. vs. Randy L. Haugen, et al., Case No. 1:95-CV-0094W (DKW), United States District of Utah, Northern Division. Trial testimony, March 9 and 12, 2007.

State of Colorado, et al. v. Warner Chilcott Holdings Company III, LTD., et al., Civil Action No. 1:05CV02182 (CKK), United States District Court for the District of Columbia. Deposition testimony, January 19, 2007.

Barbara Schwab, et al. v. Philip Morris USA, Inc., Case No. CV-04-1945 (JBW) (SMG), United States District Court for the Eastern District of New York. Deposition testimony, March 23, March 24, May 18, and August 21, 2006.

Appendix C
Documents Relied Upon

DOCUMENTS RELIED UPON

A. Academic Articles and Books

1. Dahan, Ely, and John R. Hauser, "The Virtual Customer," *Journal of Product Innovation Management*, 19, 2002, pp. 332-353.
2. Gabriel M. Gelb and Betsy D. Gelb, "Internet Surveys for Trademark Litigation: Ready or Not, Here They Come," *The Trademark Reporter*, 97, 5, September-October, 2007, p. 1073.
3. Glen L. Urban and John R. Hauser, *Design and Marketing of New Products*, (Englewood Cliffs, NJ; Prentice-Hall, Inc.), 1980.
4. Goodman, Leo A., "On the exact variance of products," *Journal of the American Statistical Association*, December 1960, 708-713.
5. Griffin, Abbie and John R. Hauser, "The Voice of the Customer," *Marketing Science*, Vol. 12, No. 1, Winter 1993, pp. 1-27.
6. Hauser, John R., Olivier Toubia, Theodoros Evgeniou, Rene Befurt, and Daria Dzyabura, "Disjunctions of Conjunctions, Cognitive Simplicity and Consideration Sets," *Journal of Marketing Research*, Vol. 47, June 2010, pp. 485-496.
7. Sawyer, Alan G., "Demand Artifacts in Laboratory Experiments in Consumer Research," *Journal of Consumer Research*, 1, 4, March 1975, pp. 20-30.
8. Shrimp, Terence A., Eva M. Hyatt, and David J. Snyder, "A Critical Appraisal of Demand Artifacts in Consumer Research," *Journal of Consumer Research*, 18, 3, December 1991, pp. 273-283.
9. Smith, D.M., N. Schwarz, T.R. Roberts, and P.A. Ubel, "Why are you calling me? How study introductions change response patterns," *Quality of Life Research*, 15, 2006, pp. 621-630.
10. Robert H. Thornburg, Trademark Surveys: Development of Computer-Based Survey Methods, 4 *J. Marshall Rev. Intell. Prop. L.* 91 (2005).

11. Toubia, Olivier, Duncan I. Simester, John R. Hauser, and Ely Dahan, "Fast Polyhedral Adaptive Conjoint Estimation," *Marketing Science*, 22, 3, Summer 2003, 273-303.
12. Toubia, Olivier, John Hauser and Rosanna Garcia, "Probabilistic Polyhedral Methods for Adaptive Choice-Based Conjoint Analysis: Theory and Application," *Marketing Science*, Vol. 26, No. 5, September-October, 2007, pp. 596-610.
13. Urban, Glen L., and John R. Hauser, "'Listening-In' to Find and Explore New Combinations of Customer Needs," *Journal of Marketing*, Vol. 68, No. 2, April 2004, pp. 72-87.

B. Other Publications

1. Diamond, Shari S., "Reference Guide on Survey Research," in Reference Manual on Scientific Evidence, Third Edition, Federal Judicial Center, 2011.

C. Websites

1. CAPTCHA: Telling Humans and Computers Apart Automatically," CAPTCHA, <http://www.captcha.net/>, visited on October 5, 2011.
2. "Charles Coolidge Parlin - Marketing Research Award," American Marketing Association, <http://www.marketingpower.com/Calendar/Pages/CharlesCoolidgeParlinAward.aspx>, visited on April 19, 2011.
3. e-Rewards, Inc. Announces Agreement to Acquire Peanut Labs," Research Now, September 27, 2010, <http://www.researchnow.com/en-US/PressAndEvents/News/2010/10/Peanut%20Labs%20Aquisition.aspx>, visited on October 5, 2011.
4. "The Paul D. Converse Awards," American Marketing Association, <http://www.marketingpower.com/Community/ARC/Pages/Career/Awards/Converse.aspx>, visited on March 28, 2011.
5. "Previous Recipients," 16th Paul D. Converse Marketing Symposium, <http://business.illinois.edu/converse/previous.htm>, visited on April 20, 2011.

6. “2009 Charles Coolidge Parlin Marketing Research Award,” American Marketing Association, January 14, 2009, http://www.marketingpower.com/ResourceLibrary/Pages/MarketingThoughtLeaders/MarketingThoughtLeaders11409/Parlin_Marketing_Research_Award.aspx, visited on April 14, 2011.
7. <http://www.ams-inc.com>.
8. www.bernett.com.
9. <http://www.internetworldstats.com/stats14.htm> , visited on 10/6/2010.
10. <http://www.researchnow.com/en-gb/Panels/PanelQuality/ResearchIntegrity.aspx>, visited on November 2, 2011.

D. Expert Reports

1. Expert Report of John R. Hauser, 2007.

E. Other Documents

1. Email from Laurence N. Gold at Inside Research, 10/15/10.
2. Final Determination of Rates and Terms in the Matter of Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services, 1/10/08.
3. Sirius XM Consolidated – Package Report, November 23, 2010, sheet “Consolidated Plan Detail.”

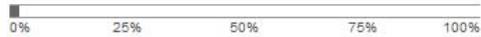
Appendix D
Survey Instrument
(Screen Shots and Microsoft Word Version)

Intro 1

Thank you for agreeing to participate in this study.

All of your answers will remain strictly confidential. No one will attempt to sell you anything as a result of participating in this study. If you don't know an answer or don't have an answer to a particular question, please choose "Don't know/Unsure."

Please press the ">>" button at the bottom of the page to begin. DO NOT USE the "back" and "forward" buttons on your browser.

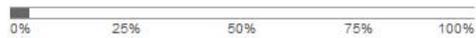


SCREENING QUESTIONS

S0.



Please enter the code exactly as it appears in the image above, and then click ">>" to continue.

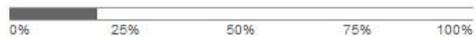


S1.

In which state do you currently reside?

(Select One)

Please select your answer



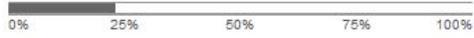
S3.



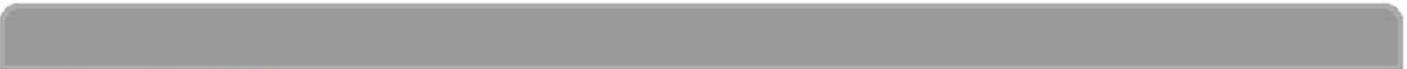
What is your gender?

(Select One)

- Male
- Female



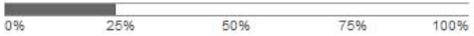
S4.



Which of these groups includes your age?

(Select One)

- Under 18 years of age
- 18 – 24
- 25 – 34
- 35 – 49
- 50 – 64
- 65 or older
- Refused



S5.

What type of electronic device are you using to complete this survey?

(Select One)

- Laptop computer
- Tablet computer (e.g., iPad)
- iPhone
- Desktop computer
- Blackberry
- Other mobile or electronic device

>>

0% 25% 50% 75% 100%

S6.

Are you, or are any members of your household, employed in any of the following industries?

(Select All That Apply)

- A music recording studio or owner of copyrighted music
- A market research firm or public relations (PR) agency
- An internet service provider
- A satellite radio company
- An insurance company
- None of these

>>

0% 25% 50% 75% 100%

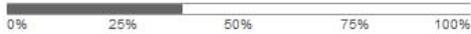
S7.



To which of these services, if any, does your household currently subscribe?

(Select All That Apply)

- Cable TV
- Broadband (high-speed) Internet
- Satellite TV
- Satellite radio
- Don't Know / Unsure
- None of these



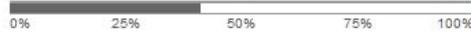
S8.



Which of the following best describes your role in making decisions about your satellite radio subscription(s)?

(Select One)

- You make the decision yourself
- You play a substantial role in the decision
- You play a minor role in the decision
- You are not involved in the decision
- Don't Know/Unsure



S9.

Which of the following type(s) of satellite radio subscriptions does your household currently have?

(Select All That Apply)

- A trial subscription (e.g., available with the purchase of some new cars) directly from SiriusXM, Sirius, or XM
- A paid subscription directly from SiriusXM, Sirius, or XM
- SiriusXM, Sirius, or XM as part of a package from a third party (such as through DirecTV, DiSH Network or AOL)
- Don't Know/Unsure

>>

0% 25% 50% 75% 100%

S9A.

How many paid satellite subscriptions from SiriusXM, Sirius, or XM do you currently have?

(Select One)

- One
- More than one
- Don't know/Unsure

>>

0% 25% 50% 75% 100%

Please think about the paid subscription you have had the longest. This subscription will be referred to as your **primary** subscription in the following questions.

>>

0% 25% 50% 75% 100%

S10.

What type of satellite radio receiver(s) do you or others in your household listen to for your primary satellite radio subscription?

(Select All That Apply)

- A computer (i.e., listen to SiriusXM, Sirius, or XM radio over the Internet)
- A receiver for use around your home, car, or boat or a portable satellite receiver unit that can be used anywhere
- A cell phone (i.e., listen to SiriusXM, Sirius, or XM radio over the Internet)
- Don't Know /Unsure

>>

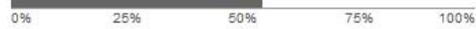


S11.

Is your primary satellite radio subscription XM or Sirius?

(Select One)

- Sirius
- XM
- Don't Know/Unsure

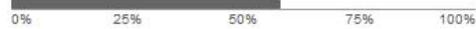


S12.

Does your primary satellite radio subscription include a range of programming channels (e.g., music, sports, talk and entertainment, comedy, news, traffic, and weather), or just a limited subset of channels (e.g., sports and talk only, family-friendly only, mostly music only), or do you not know?

(Select One)

- A subset of channels only (e.g., sports and talk only, family-friendly only, mostly music only)
- A range of programming channels (e.g., music, sports, traffic, weather, talk, entertainment, and comedy)
- Don't Know/Unsure



To the best of your knowledge, which, if any of the following XM packages describes your primary satellite radio subscription?

<h2 style="margin: 0;">XM Select</h2> <p style="font-size: 24px; font-weight: bold; margin: 10px 0;">\$12.95 /mo*</p>	<p style="color: #90ee90; font-size: 12px; margin: 0;">Our Best Package</p> <h2 style="margin: 0;">XM Premier</h2> <p style="font-size: 24px; font-weight: bold; margin: 10px 0;">\$16.99 /mo*</p>
<p>Over 170 Channels</p> <p>Commercial-free music, plus sports, news, talk, entertainment, and a selection of premium programming — all in one place.</p>	<p>Over 180 Channels</p> <p>Enjoy everything the XM Select package has to offer, plus every premium channel available on your radio.</p>
<p>Commercial Free Music ⓘ</p> <p>Same as XM Premier</p>	<p>Commercial Free Music ⓘ</p> <p>From the songs you know by heart to new artists you'll love—our music gurus curate the best in pop, soul, classical, jazz, country old and new, metal, R&B, dance, album rock, electronic and more. All the music you could want, with none of the commercials you don't.</p>
<p>Sports Talk & Play-By-Play ⓘ</p> 	<p>Sports Talk & Play-By-Play ⓘ</p> 
<p>Talk & Entertainment ⓘ</p> 	<p>Talk & Entertainment ⓘ</p> 
<p>News, Traffic & Weather ⓘ</p> 	<p>News, Traffic & Weather ⓘ</p> 
<p>Comedy ⓘ</p> <p>Same as XM Premier</p>	<p>Comedy ⓘ</p> <p>Whether it's Jamie Foxx or Larry the Cable Guy, classic comedy or edgy, uncensored stand-up, it's easy to find your kind of funny with channels like Blue Collar Radio, The Foxxhole presented by Jamie Foxx, Raw Dog Comedy Uncensored and the for-all-ears Laugh USA.</p>
<p>Add Internet Listening</p> <p style="font-size: 18px; font-weight: bold; color: #90ee90;">Only \$2.99/month</p> <p>Listen on your PC, Mac, compatible smartphone & internet radio for only \$2.99/month.</p> <p>Learn More</p>	<p>Add Internet Listening</p> <p style="font-size: 18px; font-weight: bold; color: #90ee90;">Only \$2.99/month</p> <p>Listen on your PC, Mac, compatible smartphone & internet radio for only \$2.99/month.</p> <p>Learn More</p>

(Select One)

- XM Select (formerly known as XM Everything)
- XM Premier (formerly known as XM Everything Plus the Best of Sirius)
- Other
- Don't know/Unsure



To the best of your knowledge, which, if any of the following Sirius packages describes your primary satellite radio subscription?

<h2>Sirius Select</h2> <p>\$12.95 /mo*</p>	<p>Our Best Package</p> <h2>Sirius Premier</h2> <p>\$16.99 /mo*</p>
<p>Over 130 Channels</p> <p>Commercial-free music, plus sports, news, talk, entertainment, and a selection of premium programming — all in one place.</p>	<p>Over 140 Channels</p> <p>Enjoy everything the Sirius Select package has to offer, plus every premium channel available on your radio.</p>
<p>Commercial Free Music ⓘ</p> <p>Same as Sirius Premier</p>	<p>Commercial Free Music ⓘ</p> <p>From the songs you know by heart to new artists you'll love—our music gurus curate the best in pop, soul, classical, jazz, country old and new, metal, R&B, dance, album rock, electronic and more. All the music you could want, with none of the commercials you don't.</p>
<p>Sports Talk & Play-By-Play ⓘ</p> 	<p>Sports Talk & Play-By-Play ⓘ</p> 
<p>Talk & Entertainment ⓘ</p> 	<p>Talk & Entertainment ⓘ</p> 
<p>News, Traffic & Weather ⓘ</p> 	<p>News, Traffic & Weather ⓘ</p> 
<p>Comedy ⓘ</p> <p>Same as Sirius Premier</p>	<p>Comedy ⓘ</p> <p>Whether it's Jamie Foxx or Larry the Cable Guy, classic comedy or edgy, uncensored stand-up, it's easy to find your kind of funny with channels like Blue Collar Radio, The Foxxhole presented by Jamie Foxx, Raw Dog Comedy Uncensored and the for-all-ears Laugh USA.</p>
<p>Add Internet Listening</p> <p>Only \$2.99/month</p> <p>Listen on your PC, Mac, compatible smartphone & internet radio for only \$2.99/month.</p> <p>Learn More</p>	<p>Add Internet Listening</p> <p>Only \$2.99/month</p> <p>Listen on your PC, Mac, compatible smartphone & internet radio for only \$2.99/month.</p> <p>Learn More</p>

(Select One)

- Sirius Select** (formerly known as Sirius Everything)
- Sirius Premier** (formerly known as Sirius Everything Plus the Best of XM)
- Other
- Don't know/Unsure



MAIN QUESTIONNAIRE - PRICING SECTION

Q1.

Which of the following best describes how often you pay for your primary satellite radio subscription?

(Select One)

- Monthly
- Quarterly
- Semi-annually
- Upfront for one-year subscription
- Upfront for a two-year subscription
- Upfront for a three-year subscription
- Upfront for a four-year subscription
- Upfront for a five-year subscription
- Upfront for a lifetime subscription
- Other
- Don't Know/Unsure

>>

0% 25% 50% 75% 100%

Q2.

Please describe the other payment cycle on which you pay for your primary satellite radio subscription.

>>

0% 25% 50% 75% 100%

Q3.

The standard price for your primary **Sirius Premier** (formerly known as Sirius Everything Plus the Best of XM) satellite radio subscription on a monthly basis is **\$16.99 per month**. This price does not include any taxes, promotional discounts, multiple receiver discounts, fees, or add-on services such as Internet listening.

Are you currently paying the standard price of **\$16.99 per month** for your primary satellite radio subscription, or are you on a special promotional price that lowers the cost of your subscription for a limited period of time (e.g., introductory promotion or a "win your business back" promotion)?

(Select One)

- Promotional price
- Standard price
- Don't Know/Unsure

>>

Q4.

Please describe the promotional pricing offer and amount, if possible.

>>

Q5.

Would you be willing to pay the standard price of \$16.99 per month for your current Sirius package when the promotional period ends or would you cancel your subscription when the promotional period ends?

(Select One)

- No, I would cancel my subscription when the promotional period ends
- Yes, I would continue to subscribe and pay the standard price
- Don't Know/Unsure

>>

Q6.

You just indicated that you would cancel your satellite radio service if the price were \$16.99 per month. What is the most you would be willing to pay *monthly* for your primary satellite radio subscription before deciding it was too expensive; in other words, if the price was any higher you would cancel your subscription?

(Please enter a dollar amount - response must contain the dollar amount followed by a decimal point and then cents.)

\$ per month

Don't Know/Unsure

>>

Q7.

Next, you will be asked a series of seven (7) questions about how much you would be willing to pay for satellite radio under a number of different conditions. These conditions will build upon each other, with each question including all the conditions of the previous question(s).

When giving your answers, please think only about your primary subscription for satellite radio that you listen to over the satellite radio receiver. Do not consider any satellite radio programming that you listen to over the Internet on a computer or on a cell phone.

>>

Q7a

How much would you pay per month for satellite radio if...

*Sound quality was only equal to that of standard FM radio you can listen to **AND**
There was no music available, not even your favorite channels **AND**
There was no sports coverage available, not even your favorite teams **AND**
There were as many commercials as on AM or FM Radio **AND**
You couldn't listen to the same stations everywhere*

Please assume that all other aspects of satellite radio would remain the same.

Instead of \$10.00 per month, I would pay \$ per month.

>>

Q7b

How much would you pay per month for satellite radio if...

Sound quality was only equal to that of standard FM radio you can listen to

Please assume that all other aspects of satellite radio would remain the same.

You might decide that you are still willing to pay \$10.00 per month, you might decide that you are willing to pay less than \$10.00 per month, or you may choose to no longer pay for this satellite radio subscription. Please enter a dollar amount - response must contain the dollar amount followed by a decimal point and then cents. If you would no longer be willing to pay for this satellite radio subscription, please enter "0.00."

Instead of \$10.00 per month, I would pay \$ per month.

>>

Q7c

How much would you pay per month for satellite radio if...

*Sound quality was only equal to that of standard FM radio you can listen to **AND**
There was no music available, not even your favorite channels **AND**
There was no sports coverage available, not even your favorite teams **AND**
There were as many commercials as on AM or FM Radio*

Please assume that all other aspects of satellite radio would remain the same.

Instead of \$10.00 per month, I would pay \$ per month.

>>

Q7d

How much would you pay per month for satellite radio if...

*Sound quality was only equal to that of standard FM radio you can listen to **AND**
There was no music available, not even your favorite channels*

Please assume that all other aspects of satellite radio would remain the same.

Instead of \$10.00 per month, I would pay \$ per month.



Q7e

How much would you pay per month for satellite radio if...

*Sound quality was only equal to that of standard FM radio you can listen to **AND**
There was no music available, not even your favorite channels **AND**
There was no sports coverage available, not even your favorite teams **AND**
There were as many commercials as on AM or FM Radio **AND**
You couldn't listen to the same stations everywhere **AND**
There weren't any non-music entertainment-talk or comedy shows available, even those with your favorite hosts*

Please assume that all other aspects of satellite radio would remain the same.

Instead of \$10.00 per month, I would pay \$ per month.



Q7f

How much would you pay per month for satellite radio if...

*Sound quality was only equal to that of standard FM radio you can listen to **AND**
There was no music available, not even your favorite channels **AND**
There was no sports coverage available, not even your favorite teams*

Please assume that all other aspects of satellite radio would remain the same.

Instead of \$10.00 per month, I would pay \$ per month.



Q7g

How much would you pay per month for satellite radio if...

*Sound quality was only equal to that of standard FM radio you can listen to **AND***

*There was no music available, not even your favorite channels **AND***

*There was no sports coverage available, not even your favorite teams **AND***

*There were as many commercials as on AM or FM Radio **AND***

*You couldn't listen to the same stations everywhere **AND***

*There weren't any non-music entertainment-talk or comedy shows available, even those with your favorite hosts **AND***

There were no news, weather or traffic reports available

Please assume that all other aspects of satellite radio would remain the same.

Instead of \$10.00 per month, I would pay \$ per month.

>>

Q8.

Now let's go back to thinking about your package that exists today (disregarding the questions when you were asked to state a price if aspects of satellite radio service were missing).

You indicated earlier that you currently pay the standard price of \$16.99 per month for your current Sirius package.

What is the most you would be willing to pay monthly for your primary satellite radio subscription before deciding it was too expensive; in other words, if the price was any higher you would cancel your subscription?

Your answer can be the same as what you are currently paying or higher.

(Please enter a dollar amount - response must contain the dollar amount followed by a decimal point and then cents.)

\$ per month

Don't Know/Unsure

>>

MAIN QUESTIONNAIRE - IMPORTANCE SECTION

Now, think about the music that can be found on satellite radio. After a song has been written, it can be recorded many times, by the same artist or different artists. Some examples include classical music being recorded and released long after it was originally composed, popular artists releasing cover versions of previously recorded songs, and technology advances making it possible to re-release music with improved sound quality.

Once again, when giving your answers to the following questions, please think only of satellite radio that you listen to over the satellite receiver. Do not consider any satellite radio programming that you listen to over the Internet on a computer or on a cell phone.

>>

Q9.

Please allocate 100 percentage points based on the relative importance of each statement below regarding your decision to subscribe to satellite radio. Make sure the total adds up to 100%. If you don't know or are unsure, please check the box.

(Enter whole numbers only – do not use decimal points or other punctuation.)

I can listen to music that was recorded and released (not necessarily composed/written) before 1970

I can listen to music that was recorded and released (not necessarily composed/written) from 1970 through today

= 0

Don't Know/Unsure

>>

MAIN QUESTIONNAIRE – GENRE SECTION

Q10.

Which of the following music genres do you or members of your household listen to regularly on a satellite radio receiver, as opposed to listening to satellite radio over the Internet on a computer or on a cell phone?

(Select All That Apply)

- Country
- Classical
- Hip-Hop/R&B
- Christian
- Rock
- Jazz/Standards
- Dance/Electronic
- Pop
- None of these

>>

Q11.

Please allocate 100 percentage points according to how important it is to have each of the following genres of music available to you on satellite radio, even if personally, you don't currently listen to it. Make sure the total adds up to 100%.

(Enter whole numbers only – do not use decimal points or other punctuation.)

Country

Classical

Hip-Hop/R&B

Christian

Rock

Jazz/Standards

Dance/Electronic

Pop

=



Q12.

And finally, how many online surveys, including this one, have you completed in the past 3 months with Research Now (also known as e-Rewards) and any other survey panel provider?

(Select One)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- More than 10



Q13.

Please indicate your best estimate of how many surveys, including this one, you have completed in the past 3 months with Research Now (also known as e-Rewards) and any other survey panel provider?



Broadcast Survey- FINAL – 09.15.11- (Market Price/Subscribers)

Thank you for agreeing to participate in this study.

All of your answers will remain strictly confidential. No one will attempt to sell you anything as a result of participating in this study. If you don't know an answer or don't have an answer to a particular question, please choose "Don't know/Unsure."

Please press the button at the bottom of the page to begin. DO NOT USE the "back" and "forward" buttons on your browser.

SCREENING QUESTIONS

S0. [INSERT CAPTCHA]

Please enter the code exactly as it appears in the image above, and then click ">>" to continue.

S1. In which state do you currently reside? (Select One) [DROP DOWN MENU OF 50 STATES + DC. INCLUDE A TERMINATING OPTION FOR "State/Region not listed"]

S2. [HIDDEN VARIABLE FOR REGION. DETERMINE US CENSUS REGION BASED ON STATE SELECTED IN S1.]

S3. What is your gender? (Select One)

Male	1	[CONTINUE]
Female	2	[CONTINUE]

S4. Which of these groups includes your age? (Select One)

Under 18 years of age	1	[TERMINATE]
18 – 24	2	[CONTINUE]
25 – 34	3	
35 – 49	4	
50 – 64	5	
65 or older	6	
Refused	7	[TERMINATE]

[TERMINATE IF SELF-REPORTED GENDER (S3) and AGE (S4) DO NOT MATCH PARAMETERS PASSED TO THE SURVEY BY PANEL PROVIDER]

[NOTE: GENDER, REGION, and AGE BRACKETS WILL BE CLICK BALANCED TO U.S. CENSUS STATS.]

S5. What type of electronic device are you using to complete this survey? (Select One) [RANDOMIZE LIST]

Desktop computer	1	[CONTINUE]
Laptop computer	2	
Tablet computer (e.g., iPad)	3	
iPhone	4	[TERMINATE]
Blackberry	5	
Other mobile or electronic device [ANCHOR]	6	

- S6.** Are you, or are any members of your household, employed in any of the following industries? (Select All That Apply) [RANDOMIZE]

A satellite radio company	1	[TERMINATE]
A music recording studio or owner of copyrighted music	2	
A market research firm or public relations (PR) agency	3	[CONTINUE]
An internet service provider	4	
An insurance company	5	
None of these [EXCLUSIVE - DESELECT OTHERS] [ANCHOR]	6	

- S7.** To which of these services, if any, does your household currently subscribe? (Select All That Apply) [RANDOMIZE LIST EXCEPT FOR NONE/DK/UNSURE]

Satellite radio	1	[CONTINUE]
Satellite TV	2	[TERMINATE UNLESS '1' IS SELECTED]
Broadband (high-speed) Internet	3	
Cable TV	4	
Don't Know / Unsure [EXCLUSIVE]	5	
None of these [EXCLUSIVE]	6	

- S8.** Which of the following best describes your role in making decisions about your satellite radio subscription(s)? (Select One) [ROTATE TOP TO BOTTOM /BOTTOM TO TOP]

You make the decision yourself	1	[CONTINUE]
You play a substantial role in the decision	2	
You play a minor role in the decision	3	[TERMINATE]
You are <u>not</u> involved in the decision	4	
Don't Know/Unsure [ANCHOR]	5	

S9. Which of the following type(s) of satellite radio subscriptions does your household currently have? (Select All That Apply) [RANDOMIZE]

A paid subscription directly from SiriusXM, Sirius, or XM	1	[CONTINUE]
A trial subscription (e.g., available with the purchase of some new cars) directly from SiriusXM, Sirius, or XM	2	[TERMINATE UNLESS '1' IS SELECTED]
SiriusXM, Sirius, or XM as part of a package from a third party (such as through DirecTV, DiSH Network or AOL)	3	
Don't Know/Unsure [DESELECT OTHERS] [ANCHOR]	4	[TERMINATE]

S9A. How many paid satellite subscriptions from SiriusXM, Sirius, or XM do you currently have? (Select One)

One	1	[SKIP TO S10]
More than one	2	[CONTINUE TO INTRO BELOW]
Don't know/Unsure	3	[CONTINUE TO INTRO BELOW]

Please think about the paid subscription you have had the longest. This subscription will be referred to as your **primary** subscription in the following questions.

S10. What type of satellite radio receiver(s) do you or others in your household listen to for your [FILL "primary" if S9A = 2, 3] satellite radio subscription? (Select All That Apply) [RANDOMIZE]

A receiver for use around your home, car, or boat or a portable satellite receiver unit that can be used anywhere	1	[CONTINUE]
A computer (i.e., listen to SiriusXM, Sirius, or XM radio over the Internet)	2	[TERMINATE UNLESS '1' IS SELECTED]
A cell phone (i.e., listen to SiriusXM, Sirius, or XM radio over the Internet)	3	
Don't Know /Unsure [DESELECT OTHERS][ANCHOR]	4	[TERMINATE]

S11. Is your [FILL “primary” if S9A = 2, 3] satellite radio subscription XM or Sirius? (Select One) [ROTATE XM AND SIRIUS]

XM	1	[CONTINUE- USE THIS TO FILL IMAGE FOR S13A]
Sirius	2	[CONTINUE- USE THIS TO FILL IMAGE FOR S13B]
Don't Know/Unsure	3	[TERMINATE]

S12. Does your [FILL “primary” if S9A= 2, 3] satellite radio subscription include a range of programming channels (e.g., music, sports, talk and entertainment, comedy, news, traffic, and weather), or just a limited subset of channels (e.g., sports and talk only, family-friendly only, mostly music only), or do you not know? (Select One) [RANDOMIZE]

A range of programming channels (e.g., music, sports, traffic, weather, talk, entertainment, and comedy)	1	[CONTINUE TO S13A IF S11=1, SKIP TO S13B IF S11=2]
A subset of channels only (e.g., sports and talk only, family-friendly only, mostly music only)	2	[TERMINATE]
Don't Know/Unsure [ANCHOR]	3	[TERMINATE]

S13A. To the best of your knowledge, which, if any of the following XM packages describes your [FILL “primary” if S9A= 2, 3] satellite radio subscription? (Select One) [RANDOMIZE FORWARD OR REVERSE ORDER OF 1-2. ORDER OF IMAGES SHOULD MATCH THE ORDER OF OPTIONS.]



XM Premier (formerly known as XM Everything Plus the Best of Sirius)	1	[CONTINUE]
XM Select (formerly known as XM Everything)	2	
Other [ANCHOR]	3	[TERMINATE]
Don't Know/Unsure [ANCHOR]	4	[TERMINATE]

S13B. To the best of your knowledge, which, if any of the following Sirius packages describes your [FILL “primary” if S9A= 2, 3] satellite radio subscription? (Select One) [RANDOMIZE FORWARD OR REVERSE ORDER OF 1-2. ORDER OF IMAGES SHOULD MATCH THE ORDER OF OPTIONS.]



Sirius Premier (formerly known as Sirius Everything Plus the Best of XM)	1	[CONTINUE]
Sirius Select (formerly known as Sirius Everything)	2	
Other [ANCHOR]	3	[TERMINATE]
Don't Know/Unsure [ANCHOR]	4	[TERMINATE]

MAIN QUESTIONNAIRE - PRICING SECTION

Q1. Which of the following best describes how often you pay for your [FILL "primary" if S9A= 2, 3] satellite radio subscription? (Select One)

Monthly	1	[SKIP TO Q3]
Quarterly	2	[SKIP TO Q3]
Semi-annually	3	[TERMINATE]
Upfront for one-year subscription	4	[SKIP TO Q3]
Upfront for a two-year subscription	5	[SKIP TO Q3]
Upfront for a three-year subscription	6	[SKIP TO Q3]
Upfront for a four-year subscription	7	[TERMINATE]
Upfront for a five-year subscription	8	[TERMINATE]
Upfront for a lifetime subscription	9	[TERMINATE]
Other	10	[CONTINUE]
Don't Know/Unsure	11	[TERMINATE]

Q2. Please describe the other payment cycle on which you pay for your [FILL "primary" if S9A= 2, 3] satellite radio subscription. [OPEN END]

[CAPTURE RESPONSE THEN TERMINATE]

Q3. The standard price for your [FILL “primary” if S9A= 2, 3] [INSERT ANSWER FROM EITHER S13A OR S13B] satellite radio subscription on [FILL “a” for Monthly and Quarterly OR “an” for Upfront] [INSERT FILL FROM Q1] basis is [FILL WITH ANCHOR FROM CHART BASED ON ANSWER TO Q1]. This price does not include any taxes, promotional discounts, multiple receiver discounts, fees, or add-on services such as Internet listening.

ANCHOR PRICE	
SELECT	1 Receiver
Monthly	\$12.95 per month
Quarterly	\$38.85, which is \$12.95 per month
Upfront for one-year subscription	\$142.45, which is a discounted price of \$11.87 per month
Upfront for a two-year subscription	\$271.95, which is a discounted price of \$11.33 per month
Upfront for a three-year subscription	\$401.45, which is a discounted price of \$11.15 per month
PREMIER	1 Receiver
Monthly	\$16.99 per month
Quarterly	\$50.97, which is \$16.99 per month
Upfront for one-year subscription	\$186.89, which is a discounted price of \$15.57 per month
Upfront for a two-year subscription	\$356.79, which is a discounted price of \$14.87 per month
Upfront for a three-year subscription	\$526.69, which is a discounted price of \$14.63 per month

Are you currently paying the standard price of [FILL FROM ANCHOR PRICE GIVING BOTH PRICE AND MONTHLY PRICE BASED ON ANSWER TO Q1] for your [FILL “primary” IF S9A=2, 3] satellite radio subscription, or are you on a special promotional price that lowers the cost of your subscription for a limited period of time (e.g., introductory promotion or a “win your business back” promotion)? (Select One) [RANDOMIZE]

Standard price	1	[SKIP TO Q7]
Promotional price	2	[CONTINUE]
Don't Know/Unsure [ANCHOR]	3	[SKIP TO Q5]

Q4. Please describe the promotional pricing offer and amount, if possible. [OPEN END]

Q5. Would you be willing to pay the standard price of [MONTHLY ANCHOR PRICE] per month for your current [FILL IF S11=1 "XM", IF S11=2 "Sirius"] package [FILL "when the promotional period ends" ONLY IF Q3=2] or would you cancel your subscription [FILL "when the promotional period ends" ONLY IF Q3=2]? (Select One)
[RANDOMIZE]

Yes, I would continue to subscribe and pay the standard price	1	[SKIP TO Q7]
No, I would cancel my subscription [FILL "when the promotional period ends" ONLY IF Q3=2]	2	[CONTINUE]
Don't Know/Unsure [ANCHOR]	3	[TERMINATE]

Q6. You just indicated that you would cancel your satellite radio service if the price were [MONTHLY ANCHOR PRICE]. What is the most you would be willing to pay *monthly* for your [FILL "primary" if S9A= 2, 3] satellite radio subscription before deciding it was too expensive; in other words, if the price was any higher you would cancel your subscription? *(Please enter a dollar amount - response must contain the dollar amount followed by a decimal point and then cents.)* [OPEN END] [ALLOW FOR 4 DIGITS. DO NOT ALLOW A RESPONSE OF ZERO (00.00)] [MUST BE < THAN STANDARD MONTHLY AMOUNT PROVIDED IN ANCHOR]

\$ ____ . ____ per month [NEW ANCHOR FOR Q7 SEQUENCE]

Don't Know/Unsure [TERMINATE]

Q7.

Next, you will be asked a series of seven (7) questions about how much you would be willing to pay for satellite radio under a number of different conditions. These conditions will build upon each other, with each question including all the conditions of the previous question(s).

When giving your answers, please think only about your [FILL "primary" if S9A= 2, 3] subscription for satellite radio that you listen to over the satellite radio receiver. Do not consider any satellite radio programming that you listen to over the Internet on a computer or on a cell phone.

[RANDOMIZE THE ORDER IN WHICH CONDITIONS BUILD, INCLUDING NO MUSIC]

[RECORD ORDER OF CONDITIONS]

[Q7a-Q7g SHOULD BE SHOWN ON SEPARATE SCREENS]

[HAVE MOST RECENTLY ADDED CONDITION APPEAR IN BOLD]

[SHOW PRICING FROM PREVIOUS CONDITION] Error message should read: 'Response must be less than or equal to [INSERT PRICE FROM PREVIOUS CONDITION].' AND/OR 'Please enter as a dollar amount - response must include exactly two decimal places (e.g., 12.50, 11.00, 0.00).'

[IF ANY Q7a-Q7f=0, CONTINUE TO Q8 OR SKIP TO Q9 IF Q5=2 or 3]

[MONTHLY ANCHOR PRICE COMES FROM Q3 UNLESS RESPONDENT HAS ANSWERED Q6 IN WHICH CASE FILL FROM Q6]

Q7a: How much would you pay per month for satellite radio if ...

You couldn't listen to the same stations everywhere

Please assume that all other aspects of satellite radio would remain the same.

FOR FIRST IN THE SERIES, ADD 'You might decide that you are still willing to pay [FILL MONTHLY ANCHOR PRICE] per month, you might decide that you are willing to pay less than [FILL MONTHLY ANCHOR PRICE] per month, or you may choose to no longer pay for this satellite radio subscription. Please enter a dollar amount - response must contain the dollar amount followed by a decimal point and then cents. If you would no longer be willing to pay for this satellite radio subscription, please enter '0.00.'

Instead of [INCLUDE INITIAL MONTHLY ANCHOR PRICE IF ASKED FIRST, OR PREVIOUS ANSWER IN THE SERIES] per month, I would pay \$ _ _ . _ _ per month. [OPEN END: \$ AMOUNT MUST BE EQUAL or LESS THAN PREVIOUS PRICE]

Q7b: How much would you pay per month for satellite radio if ...

You couldn't listen to the same stations everywhere AND

Sound quality was only equal to that of standard FM radio you can listen to

Please assume that all other aspects of satellite radio would remain the same.

Instead of [INCLUDE INITIAL MONTHLY ANCHOR PRICE IF ASKED FIRST, OR PREVIOUS ANSWER IN THE SERIES] per month, I would pay \$ __. __. __ per month. [OPEN END: \$ AMOUNT MUST BE EQUAL or LESS THAN PREVIOUS PRICE]

Q7c: How much would you pay **per month** for satellite radio if ...

You couldn't listen to the same stations everywhere AND

Sound quality was only equal to that of standard FM radio you can listen to AND

There were as many commercials as on AM or FM Radio

Please assume that all other aspects of satellite radio would remain the same.

Instead of [INCLUDE INITIAL MONTHLY ANCHOR PRICE IF ASKED FIRST, OR PREVIOUS ANSWER IN THE SERIES] per month, I would pay \$ __. __. __ per month. [OPEN END: \$ AMOUNT MUST BE EQUAL or LESS THAN PREVIOUS PRICE]

Q7d: How much would you pay per month for satellite radio if ...

You couldn't listen to the same stations everywhere AND

Sound quality was only equal to that of standard FM radio you can listen to AND

There were as many commercials as on AM or FM Radio AND

There was no music available, not even your favorite channels

Please assume that all other aspects of satellite radio would remain the same.

Instead of [INCLUDE INITIAL MONTHLY ANCHOR PRICE IF ASKED FIRST, OR PREVIOUS ANSWER IN THE SERIES] per month, I would pay \$ __. __. __ per month. [OPEN END: \$ AMOUNT MUST BE EQUAL or LESS THAN PREVIOUS PRICE]

Q7e: How much would you pay per month for satellite radio if ...

You couldn't listen to the same stations everywhere AND

Sound quality was only equal to that of standard FM radio you can listen to AND

There were as many commercials as on AM or FM Radio AND

There was no music available, not even your favorite channels AND

There weren't any non-music entertainment-talk or comedy shows available, even those with your favorite hosts

Please assume that all other aspects of satellite radio would remain the same.

Instead of [INCLUDE INITIAL MONTHLY ANCHOR PRICE IF ASKED FIRST, OR PREVIOUS ANSWER IN THE SERIES] per month, I would pay \$ __. __ __ per month. [OPEN END: \$ AMOUNT MUST BE EQUAL or LESS THAN PREVIOUS PRICE]

Q7f: How much would you pay per month for satellite radio if ...

You couldn't listen to the same stations everywhere AND

Sound quality was only equal to that of standard FM radio you can listen to AND

There were as many commercials as on AM or FM Radio AND

There was no music available, not even your favorite channels AND

There weren't any non-music entertainment-talk or comedy shows available, even those with your favorite hosts AND

There was no sports coverage available, not even your favorite teams

Please assume that all other aspects of satellite radio would remain the same.

Instead of [INCLUDE INITIAL MONTHLY ANCHOR PRICE IF ASKED FIRST, OR PREVIOUS ANSWER IN THE SERIES] per month, I would pay \$ __. __ __ per month. [OPEN END: \$ AMOUNT MUST BE EQUAL or LESS THAN PREVIOUS PRICE]

Q7g: How much would you pay per month for satellite radio if ...

You couldn't listen to the same stations everywhere AND

Sound quality was only equal to that of standard FM radio you can listen to AND

There were as many commercials as on AM or FM Radio AND

There was no music available, not even your favorite channels AND

There weren't any non-music entertainment-talk or comedy shows available, even those with your favorite hosts AND

There was no sports coverage available, not even your favorite teams AND

There were no news, weather or traffic reports available

Please assume that all other aspects of satellite radio would remain the same.

Instead of [INCLUDE INITIAL MONTHLY ANCHOR PRICE IF ASKED FIRST, OR PREVIOUS ANSWER IN THE SERIES] per month, I would pay \$ __. __ per month. [OPEN END: \$ AMOUNT MUST BE EQUAL or LESS THAN PREVIOUS PRICE]

Q8. [ASK ONLY IF Q3=1 OR Q5=1] Now let's go back to thinking about your package that exists today (disregarding the questions when you were asked to state a price if aspects of satellite radio service were missing).

You indicated earlier that you [FILL 'currently' IF Q3=1] [FILL 'would be willing to' IF Q3=2 AND Q5=1] pay the standard price of [MONTHLY ANCHOR PRICE] per month for your current [FILL IF S11=1 "XM", IF S11=2 "Sirius"] package.

What is the most you would be willing to pay **monthly** for your [FILL "primary" if S9A= 2, 3] satellite radio subscription before deciding it was too expensive; in other words, if the price was any higher you would cancel your subscription?

[SPLIT THIS SENTENCE OUT FROM THE PREVIOUS PARAGRAPH]

Your answer can be the same as what you are currently paying or higher. *(Please enter a dollar amount - response must contain the dollar amount followed by a decimal point and then cents.)* [OPEN END] [ALLOW FOR 4 DIGITS] [MUST BE > or = TO AMOUNT PROVIDED IN ANCHOR]

\$ ____ . ____ per month

Don't Know/Unsure

MAIN QUESTIONNAIRE - IMPORTANCE SECTION [ASK ALL]

Now, think about the music that can be found on satellite radio. After a song has been written, it can be recorded many times, by the same artist or different artists. Some examples include classical music being recorded and released long after it was originally composed, popular artists releasing cover versions of previously recorded songs, and technology advances making it possible to re-release music with improved sound quality.

Once again, when giving your answers to the following questions, please think only of satellite radio that you listen to over the satellite receiver. Do not consider any satellite radio programming that you listen to over the Internet on a computer or on a cell phone.

- Q9.** Please allocate 100 percentage points based on the relative importance of each statement below regarding your decision to subscribe to satellite radio. Make sure the total adds up to 100%. If you don't know or are unsure, please check the box. (Enter whole numbers only – do not use decimal points or other punctuation.) [ROTATE] [WHOLE NUMBERS BETWEEN 0 and 100, MUST=100%] [ERROR MESSAGE: THE TOTAL MUST EQUAL 100%]

SCORE

I can listen to music that was recorded and released (not necessarily composed/written) from 1970 through today	
I can listen to music that was recorded and released (not necessarily composed/written) before 1970	
<input type="checkbox"/> Don't Know/Unsure	

MAIN QUESTIONNAIRE – GENRE SECTION

- Q10.** Which of the following music genres do you or members of your household listen to regularly on a satellite radio receiver, as opposed to listening to satellite radio over the Internet on a computer or on a cell phone? (Select All That Apply) [RANDOMIZE ORDER]

Pop	1	[CONTINUE]
Rock	2	
Hip-Hop/R&B	3	
Dance/Electronic	4	
Country	5	
Christian	6	
Jazz/Standards	7	
Classical	8	
None of these	9	[SKIP TO Q12]

Q11. Please allocate 100 percentage points according to how important it is to have each of the following genres of music available to you on satellite radio, even if personally, you don't currently listen to it. Make sure the total adds up to 100%. (Enter whole numbers only – do not use decimal points or other punctuation.) **[RETAIN ORDER FROM Q10 – ELIMINATE OTHER] [WHOLE NUMBERS BETWEEN 0 and 100, MUST=100%] [ERROR MESSAGE: 'The total must equal 100%']**

Pop	
Rock	
Hip-Hop/R&B	
Dance/Electronic	
Country	
Christian	
Jazz/Standards	
Classical	

Q12. And finally, how many online surveys, including this one, have you completed in the past 3 months with Research Now (also known as e-Rewards) and any other survey panel provider? (Select One)

1	1	[SKIP TO END]
2	2	
3	3	
4	4	
5	5	
6	6	
7	7	
8	8	
9	9	
10	10	
More than 10	11	[CONTINUE]

Q13. Please indicate your best estimate of how many surveys, including this one, you have completed in the past 3 months with Research Now (also known as e-Rewards) and any other survey panel provider? **[NUMERIC INPUT. FORCE A RESPONSE GREATER THAN 10.]**

Those are all of the questions we have for you today. Thank you very much for participating in this study and have a great day.

Appendix E

Invitation to Participate in the Survey

SURVEY INVITATION

Email Subject:

Get Rewarded for Your Time - Study about Consumers

Email Body:

Dear <%First%>,

Based on your e-Rewards(R) profile, you are invited to earn e-Rewards Currency for participating in a research survey. If you qualify and complete the survey:

Full reward amount: \$2.50 in e-Rewards Currency

Full survey length: approximately 10 minutes

To complete the survey and earn e-Rewards Currency, simply click the link below, or copy the URL into your browser:

Error! Hyperlink reference not valid.>

We encourage you to respond quickly -- this e-Rewards invitation will be available only until a predetermined number of responses have been received. Please Note: you will only receive e-Rewards credit for taking the survey once.

Continue to check your inbox and your Member home page for future opportunities to earn e-Rewards Currency.

We value your time,

The e-Rewards Team

Appendix F
Screening Statistics

SCREENING STATISTICS

Full Screening Data		
Complete	354	26%
Self-terminated	42	3%
Failed to validate on age or gender	88	6%
Screen: age younger than 18 or refused	1	0%
Screen: taking survey on inappropriate electronic device	83	6%
Screen: works for satellite radio firm, a music recording studio, or holds a music copyright	3	0%
Screen: not a current satellite radio subscriber	296	22%
Screen: not an influential decision maker	98	7%
Screen: only trial or 3rd-party subscription	87	6%
Screen: only computer or cell-phone receiver or don't know	74	5%
Screen: only subscribe to a subset of channels	34	3%
Screen: don't know which is the satellite radio provider	12	1%
Screen: don't know if subscribe to Premier or Select level	80	6%
Screen: Failure to correctly input Captcha	5	0%
Q1: Payment cycle is atypical	52	4%
Q2: Other payment cycle	1	0%
Q5: Not sure re: reservation price/promo	39	3%
Q6: Not sure re: reservation price/non-promo	9	1%
	1358	

Survey Participation Rates		
Qualified and Included	348	26.0%
Qualified and Excluded, due to:	6	0.4%
<i>Straight-lining</i>	6	0.4%
Disqualified due to:	962	70.5%
<i>Non subscriber</i>	296	21.7%
<i>Other screener</i>	578	42.4%
<i>Age/gender not validated</i>	88	6.5%
Self-terminated, at:	42	3.1%
<i>Screeners</i>	36	2.6%
<i>Survey</i>	6	0.4%
Total Survey Participants	1358	
Total Survey Invitations	13222	

Appendix G

Willingness to Pay for Music Programming on Satellite Radio

WILLINGNESS TO PAY FOR SATELLITE RADIO

Willingness to Pay for Music Programming on Satellite Radio (Base: 348)

Order	Ubiquity of Station Availability	Premium Sound Quality	Freedom from Commercials	Current Levels of Music	Current Levels of Talk/Comedy	Current Levels of Sports	Current Levels of News Weather and Traffic
First	\$7.01	\$3.63	\$7.83	\$10.37	\$5.20	\$3.75	\$3.16
Last	\$0.05	\$0.02	\$0.02	\$0.51	\$0.06	\$0.02	\$0.00
Overall	\$1.97	\$1.20	\$2.46	\$3.24	\$1.46	\$1.11	\$1.03

Conditions in the Questionnaire Corresponding to Satellite Radio Features:

You couldn't listen to the same stations everywhere

Sound quality was only equal to that of standard FM radio you can listen to

There were as many commercials as on AM or FM Radio

There was no music available, not even your favorite channels

There weren't any non-music entertainment-talk or comedy shows available, even those with your favorite hosts

There was no sports coverage available, not even your favorite teams

There were no news, weather or traffic reports available

Appendix H
Confidence Intervals

CONFIDENCE INTERVALS

Willingness to Pay for Music Programming on Satellite Radio (Base: 348)

	95% Confidence Interval	
Ubiquity of Station Availability	1.59	2.36
Premium Sound Quality	0.89	1.50
Freedom from Commercials	2.04	2.87
Current Levels of Music	2.75	3.74
Current Levels of Talk/Comedy	1.13	1.79
Current Levels of Sports	0.82	1.40
Current Levels of News, Weather and Traffic	0.78	1.28

Conditions in the Questionnaire Corresponding to Satellite Radio Features:

You couldn't listen to the same stations everywhere

Sound quality was only equal to that of standard FM radio you can listen to

There were as many commercials as on AM or FM Radio

There was no music available, not even your favorite channels

There weren't any non-music entertainment-talk or comedy shows available, even those with your favorite hosts

There was no sports coverage available, not even your favorite teams

There were no news, weather or traffic reports available

Relative Importance of Post-1970 Music (Base: 339)

	95% Confidence Interval	
Music Recorded and Released from 1970 Through Today	62.15%	67.95%

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

_____)	
In the Matter of)	
)	
DETERMINATION OF RATES AND TERMS FOR	)	Docket No. 2011-1
PREEXISTING SUBSCRIPTION AND SATELLITE	)	CRB PSS/Satellite II
DIGITAL AUDIO RADIO SERVICES)	
_____)	

WRITTEN DIRECT TESTIMONY OF DAVID P. STOWELL
(On behalf of Sirius XM Radio Inc.)

I. Introduction and Qualifications

1. My name is David P. Stowell. I am a professor of finance at Northwestern University’s Kellogg School of Management (“Kellogg”), where I teach classes that focus on investment banking, hedge funds, and private equity. Prior to joining the faculty of Kellogg, I worked for 20 years in the investment banking industry and have held the following positions: (i) managing director and head of Midwest investment banking at JP Morgan in Chicago, (ii) managing director and co-head of U.S. equity capital markets at UBS, (iii) vice president at Goldman Sachs in New York and Tokyo, and (iv) senior vice president at Lehman Brothers in Tokyo. During this 20-year period, I provided investment banking services to many corporations and financial organizations. I also worked for several years at O’Connor Partners, a large hedge fund based in Chicago, until it was acquired by UBS.

2. Prior to my career as an investment banker, I worked for Bank of America with a team that focused on providing loans and other commercial banking services to the U.S. auto industry. During this four-year period, I analyzed the ability of companies to generate sufficient cash flow to pay off loan obligations as part of a due diligence and credit analysis process.

3. In my five years in academia, I have studied investment banking transactions in many forms, including mergers and acquisitions, capital markets, and restructuring transactions. I have published ten case studies for Kellogg that deal with actual transactions and the decision-making process involved in those transactions. I also have contributed to several case studies published

by Harvard Business School. In 2010, my book entitled “Investment Banks, Hedge Funds and Private Equity: The New Paradigm,” which focuses on transactions, processes, and issues relating to investment banks, hedge funds, and private equity, was published under the Academic Press imprint of Elsevier Inc.

4. I graduated from Utah State University with a BA in Economics and from Columbia University’s Graduate School of Business with an MBA in Finance. My complete *curriculum vitae*, listing publications authored or co-authored and testimony rendered in the last four years, is attached.

II. Assignment

5. I have been asked to evaluate the financial prospects of Sirius XM Radio Inc. (“Sirius XM” or the “Company”) over the 2013-2017 period and opine on the likely impact of a royalty rate increase. In analyzing the financial state of Sirius XM, a highly leveraged company that recently found itself on the brink of bankruptcy, I have considered the increasingly competitive landscape in which Sirius XM operates and its increasing dependence on the highly cyclical and volatile U.S. automobile industry. I have also analyzed the historic performance of Sirius XM, the record of its prior rate proceeding with SoundExchange, and analysts’ reports discussing Sirius XM.

III. Summary of Testimony

6. Sirius XM and its predecessor companies (Sirius and XM), have had a tumultuous financial history. Since their inception, these companies have lost billions of dollars. Prior to 2010, the Company never reported a net profit in any year.¹ The Company (and its predecessor companies) has twice been on the brink of bankruptcy – once in 2003 and again in 2009.² Sirius XM only survived the more recent brush with bankruptcy by virtue of an eleventh hour rescue by Liberty Media after 21 other investors declined to provide essential financing. Given this history

¹ I am speaking here of accounting profits rather than real, economic profits, which the Company has yet to achieve.

² Written Direct Testimony of David Frear (“Frear Testimony”) at ¶¶8-16. The 2003 restructuring was XM Satellite Radio Inc., a predecessor company. XM Satellite Radio Inc. Form 10-K Filed March 30, 2004, p. 5.

of financial turmoil, it is my opinion that Sirius XM may find itself in yet another period of financial distress.

7. In the current uncertain economic environment, where companies are stockpiling unprecedented amounts of cash,³ and in light of the challenging competitive landscape, it is dangerous to assume that Sirius XM is “out of the woods” despite the fact that the Company now, for the first time, has positive earnings. Sirius XM is beginning to face intense competitive threats from media suppliers that were either in a fledgling state or did not exist at the time of the last proceeding. These competitive threats will continue to increase over the term of the 2013-2017 license period as audio content increasingly becomes available over the Internet, as smartphones (and other portable devices) become increasingly compatible with car audio systems, as automakers move aggressively to make competitive technologies a key part of their dashboard infotainment systems, and as broadband wireless connectivity becomes increasingly ubiquitous. As these new alternatives continue to gain momentum, Sirius XM may lose a significant number of subscribers.

8. In a scenario in which Sirius XM’s revenues are declining because it is losing subscribers to new alternative technologies, the royalty that the Company is required to pay SoundExchange has a large impact on its bottom line finances and, consequently, its ability to survive outside of bankruptcy. In uncertain financial times such as the current environment, it is particularly dangerous to impose on Sirius XM an increase in a cost that it has little control over. To do so would pose a serious risk to Sirius XM’s future.

9. Sean Butson, an expert retained by SoundExchange in the prior rate proceeding, made projections in 2006 for the period 2006-2012. Not only did those projections not contemplate the possibility that Sirius XM would find itself on the brink of bankruptcy a mere 12 months after the close of the last proceeding, but Mr. Butson also estimated that the combined 2010 subscriber

³ “Nonfinancial companies held more than \$2 trillion in cash and other liquid assets at the end of June [2011]... up more than \$88 billion from the end of March. Cash accounted for 7.1% of all company assets, everything from buildings to bonds, the highest level since 1963.” Casselman, Ben and Justin Lahart, “U.S. News: Companies Shun Investment, Hoard Cash – Reluctance to Spend by Consumers and Businesses Fearful of a Domestic Slowdown Hamstrings Pace of Economic Recovery,” *Wall Street Journal*, September 17, 2011.

base of Sirius and XM would be nearly 33 million⁴ – some 57% greater than it is today. This was a significant miss, but not a surprising one. It is often the case that equity analysts are unduly optimistic in their projections and, consequently, are frequently wrong. This tendency has proven to be particularly true of equity analysts that cover Sirius XM. Nearly every analyst that covered Sirius XM in 2007 proved to be significantly over optimistic.

10. The same cannot be said for debt analysts and lenders who are generally more focused on a company's probability of experiencing serious financial distress and defaulting on debt payments. These analysts typically have a more cautious outlook which extends to consideration of the value of assets (and underlying collateral) that would be available in a bankruptcy to satisfy creditor claims. Credit rating agencies that rate the risk of companies defaulting on their debt have given Sirius XM credit ratings that imply that there is a real risk – currently up to 26% – that Sirius XM will default on its debt within the next five years.

11. While I cannot state with certainty, it is my opinion that Sirius XM is reasonably likely to experience financial distress during the 2013-2017 period because of increased competition and the tumultuous economic climate. If Sirius XM's subscriber base declines significantly it could find itself in the same position that it was in during 2009, with insufficient cash to pay off maturing debt during a credit crisis. If the royalty rate is materially increased, the likelihood of bankruptcy would increase significantly. As a result, I have concluded that an increase in the royalty rate would substantially increase the likelihood of disruption for Sirius XM.

IV. History of Sirius XM

12. Sirius XM and its predecessor companies invested over \$2.6 billion for space and ground assets prior to starting their satellite broadcasting services.⁵ Since making these massive investments, the Company has lost money year after year. The Company's annual Earnings before Interest, Tax, Depreciation, and Amortization ("EBITDA") and Free Cash Flow ("FCF"), both standard measures of financial performance, have been negative in each year through 2009. As of September 2011, the Company had an accumulated FCF of negative \$5.5 billion and an

⁴ Written Direct Testimony of Sean Butson, October 26, 2006, Appendices A & B. *See also, Satellite I* decision at p. 49. Mr. Butson did revise these estimates in his rebuttal testimony but still missed the mark by a wide margin. Rebuttal Testimony of Sean Butson, July 23, 2007, Appendices A & B.

⁵ Written Direct Testimony of J. Armand Musey, October 30, 2006, pp. 6-7.

accumulated EBITDA of negative \$3.7 billion.⁶ It is only in the last two years that the Company has finally started to see positive EBITDA. As the numbers noted above make plain, even with the recent positive earnings, Sirius XM is still years away from recovering its massive accumulated losses. Of course, were it not for these massive investments (and resulting losses), Sirius XM would not be the company that it is today.

13. In an effort to finally turn the corner and become profitable, Sirius XM instituted cost cutting measures across the board, including a more than \$500 million reduction in its subscriber acquisition, sales, marketing, and administrative costs and a more than \$100 million reduction in its programming costs over the 2007-2009 period.⁷ Although costs related to non-music content have been cut, the one cost that Sirius XM has historically had little control over, and that has been rising, is its royalty payment obligation to SoundExchange. Even during times of significant cost cutting efforts and despite its inability to turn a profit, Sirius XM has paid vast sums to SoundExchange. Between 2007 and September 30, 2011, Sirius XM paid ██████████ ██████████ to SoundExchange even though its cumulative FCF during this period was negative \$437 million.⁸ Not only were the actual royalty payments substantial, but the percentage-of-revenue rates paid over the 2007-2011 period increased three-fold, from less than 2.5% to 7.5% (and will rise to 8% in 2012).⁹

14. Due in large part to the significant investments, large losses, and the negative cumulative FCFs discussed above, Sirius XM has had to restructure itself twice over the past eight years.¹⁰ In an effort to avoid a second near brush with bankruptcy in 2009, Sirius XM hired Evercore Capital (“Evercore”) to help raise funding to pay off maturing debt obligations that were coming due in February 2009. Evercore and other investment bankers approached 21 potential lenders, but could not reach agreement with any of them. Most of these prospective lenders had no

⁶ See SiriusXM 10-K filings for 2008, 2009, and 2010, and SiriusXM 10-Q filing for 3Q 2011. For 2006 – 3Q 2011, adjusted EBITDA is used. Prior to 2006, historical Free Cash Flow and EBITDA data for Sirius and XM were downloaded from Bloomberg and combined to produce an annual figure.

⁷ Frear Testimony at ¶¶19-20.

⁸ Pro forma/adjusted Free Cash Flow figures as reported in Sirius XM’s 10-Ks and 3Q 2011 10-Q are used to calculate cumulative Free Cash Flow over the period.

⁹ Final Determination of Rates and Terms, *Satellite I*, pp. 67, 70.

¹⁰ The 2003 restructuring was XM Satellite Radio Inc., a predecessor company. XM Satellite Radio Inc. Form 10-K Filed March 30, 2004, p. 5.

interest in investing in a company that had a history of significant losses and was tied so closely to the problematic U.S. automotive industry. Potential lenders were also unwilling to invest in a company that had experienced many years of negative EBITDA margins and faced significant future competitive threats from emerging technologies.¹¹ [REDACTED]

[REDACTED] Faced with such unreasonable terms and uncertainty, the Company believed a Chapter 11 bankruptcy filing was a superior alternative.¹²

15. The royalty rate paid by Sirius XM to SoundExchange was viewed as a significant deterrent to potential providers of capital. In a discussion with Greg Maffei, President and CEO of Liberty Media Group (“Liberty”) and now a member of the Sirius XM Board of Directors, Mr. Maffei confirmed that these royalty payments were a real concern to Liberty in the evaluation of any potential investment in Sirius XM, as they represent a very large portion of future EBITDA and were uncontrollable costs that were delinked from the value of the revenue that they produced.

16. On the day before the planned bankruptcy, Liberty offered a deal that kept Sirius XM afloat – loans of \$380 million that allowed Sirius XM to repay the principal and interest maturing on its notes.¹³ This rescue, however, came at a considerable cost. The loans carried an extremely high 15% interest rate, and the Company was also required to pay Liberty Media a \$30 million restructuring fee, which further increased the effective cost of the loans.¹⁴ Finally, and most significantly, Liberty received 12.5 million preferred shares of Sirius XM stock that are convertible into approximately 40% of the common stock of the Company (after giving effect to such conversion).¹⁵ The value of existing equity holders shares was therefore diluted by 40%. While the Company did survive, existing equity holders were negatively impacted, making it

¹¹ Frear Testimony at ¶9.

¹² Frear Testimony at ¶¶11-12.

¹³ Frear Testimony at ¶¶12-13.

¹⁴ By comparison, the Company was paying 5.44% on December 31, 2008 for its floating rate Senior Secured Term Loan issued in June of 2007. *See* Sirius XM Radio Inc. Form 10-K filed March 10, 2009, p. F-29.

¹⁵ Frear Testimony at ¶13.

highly unlikely that pre-2008 equity investors will ever realize an adequate return on their Sirius XM investments. What is more, Sirius XM was still left with significant debt. The total amount of Sirius XM debt that comes due between 2013 and 2015 is nearly \$2.4 billion.¹⁶

17. Sirius XM's stock price reflects the Company's tumultuous financial history and near bankruptcy. The stock fell from over \$4 in January 2007 down to \$.055 per share on February 11, 2009, a time when bankruptcy seemed inevitable. The stock price still has not recovered. The current share price remains substantially below January 2007 levels – currently trading at approximately \$1.76 per share.¹⁷

V. Despite Recent Profitability, Sirius XM is not “Out of the Woods”

A. The Competitive Landscape in which Sirius XM Operates has Changed

18. While Sirius XM did survive its recent brush with bankruptcy, and now, after twenty years of losses, finally is able to generate revenues that exceed its costs, it is dangerous to assume that this recent success will continue over the 2013-2017 period. As discussed in greater detail in the Written Direct Testimonies of William Rosenblatt (“Rosenblatt Testimony”) and James Meyer (“Meyer Testimony”), the competitive landscape in which Sirius XM operates has changed significantly since the last rate-setting proceeding. In addition to terrestrial radio, Sirius XM now competes with a host of Internet based music and non-music streaming services, subscription based music rental libraries, and services that allow users to upload digital content and later access it through smartphones over increasingly ubiquitous wireless broadband. These services have crowded the competitive landscape to a far greater degree than existed in 2007 and are poised to experience continued growth over the coming years. While none of these services provide precisely the same array of content options as Sirius XM, many of them are substantially cheaper (including many that are free to the consumer), and therefore pose a real competitive threat to Sirius XM's market share. I expect that over the 2013-2017 period, as these services continue to develop and expand, Sirius XM's subscriber base is likely to contract as subscribers increasingly opt for these emerging alternatives.

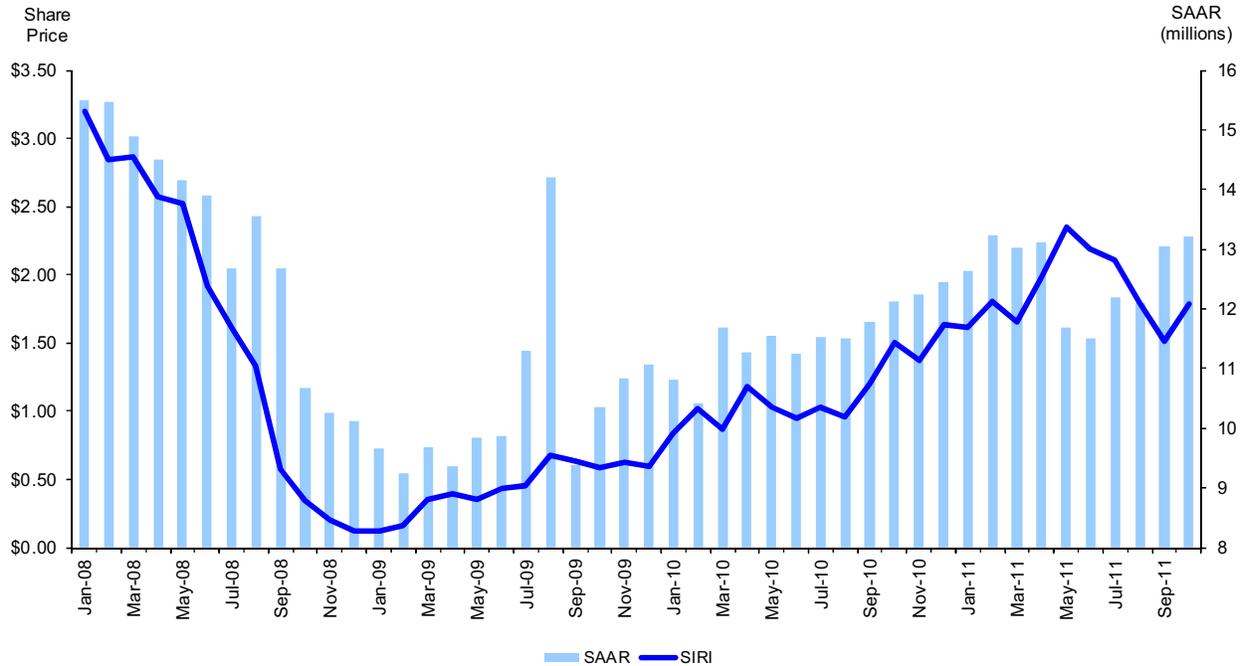
¹⁶ Sirius XM Radio Inc. Form 10-Q for Period Ending September 30, 2011, p. 16-18.

¹⁷ Closing share price as of November 28, 2011.

B. Sirius XM's Dependence on the U.S. Automotive Industry Has Increased Since the Last Rate Proceeding

19. As Exhibit 1 illustrates, in recent years 69% of changes in the Company's share price can be explained by changes in the seasonally adjusted annual rate ("SAAR") of U.S. new light vehicle sales.¹⁸

**Exhibit 1
SIRI Share Price vs. SAAR for U.S. New Light Vehicle Sales**



Source: CRSP; Bloomberg; U.S. Bureau of Economic Analysis
 Note:
 [1] Regression model: SIRI = -3.647 + 0.412*SAAR. R² = .694.

20. The demand for Sirius XM's product has become increasingly dependent on the highly volatile and cyclical U.S. auto industry. Sirius XM's exposure to the auto industry gives rise to a risk that cannot be hedged: there currently is no viable channel for its product that can generate sufficient revenue to sustain the Company outside of the new car market.¹⁹ As of 2010, 65% of

¹⁸ The break in this relationship in July and August of 2009 was due to the "Cash for Clunkers" program, which artificially raised demand for new vehicles. When removing those data points from the analysis, the correlation increases to 77%.

¹⁹ The used car market does not generate a significant number of subscribers to offset the effects of a decline in new car sales on Sirius XM's subscriber base. Less than 1% of Sirius XM's subscribers are projected to be attributable to used car sales by the end of 2012. Sirius XM

all of Sirius XM's current subscribers joined through the new car sales channel and the overwhelming majority of future subscriber growth is expected to come through new car sales.²⁰

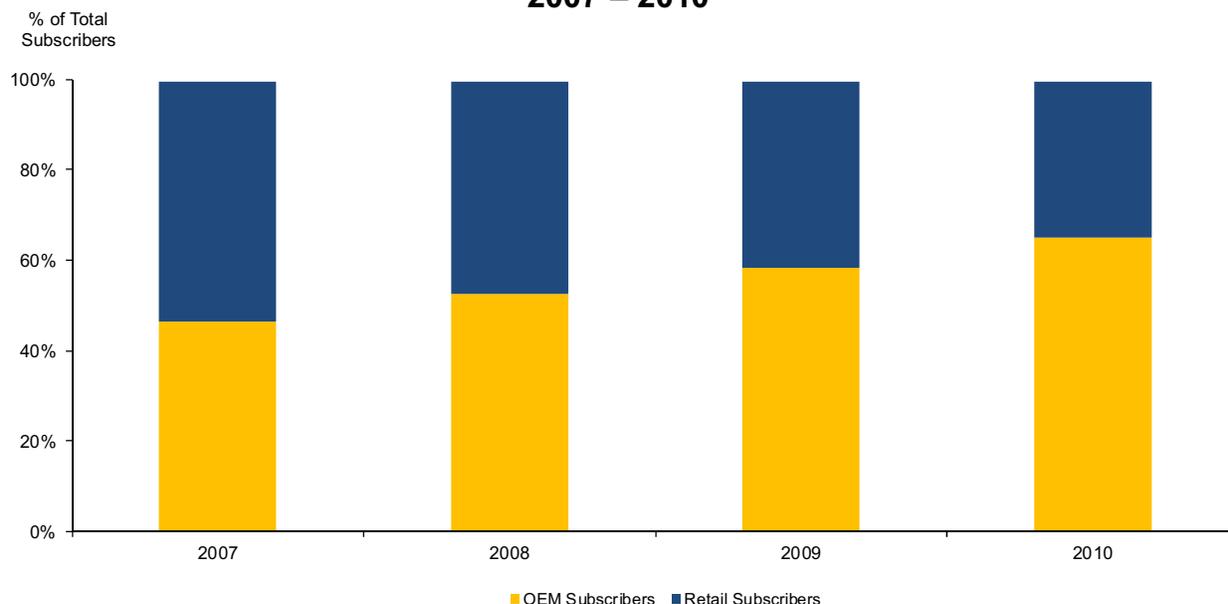
21. The Company's future growth, therefore, is highly dependent on both its ability to successfully partner with car manufacturers and the sale of new cars in the U.S. As shown in Exhibit 2, this dependence on car manufacturers has increased steadily since 2007, rising from 46% of all subscribers in 2007 to 65% of all subscribers in 2010. Furthermore, this trend away from retail subscriptions towards increased dependence on car manufacturers is expected to continue over the coming years as nearly all new subscribers are projected to be attributable to new car sales.²¹ The inability of Sirius XM to hedge this increasing exposure to the U.S. auto industry represents a business risk that existed in 2007, but is even larger today and is expected to continue to increase through 2017.

Radio Inc. – Reiterating OW Following 3Q Results, Outlook Unchanged, Morgan Stanley, November 3, 2011, at p. 12.

²⁰ Sirius XM Radio Inc. – Reiterating OW Following 3Q Results, Outlook Unchanged, Morgan Stanley, November 3, 2011, at p. 12. In 2012, Morgan Stanley estimates Sirius XM will have 1,280,000 net subscriber additions overall, with 1,686,000 from net OEM additions. Morgan Stanley projects Sirius XM's other three channels (Retail, Used, and Rental) will lose a combined 406,000 subscribers in 2012.

²¹ See Meyer Testimony at ¶37; Sirius XM (SIRI) - SIRI: Serious Leverage; Initiating Coverage with BUY Rating and \$1.00 Price Target, Lazard Capital Markets, January 25, 2010, at p. 14; Sirius XM Radio Inc. – Reiterating OW Following 3Q Results, Outlook Unchanged, Morgan Stanley, November 3, 2011, at p. 12.

Exhibit 2 OEM vs. Retail Subscribers 2007 – 2010



Source: Sirius XM 10-K filings

Note:

[1] For 2007 and 2008, pro forma/adjusted figures are used. For 2009 and 2010, actual figures are used. 2011 YTD figures are not available as Q3 2011 10-Q does not breakout subscribers into OEM and retail.

[2] OEM and retail subscribers do not quite add up to 100% due to a small number of rental car subscribers.

22. This dependence on the automotive industry creates two significant threats to Sirius XM's profitability. First, should the market for new cars decline, as it did in 2008 and 2009, Sirius XM is likely to experience a decline in the number of new subscribers because the Company acquires the vast majority of its new customers from new car sales. Second, and perhaps more significant, is the possibility that automakers will no longer view Sirius XM as attractive, preferring emerging infotainment alternatives that are easily modified for use internationally. Auto manufacturers, as global companies, seek opportunities to use common components throughout the world whenever possible to streamline engineering and reduce costs. Sirius XM, unlike its Internet based competitors, currently has no ability to broadcast in any country outside North America. This inability to provide a universal service gives an incentive for car manufacturers to move away from Sirius XM in favor of Internet based services. In the likely event that car manufacturers move in this direction, the number of Sirius XM's new subscribers will decline.

23. The competitive threat from Internet-based infotainment services already exists. Currently, the overwhelming majority of new cars allow for the connection of smartphones (or

other portable devices, including those with Internet access) to car audio systems with ease through a simple cable or Bluetooth connection (and with a sound quality that is equal to or better than that provided by Sirius XM), making Internet based competitors a realistic alternative for those who listen to Sirius XM while driving.²² Additionally, car manufacturers are moving aggressively to integrate mobile data services, including online music services, directly into their dashboard infotainment systems. Currently, some of the more prominent digital music services are taking advantage of such in-vehicle integrations. Pandora Internet Radio, for example, is integrated into the in-vehicle audio systems (and can be accessed directly from the dashboard controls) of several automakers, including Ford, Mercedes, BMW, and Scion, and has plans for more such integrations in the near future.²³ Similarly, MOG, a subscription-based music rental library, currently offers an in-dash integration for BMW's Mini auto line and is expected to integrate its services into the audio systems of Ford and Toyota models in the near future.²⁴ Given the increasing threats from competitors and the increasing availability of competitor services in cars, it is reasonably likely that Sirius XM will suffer a reduction in its subscriber base between 2013 and 2017.

24. While I cannot say with certainty how the competitive threats to Sirius XM will affect its future performance, a worst case scenario of bankruptcy must be considered when evaluating the future of the Company. Faced with the competitive threats outlined above, it is not prudent to assume that the status quo will continue.

C. Sirius XM's "Junk" Credit Rating Evidences the Likely Effect of these Competitive Threats

25. Debt analysts, who typically consider "downside" risk, currently believe that Sirius XM is reasonably likely to default. Moody's and S&P, the two largest credit ratings agencies, currently view Sirius XM to be dependent on U.S. automotive sales and consumer discretionary spending growth, and vulnerable to competition.²⁵ While it is true that both Moody's and S&P

²² Rosenblatt Testimony at 17.

²³ Rosenblatt Testimony at 19.

²⁴ Rosenblatt Testimony at 20.

²⁵ See Sirius XM Radio Rating Raised to 'BB' On Improved EBITDA and Debt Leverage, Standard & Poor's, October 26, 2011; Credit Opinion: Sirius XM Radio Inc., Moody's Investor Service, May 25, 2011.

have recently taken a more salutatory view of Sirius XM, they still have assigned the Company's outstanding debt a "junk" credit rating. Currently, Moody's debt rating for Sirius XM is B2 (speculative and subject to high credit risk), and S&P has assigned Sirius XM a rating of BB (one facing major ongoing uncertainties or exposure to adverse business, financial, or economic conditions, and having significant speculative characteristics).²⁶

26. These credit ratings suggest that there is a realistic possibility that Sirius XM will default on its outstanding debt. Past experience has shown that companies with the same B2 Moody's rating have a five-year debt default rate of 25.7%,²⁷ while companies with an S&P BB rating have a five-year default rate of 8.74%.²⁸ The relatively wide disparity between the credit ratings from Moody's and S&P is indicative to me of the difficulty in predicting Sirius XM's performance five years into the future.

27. The risks faced by Sirius XM are further evidenced in the Altman Z-score, which measures the probability that a firm will default on its credit obligations within two years.²⁹ A Z-score of greater than 2.99 is considered "safe", a score between 2.98 and 1.82 is "grey", and a score of less than 1.81 is considered "distressed." As shown in Exhibit 3, as of the third quarter of 2011, Sirius XM had a Z-score of negative 0.75, a score significantly below the highest limit of "distressed." Exhibit 3 also shows that the Company's Z-score is well below the Z-scores that

²⁶ *Bloomberg*; Rating Symbols and Definitions, Moody's Investors Service, January 2011, p. 4; Credit Ratings Definitions & FAQs, Standard & Poor's, available at <http://www.standardandpoors.com/ratings/definitions-and-faqs/en/us>. Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category. For S&P, the ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

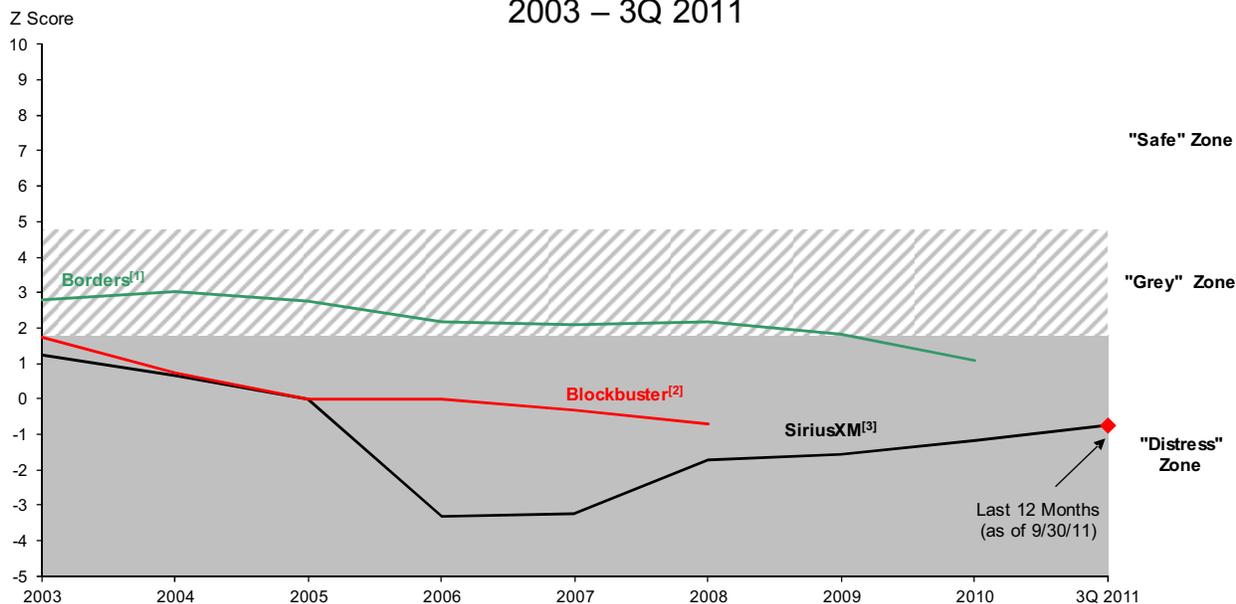
²⁷ Corporate Default and Recovery Rates, 1920-2010, Moody's Investors Service February 28, 2011, Exhibit 36.

²⁸ 2010 Annual Global Corporate Default Study, Standard & Poor's, available at <http://www.standardandpoors.com/ratings/articles/en/us/?assetID=1245302234237>, March 30, 2011, Table 26.

²⁹ "It is suggested that the bankruptcy prediction model is an accurate forecaster of failure up to two years prior to bankruptcy.... Investigation of the individual ratio movements prior to bankruptcy corroborated the model's findings that bankruptcy can be accurately predicted up to two years prior to actual failure..." See Altman, Edward I., "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy," *The Journal of Finance*, Vol. 23, No. 4, September 1968, pp. 589-609.

Borders and Blockbuster – both one-product companies, like Sirius XM – had at the end of the year prior to filing for bankruptcy protection.

Exhibit 3
Altman Z Score
2003 – 3Q 2011



Source: Capital IQ

Note:

[1] Year end figures for Borders are as of the last week of January/first week of February.

[2] Year end figures for Blockbuster are as of the final day of the quarter for 2003 – 2006, and the first week of January for 2007 – 2010.

[3] Year end figures for SiriusXM are as of the final day of the quarter.

D. Other More Financially Sound Companies, When Faced with Similar Competitive Threats, Have not Survived

28. The foregoing risks to the Company’s financial position, created by the rapid development of competing technologies, are not unique to Sirius XM. It is not uncommon, especially in the last ten years, for financially sound companies to fall on hard times due to the rise of alternative technologies.

29. Recent high profile examples of this are the experiences of Blockbuster and Borders – both once large and financially healthy companies that, when faced with the rapid emergence of new technology, fell into financial turmoil. For over a decade, Blockbuster was the dominant player in the movie rental industry. Shortly after the rise of Netflix, an internet based competitor, Blockbuster found itself struggling to remain competitive, and unable to innovate

quickly enough, filed for bankruptcy.³⁰ Borders – a company that helped revolutionize “brick and mortar” bookselling – similarly found itself unable to innovate and remain competitive with internet based sales channels (e.g., Amazon.com) and the “e-book” market.³¹ It too, after years of financial prosperity, ultimately went bankrupt.³²

30. In an effort to remain competitive and to avoid a fate similar to that of Blockbuster and Borders, Sirius XM continues to innovate. As described in greater detail in the testimony of Jim Meyer and Mel Karmazin, the Company devotes substantial resources to improving its product, both through technological innovation and through enhanced content offerings.³³ While these efforts may ultimately prove to be successful, it is far from certain that they will be sufficient to fend off the increasing threats faced by the Company.

VI. A Change in the Royalty Rate has a Material Impact on Sirius XM

31. It is important to recognize that a change in the royalty rate can have a significant impact on Sirius XM’s financial position. Exhibit 4 below demonstrates the high percentage of earnings that is consumed by royalty payments, and the consequence of increasing the royalty rate.³⁴ As noted above, many capital providers would be reluctant to support a company that pays royalties that represent such a high portion of earnings, especially because these payments are largely non-negotiable once set.

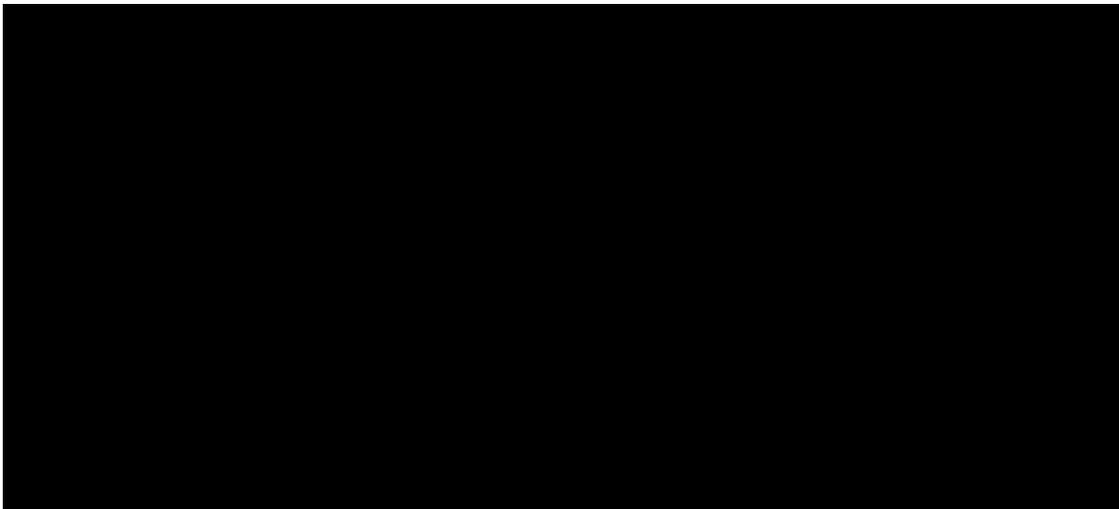
³⁰ Blockbuster Declares Bankruptcy - A Day Late and a Business Model Short, Rudofsky Associates, LCC, available at <http://www.rudofskyassociates.com/news/tag/why-did-blockbuster-go-bankrupt/>, September 24, 2010.

³¹ “The Borders Story: Is This the Final Chapter?,” Newsweek.com, available at: <http://www.newsweek.com/2011/01/20/the-borders-story-is-this-the-final-chapter.html>, January 20, 2011.

³² “Timeline: A short history of Borders Group bookstores,” Reuters.com, available at: <http://www.reuters.com/article/2011/02/16/us-borders-timeline-idUSTRE71F3AT20110216>, February 16, 2011.

³³ Meyer Testimony at ¶¶45-48; Written Direct Testimony of Mel Karmazin at ¶¶21-35.

³⁴ I examine EBIT, Earnings Before Interest and Taxes, as opposed to EBITDA, because depreciation and amortization are costs associated with past investments. EBIT measures profitability after subtracting these costs, making it a more appropriate measurement of the total amount of cash available for payment to SoundExchange and investors.



Source: Sirius XM 3Q 2011 10-Q filing; Sirius and XM Statements of Account for a Preexisting Satellite Digital Audio Radio Service

Note:

[1] I have been informed by counsel that the payment to SoundExchange for Q1-Q3 2011 was [REDACTED]

[2] *Pro forma* or "adjusted" figures are used. Adjusted depreciation and amortization are subtracted from adjusted EBITDA to derive EBIT. To calculate payment to SX, the royalty rate is applied to eligible subscription and advertising revenues, as reported by Sirius XM. This is divided by the sum of the payment and EBIT to give royalty paid as a percentage of payment and EBIT.

[3] The current order, applicable through December 2012, sets the royalty rate at 6%. The initial rate increases by 0.5% annually beginning in 2009.

[4] Assumes no tax effect due to net operating losses and no changes in other costs.

[5] Assumes EBIT decreases as royalty rate increases.

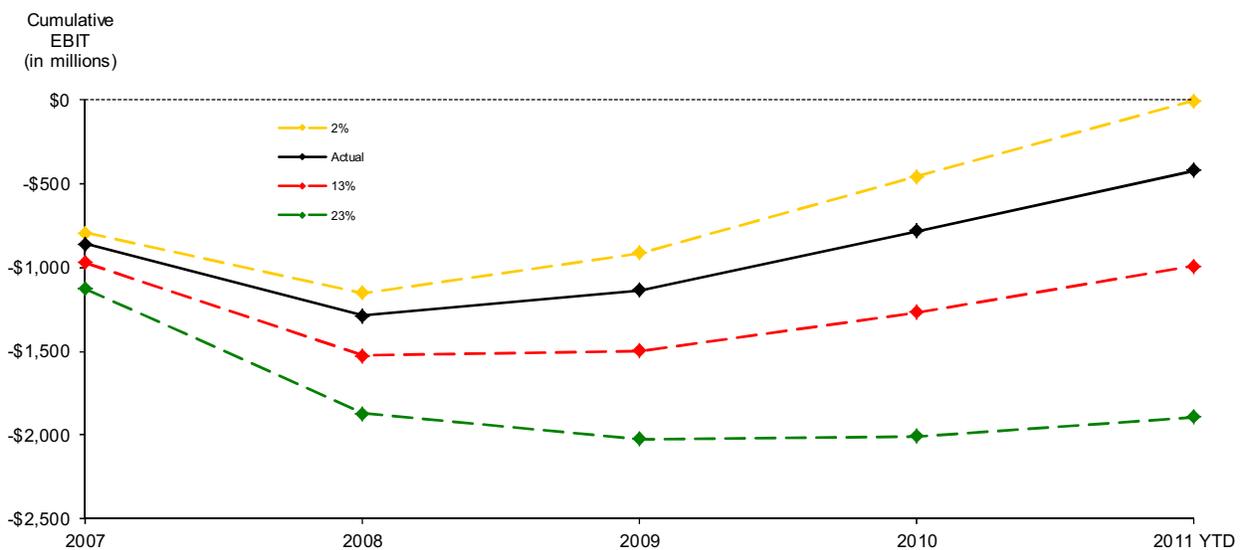
32. The effect of a change in the royalty rate on Sirius XM's financials was noted by the investment community at the close of the last rate proceeding. For example, Goldman Sachs, writing on December 4, 2007 about the CRB's pending rate decision, stated: "[w]e believe combining a potentially unfavorable ruling from the CRB along with the music publisher's tariff could offset a large portion of the near-term potential synergies incorporated in the consensus merger models if a deal is approved and further push out cash-flow break-even in the absence of a deal."³⁵ On December 5, 2007, Stifel Nicolaus, another investment bank, wrote: "[c]opyright royalty board issued new rates for performance royalties (SoundExchange) that were higher than expected... In our view, this potentially sets a bad precedent for publishing royalties... We are thus lowering margins significantly particularly in our terminal year."³⁶

³⁵ XM Satellite Radio (XMSR) - Downgrading XMSR to Sell from Neutral...Deal or No Deal, Goldman Sachs, December 4, 2007, p. 11.

³⁶ Sirius Satellite Radio, Inc. - Lowering Target Due to Higher than Expected Music Royalties, Stifel Nicolaus, December 5, 2007, p. 1 and XM Satellite Radio Holdings, Inc. - Lowering to Hold; Music Royalties Significantly Higher than Expected, Stifel Nicolaus, December 5, 2007, p. 1.

33. To further demonstrate the significance of the royalty rate, I have plotted the effect of the same alternative royalty rates used in Exhibit 4 on Sirius XM’s cumulative EBIT over the 2007-2011(YTD) period in the exhibit below. As shown in Exhibit 5, the increase in the royalty rates from less than 2.5% to 6%-8% (labeled below as “Actual”)³⁷ kept Sirius XM farther away from achieving positive cumulative EBIT during this period. Had the rate been set higher, Sirius XM’s cumulative earnings would have been significantly more negative.

Exhibit 5
Sirius XM Cumulative EBIT Since 2007, Assuming Different Royalty Rates



Source: Sirius XM 10-K and 10-Q filings; Sirius and XM Statements of Account for a Preexisting Satellite Digital Audio Radio Service
 Note:
 [1] For 2007 – 2011 YTD, *pro forma* or "adjusted" figures are used. Adjusted depreciation and amortization are subtracted from adjusted EBITDA to derive EBIT. Royalty rate is applied to eligible subscription and advertising revenues, as reported by Sirius XM.
 [2] Assumes no tax effect due to net operating losses and no changes in other costs.

34. Given the financial history of Sirius XM, and the current ongoing climate of significant economic uncertainty, including historically high volatility and “fear indices” that are close to the levels that prevailed during the 2007-2009 economic crisis,³⁸ it is reasonably likely that

³⁷ The royalty rate paid by Sirius XM was 6% in 2007 and 2008, 6.5% in 2009, 7% in 2010, 7.5% in 2011, and is set to be 8% in 2012. *See also* Final Determination of Rates and Terms, *Satellite I*, p. 67. “First, given that the current rates paid by the SDARS for these inputs are in the range of 2.0% to 2.5% of revenues...”

³⁸ The Chicago Board Options Exchange Market Volatility Index, or “VIX,” measures the implied volatility of options for the S&P 500 Index. It is often referred to as an “investor fear gauge” because it “is based on real-time option prices, which reflect investors’ consensus view

should Sirius XM once again find itself in a period of financial distress, there will not be a lender willing to rescue Sirius XM yet again, leaving it with no choice but to file for bankruptcy. Materially increasing the royalty rate significantly increases this likelihood of bankruptcy.

VII. Optimistic Projections Should Be Viewed with Skepticism

A. Equity Analyst Projections are Often Unduly Optimistic

35. I am aware that many equity analysts covering Sirius XM have optimistic financial projections for the Company. While it is possible that the equity analysts will prove to be correct, there is good reason to be skeptical of their optimistic projections. History has shown that many equity analysts are biased and often forecast unrealistically favorable financial results for the companies that they cover. The reasons for this vary, but include (1) the expectation of better access to information from corporate management if they have a favorable view on that company's stock; (2) pressure from the banking side of an investment bank if there is significant business activity with a corporate client; and (3) when analysts decide to initiate research on a company's stock because they expect the stock to do well, it is problematic for analysts to subsequently advise investors to sell a stock that they have previously influenced an investor to purchase. There has been considerable academic research confirming this tendency.³⁹ This tendency was further confirmed by the SEC when it found, as part of a settlement with ten investment banks, that analysts at securities firms covering U.S. stocks were inappropriately

of future expected stock market volatility. During periods of financial stress, which are often accompanied by steep market declines, option prices - and VIX - tend to rise. The greater the fear, the higher the VIX level. As investor fear subsides, option prices tend to decline, which in turn causes VIX to decline." See VIX FAQ, CBOE, available at <http://www.cboe.com/micro/vix/faq.aspx#2>. From December 2007 to July 2009, the VIX had an average daily index value of 33.7. From August 2011 to October 2011, the VIX had an average daily index value of 34.8.

³⁹ See, e.g., Michaely, Roni, and Kent L. Womack, "What are Analysts Really Good At?," Working Paper, Cornell University, 2007. See also Chan, Louis K.C., Jason Karceski, and Josef Lakonishok, "Analysts' Conflict of Interest and Biases in Earnings Forecasts," Working Paper, November 2003.

influenced by the investment banking divisions of their firms and therefore suffered serious conflicts of interest.⁴⁰

36. The tendency to be unduly optimistic is particularly true of the analysts that cover Sirius XM. As shown in Exhibit 6 below, these analysts rate 61% of all companies that they covered during 2011 with a “Buy” recommendation while only rating 4% with a “Sell” recommendation.

Exhibit 6 Distribution of Investment Ratings

Analyst	Date^[1]	Buy	Hold^[2]	Sell
Barrington Research	11/1/2011	70%	30%	0%
BGB Securities	11/2/2011	73%	27%	0%
Citadel Securities	8/2/2011	42%	39%	19%
Evercore Partners	11/1/2011	49%	42%	9%
Gabelli & Company	11/2/2011	46%	51%	3%
Janco Partners	9/28/2011	78%	22%	0%
Lazard Capital Markets	11/2/2011	59%	39%	2%
Maxim Group	11/2/2011	62%	33%	5%
Miller Tabak + Co.	11/1/2011	82%	18%	0%
Morgan Stanley	11/3/2011	40%	46%	15%
Pivotal Research Group	10/14/2011	90%	10%	0%
RBC Capital Markets	11/1/2011	53%	43%	4%
Stifel, Nicolaus & Company	7/28/2011	50%	48%	2%
Wunderlich Securities	11/2/2011	64%	35%	1%
Average		61%	34%	4%

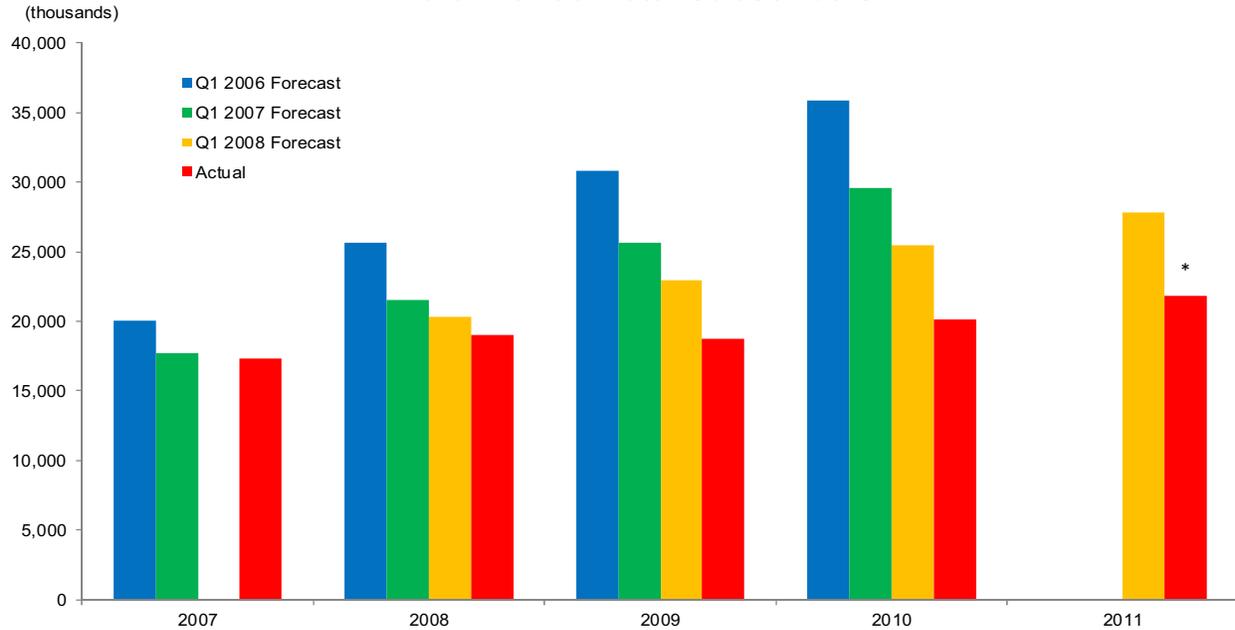
Note:

[1] Refers to date of analyst report. Reports are released on different days. I have included the most recent report available to me for each analyst.

37. Sirius XM’s equity analysts were overly optimistic when evaluating the future prospects of the Company during 2007 and 2008, as demonstrated below. Exhibits 7 and 8 compare the 2006, 2007, and 2008 forecasts of Morgan Stanley to the actual experience of Sirius XM. Exhibit 9 compares analyst consensus stock target prices to the actual experience of Sirius XM’s stock price. All three exhibits show the same tendency – a significant overestimation of the financial future of Sirius XM.

⁴⁰ Stowell, David, *An Introduction to Investment Banks, Hedge Funds, and Private Equity: The New Paradigm*, Elsevier Inc., 2010, p. 123. See also “Litigation Release No. 18438,” SEC, available at <http://www.sec.gov/litigation/litreleases/lr18438.htm>, October 31, 2003.

Exhibit 7 Morgan Stanley Forecasts vs. Actuals End of Period Total Subscribers



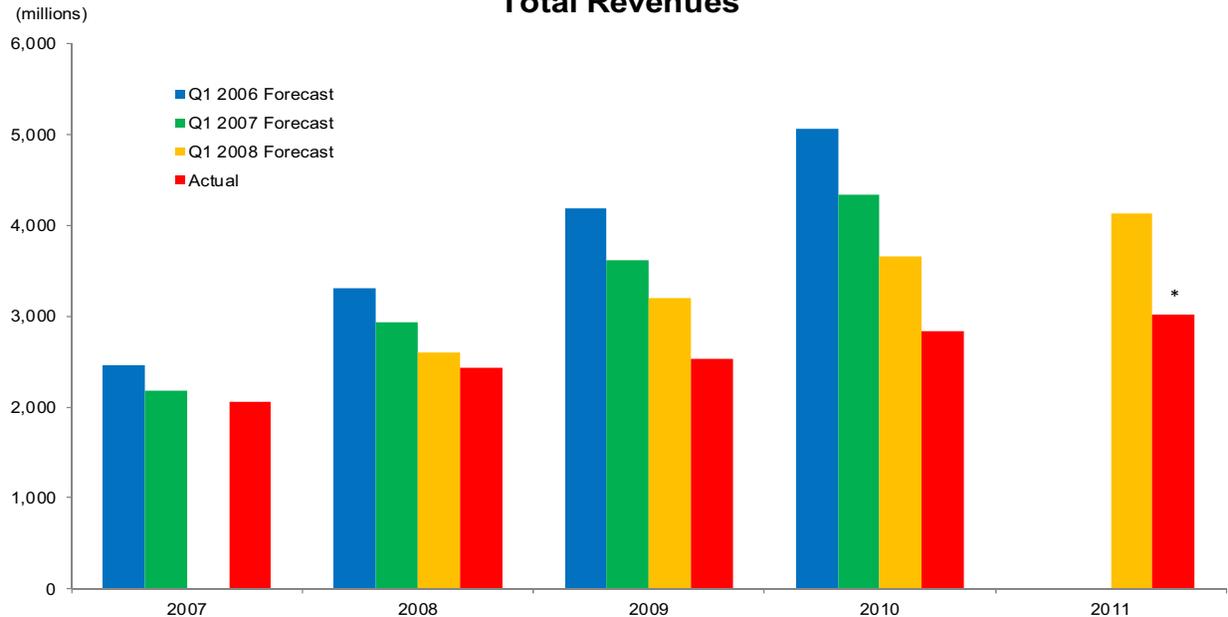
Source: Selected Morgan Stanley Reports for Sirius and XM Radio

Note:

[1] 2011 "actual" EOP total subscribers are most recent estimates from most recent Morgan Stanley report, dated 11/3/11.

[2] Forecasts for Sirius Satellite Radio and XM Satellite Holdings are combined. Forecasts come from the latest analyst report in each quarter that contains a full financial model.

Exhibit 8 Morgan Stanley Forecasts vs. Actuals Total Revenues



Source: Selected Morgan Stanley Reports for Sirius and XM Radio

Note:

[1] 2011 "actual" EOP total subscribers are most recent estimates from most recent Morgan Stanley report, dated 11/3/11.

[2] Forecasts for Sirius Satellite Radio and XM Satellite Holdings are combined. Forecasts come from the latest analyst report in each quarter that contains a full financial model.

Exhibit 9
SiriusXM Actual vs. Analyst Consensus Mean Stock Price
2007 – 2008

Date	Mean Analyst Target Price	Actual Price (12 Months Later)	% Difference	Actual Price (18 Months Later)	% Difference
1/2/2007	\$5.64	\$3.05	-46%	\$1.91	-66%
4/19/2007	\$4.46	\$2.45	-45%	\$0.39	-91%
7/19/2007	\$3.85	\$2.42	-37%	\$0.11	-97%
10/18/2007	\$3.84	\$0.39	-90%	\$0.49	-87%
1/17/2008	\$3.80	\$0.11	-97%	\$0.39	-90%
4/17/2008	\$3.64	\$0.50	-86%	\$0.62	-83%
7/17/2008	\$3.44	\$0.39	-89%	\$0.67	-81%
10/16/2008	\$1.72	\$0.59	-66%	\$1.08	-37%

Source: CRSP, Thomson Reuters Datastream

B. The Forecasts made by SoundExchange During the Last Rate Proceeding Were Similarly Overly Optimistic

38. Like the equity analysts, the forecasts put forth by SoundExchange during the last rate proceeding proved to be significantly overly optimistic. In his written direct testimony, Sean Butson, a SoundExchange witness and former equity analyst, estimated a combined subscriber base of 33.3 million by 2010 for Sirius and XM.⁴¹ As it turned out, the total subscriber base in 2010 was only 20 million, and, of those subscribers, more than 3.5 million were on paid promotional trial subscriptions.⁴² Mr. Butson's other projections for 2010 similarly missed the mark: actual revenues were 42% below those projected by Mr. Butson and actual Free Cash Flows were 58% below his predictions.⁴³ Mr. Butson revised these forecasted metrics in his rebuttal testimony, but still missed the mark by a wide margin.⁴⁴

⁴¹ Written Direct Testimony of Sean Butson, October 26, 2006, Appendices A & B.

⁴² Sirius XM Radio Inc. Form 10-Q for Period Ending June 30, 2011.

⁴³ Written Direct Testimony of Sean Butson, October 26, 2006, Appendices A & B; Sirius XM Radio Inc. Form 10-K filed February 16, 2011.

⁴⁴ Rebuttal Testimony of Sean Butson, July 23, 2007, Appendices A & B; Sirius XM Radio Inc. Form 10-K filed February 16, 2011.

C. Sirius XM's Own Internal Financial Forecasts should be Viewed with Similar Skepticism

39. I am also aware that Sirius XM's own forecasts are more optimistic than the above discussion suggests. As discussed in greater detail in the Written Direct Testimony of David Frear, Sirius XM itself does not rely on the longer term projections in its own models.⁴⁵ The Company is primarily focused on its short term – typically one to two year – outlook, and the longer term projections contained in their models are largely ignored.⁴⁶ Furthermore, as also noted by Mr. Frear, their models are fraught with uncertainty and are subject to change. In fact, it is because of this uncertainty that Sirius XM does not make these models available to the public.⁴⁷ Finally, like Morgan Stanley, and as discussed in the Testimony of David Frear, Sirius XM has consistently been overly optimistic in its own longer term forecasting.⁴⁸

40. In summary, the longer term forecasts of equity analysts and Sirius XM should be viewed with skepticism as they are likely overly optimistic and do not fully account for the significant risks that the Company will confront over the 2013-2017 period.

VIII. Conclusion

41. Based on the foregoing, it is my view that Sirius XM faces a threat of disruption that is equal to or even greater than the one it faced at the time of the last rate proceeding. While Sirius XM may have turned the corner in terms of achieving profitability, and will likely continue to do well in the immediate future, it faces new and significant threats from increased competition that did not exist at the time of the last rate proceeding. Moreover, these competitive threats are likely to increase over the 2013-2017 period.

42. While I cannot state this with certainty, it is my opinion that Sirius XM is reasonably likely to experience financial distress during the 2013-2017 period because of increased competition from Internet based audio content suppliers, its greater exposure to auto makers, and the ongoing uncertain economic climate. An increase in the royalty rate in such circumstances significantly increases the likelihood of financial distress. Moreover, it is my opinion that,

⁴⁵ Frear Testimony at ¶34.

⁴⁶ Frear Testimony at ¶33-34.

⁴⁷ Frear Testimony at ¶35.

⁴⁸ Frear Testimony at ¶35.

consistent with the views expressed by Liberty Media's Mr. Maffei, increasing royalty payments as a percent of earnings represents a significant deterrent to investors who may consider a future rescue of the Company. As a result, I have concluded that any increase to the royalty rate would substantially increase the likelihood of disruption to Sirius XM.

Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.

In the Matter of)	
DETERMINATION OF RATES AND TERMS	)	Docket No. 2011-1
FOR PREEXISTING SUBSCRIPTION AND	)	CRB PSS/Satellite II
SATELLITE DIGITAL AUDIO RADIO)	
SERVICES)	

DECLARATION OF DAVID P. STOWELL

I, David P. Stowell, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 28th day of November 2011 at Evanston, Illinois.



David P. Stowell

Appendix A

DAVID P. STOWELL

39 Indian Hill Road, Winnetka, Illinois 60093
847 441 0649 (home) 847 467 0291 (office)
d-stowell@kellogg.northwestern.edu

Current Position (Since March, 2005):

KELLOGG SCHOOL OF MANAGEMENT NORTHWESTERN UNIVERSITY

Clinical Professor of Finance
Evanston, Illinois

Teaching and research professor for three courses: Investment Banking; Hedge Funds and Private Equity; and Buyout Lab. Research focuses on investment banking activities, hedge funds and private equity funds. Faculty advisor to Investment Banking and Capital Markets Club.

Previous Positions (1986 through February, 2005):

JP MORGAN

Managing Director and Head of Central Region Investment Banking
JP Morgan Chase Mid-Corporate Banking
Chicago, Illinois

Responsible for managing the Central Region's Investment Banking business, including M&A advisory, capital markets underwriting and private placement services for corporate clients

UBS INVESTMENT BANK

Managing Director and Head of U.S. Equity-linked Securities Origination
Equity Capital Markets Group
New York, New York

Responsible for managing a nationwide equity capital markets business focused on equity-linked securities, including convertibles and derivative-related financings.

O'CONNOR PARTNERS

Managing Director and Head of Corporate Transactions
Chicago, Illinois

Responsible for creating and managing a business that focused on corporate equity derivative-based transactions for this hedge fund.

GOLDMAN SACHS

Vice President
Investment Banking Division
New York, New York and Tokyo, Japan

Focused on corporate finance and M&A for financial institutions in Tokyo and New York and then became co-head of corporate equity derivatives in New York.

Other Activities:**ADELPHIA RECOVERY TRUST**

Member of Board of Trustees

Responsible for overseeing the activities of the trust as one of five members of the board. Principal focus on asset sales and litigation activities.

PARADIGM ADVISORS

Self Proprietorship

Provide consulting services regarding investment banking (M&A, capital markets financings and derivatives), hedge funds and private equity

Educational Background:

COLUMBIA UNIVERSITY
Columbia Business School
New York, New York

MBA, Finance

UTAH STATE UNIVERSITY
Logan, Utah

BA, Economics

Publications:

Investment Banks, Hedge Funds and Private Equity: The New Paradigm—Textbook published by Academic Press, an imprint of Elsevier Inc. during February 2010

Kmart, Sears, and ESL: How a Hedge Fund Became One of the World's Largest Retailers---Kellogg Case Study, 2005

McDonald's, Wendy's and Hedge Funds: Hamburger Hedging?—Hedge Fund Activism and Impact on Corporate Governance—Kellogg Case Study, 2006

The Best Deal Gillette Could Get?—Proctor & Gamble's Acquisition of Gillette—Kellogg Case Study, 2006

The Toys "R" Us LBO—Kellogg Case Study, 2007

GM and Cerberus: Unusual Partners—Kellogg Case Study, 2007

Freeport-McMoRan: Financing an Acquisition—Kellogg Case Study, 2007

A Tale of Two Hedge Funds: Magnetar and Peloton—Kellogg Case Study, 2009

Porsche, Volkswagen and CSX: Cars, Trains and Derivatives—Kellogg Case Study, 2009

Investment Banking in 2008 (A): Rise and Fall of the Bear—Kellogg Case Study, 2009

Investment Banking in 2008: (B) A Brave New World—Kellogg Case Study, 2009

Appendix B

Deposition and Trial Testimony David Paul Stowell

Ferolie Corporation v. Advantage Sales & Marketing LLC
Gibson, Dunn & Crutcher LLP: Frederick Brown
Arbitration
Expert report and arbitration testimony on behalf of ASM
April 3, 2006

Sprint Corporation Shareholders Litigation
Case No. 04CV01714
Cravath Swaine & Moore, LLP: Michael A. Paskin
Settled out of court.
Expert report and deposition testimony on behalf of Sprint
August, 2007

CIBC World Markets v. AOM/Air Liberte
Jeantet Associates: Vincent Hug de Larauze
Skadden, Arps, Slate, Meagher & Flom LLP: Christopher L. Baker
Trial in the Paris Court of Appeal
Expert report and trial testimony on behalf of CIBC
September, 2007

McDonald Investments Inc. v. Marlow Power & Steam, Inc., et al.
Re: 53 148 Y 00792 06
Ulmer & Berne LLP: Christopher P. Fisher
Arbitration
Expert report and arbitration testimony on behalf of McDonald Investments
October, 2007

Eugene S. Crist, et al., St. James Capital Partners, L.P. v Simmons & Co. International,
Warrior Energy Services Corporation, et al.
129th District Court of Harris County, Texas, Cause No. 2004-70333
Jones Walker, Waechter, Poitevent, Carrere & Denegre L.L.P.: David Radlauer
Fulbright and Jaworski: William Maines
Crady, Jewett & McCulley: Randy Friday
Settled out of court
Expert report and deposition testimony on behalf of Simmons & Co., International,
Warrior Energy Services Corporation, et al.
April, 2008

Crossroads Systems, Inc. v. SG Cowen & Co., LLC, Successor in Interest to SG Cowen Securities Corporation, RBC Dain Rauscher, Inc., and Morgan Keegan & Company, Inc. Ogden, Gibson, Broocks & Longoria, L.L.P.: Janiece Longoria
Settled out of court
Expert report and deposition testimony on behalf of SG Cowen & Co., LLC, SG Cowen Securities Corporation and RBC Dain Rauscher, Inc.
May, 2008

Loral Space and Communications, Ind. Consolidated Litigation C.A. No. 2808-VCS and Maxine Babus v. Michael B. Targoff et al., Index No. 06/603842
White & Case LLP: Andrew Hammond
Kirkland & Ellis LLP: Eric Leon
King & Spalding LLP: Richard Cirillo
Trial
Expert report, deposition testimony and trial testimony in the Court of Chancery of the State of Delaware before Leo E Strine, Jr., Vice Chancellor on behalf of Michael B. Targoff et al.
October 2008

Scott Lakin et al. v. Morgan Stanley & Co., Inc, et al.
Case No. 22042-7300-01
Sullivan & Crowell: Richard C. Pepperman II
Settled out of court
Expert report and deposition testimony on behalf of Goldman Sachs & Co.
November, 2008

Louisiana Riverboat Gaming Partnership, et al. Chapter 11 filing: Case No. 90-10824 in the U.S. Bankruptcy Court for the Western District of Louisiana, Shreveport Division
Winston & Strawn LLP: Matthew J. Botica
Heller, Draper, Hayden, Patrick & Horn, L.L.C.: Douglas S. Draper
Trial
Expert report, deposition testimony and trial testimony on behalf of Louisiana Riverboat Gaming Partnership
May, 2009

Domin-8 Enterprise Solutions, Inc., et al. Chapter 11 filing: Case No. 09-35789. U.S. Bankruptcy Court for the Southern District of Ohio, Western Division, Judge Guy R. Humphrey
Edwards Angell Palmer & Dodge LLP: Matthew Martel
Trial
Expert report and trial testimony on behalf of RealPage, an auction bidder
December, 2009

Fluor Corporation v. Citadel Equity Fund Ltd.: C.A. No. 3:08-CV-01556-B
U.S. District Court for the Northern District of Texas, Dallas Division
Schulte Roth & Zabel LLP: Brian Kohn
Lynn Tillotson Pinker & Cox, LLP: Britta Stanton
Trial
Expert report and deposition testimony on behalf of Citadel
January, 2010

Gerald J. Gartner v Crane & Co., Inc.
Arbitration at Resolutions LLC before Professor Eric D. Green, Boston, Massachusetts
Weil, Gotshal & Manges LLP: Penny P. Reid
Choate, Hall & Stewart, LLP: Mark D. Cahill
Expert report and arbitration testimony on behalf of Crane & Co.
May, 2010

Kirschner v. Thomas H. Lee Partners, L.P., et al.
07 Civ. 7074
Milbank, Tweed, Hadley & McCloy LLP: Sander Bak
Expert report and deposition testimony on behalf of Kirschner
Settled out of court
December 2010

International Textile Group Merger Litigation
C.A. No. 2009-CP-23-3346
State of South Carolina, County of Greenville, The Court of Common Pleas
Jones Day LLP: Jean-Paul Boulee
Expert report and deposition testimony on behalf of Wilbur L. Ross, et al.
June 2011

Appendix C

Documents Relied Upon by David Stowell

<u>Document Title, Bates Numbers</u>	<u>Document Date</u>
Final Determination of Rates and Terms (Docket No. 2006-1 CRB DSTRA)	
Testimony of Sean Butson (Unrestricted), with Appendices A-V	October 26, 2006
Testimony of J. Armand Musey (Unrestricted), with Exhibits 1-2	October 30, 2006
Rebuttal Testimony of Sean Butson (Restricted), with Appendices A-H	July 23, 2007
Testimony of David J. Frear (Restricted)	July 24, 2007
Testimony of Mel Karmazin (Restricted) (Docket No. 2006-1 CRB DSTRA)	July 24, 2007
Amended Rebuttal Testimony of Mark J. Vendetti (On Behalf of XM Satellite Radio Inc.) (Restricted)	August 2, 2007
Trial Transcript of Armand Musey Hearing (Docket No. 2006-1 CRB DSTRA)	October 13, 2007
Written Direct Testimony of David J. Frear	November 29, 2011
Written Direct Testimony of James E. Meyer (Restricted)	November 29, 2011
Written Direct Testimony of William R. Rosenblatt	November 29, 2011
Altman, Edward I., "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy," <i>The Journal of Finance</i> , Vol. 23, No. 4, September 1968	
"Litigation Release No. 18438," SEC, available at http://www.sec.gov/litigation/litreleases/lr18438.htm ,	October 31, 2003
Chan, Louis K.C., Jason Karceski, and Josef Lakonishok, "Analysts' Conflict of Interest and Biases in Earnings Forecasts," Working Paper, November 2003	
Michaely, Roni, and Kent L. Womack, "What are Analysts Really Good At?," Working Paper, Cornell University, 2007	
Stowell, David, <i>An Introduction to Investment Banks, Hedge Funds, and Private Equity: The New Paradigm</i> , Elsevier Inc., 2010.	
"Cars Born to Run With Smartphone Apps," The New York Times	October 14, 2010
"Car Market Merges Ahead; The Market Will Be the Key Battleground for Satellite and Web Radio," Billboard	November 6, 2010
"Rating Symbols and Definitions," Moody's Investors Service	January 2011
"Pioneer In-Dash Navigation Line Keeps Drivers Connected While Staying Focused on the Road," ENP Newswire	January 7, 2011
"Pandora Invades Sirius' Home Turf," The Motley Fool	January 10, 2011
"Edmunds.com Inc. Cites Showcases Technologies That Bring Internet into Cars and Combat Distracted Driving, Reports Edmunds.com," Computer Weekly News	January 20, 2011
"The Borders Story: Is This the Final Chapter?," Newsweek.com	January 20, 2011
"Timeline: A Short History of Borders Group bookstores," Reuters.com	February 16, 2011
"Garmin's 4th-Quarter Profit Drops 52 pct as Smart Phones Overpower Personal Navigator Market," Associated Press Newswires	February 23, 2011
"HARMAN Automotive Connectivity and Advanced Audio Solutions Make the 'BamBoo' Concept Car from Rinspeed a Social Networking Hub," Business Wire	February 28, 2011
"Corporate Default and Recovery Rates, 1920-2010," Moody's Investors Service	February 28, 2011
"Mog, the Digital Music Service, Takes Aim at the TV and the Car," The New York Times	March 8, 2011

Document Title, Bates Numbers	Document Date
Welch, David, "GM Pushes Hard with OnStar," Bloomberg Businessweek	March 10, 2011
"HARMAN; HARMAN Automotive Connectivity and Advanced Audio Solutions Make the 'BamBoo' Concept Car from Rinspeed a Social Networking Hub," China Weekly News	March 15, 2011
"2010 Annual Global Corporate Default Study," Standard & Poor's	March 30, 2011
"Edmunds' InsideLine.com Reveals Ford Sync's Competitors are Catching Up," Entertainment Close-Up	March 31, 2011
"Edmunds.com; Ford Sync's Infotainment Leadership is Eroding, Reports Edmunds' InsideLine.com," Telecommunications Weekly	April 13, 2011
"One Smart Car. Toyota's Prius V Puts Your Smartphone on Your Dash to Make...," New York Daily News	April 19, 2011
"knowDigital Finds That 'The Future is Now' for In-Car Streaming Audio," Business Wire	April 25, 2011
"Credit Opinion: Sirius XM Radio Inc.," Moody's Investors Service	May 25, 2011
Gain, Bruce, "Car Smart Phones & Smart Driving Coexist?" EBN	May 27, 2011
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Tobin, Dominic, and Nick Rufford, "Driver, This is iDash - Time for a Fuel Stop; The Latest Motoring Apps Turn Your Smartphone or Tablet into a Command Centre for Your Car, Monitoring Performance, Diagnosing Faults and Even Tweeting," The Sunday Times	May 29, 2011
Turner, A., "Do You Want Apps in Your Car?"	May 31, 2011
"Automakers Trail in the Great Gizmo Race," Automotive News	June 10, 2011
"Research Update: Sirius XM Radio Inc. 'BB-' Rating Affirmed, Outlook Revised to Positive," Standard & Poor's	June 28, 2011
"Online Music, Unshackled," <i>The New York Times</i>	July 27, 2011
Casselman, Ben and Justin Lahart, "U.S. News: Companies Shun Investment, Hoard Cash – Reluctance to Spend by Consumers and Businesses Fearful of a Domestic Slowdown Hamstrings Pace of Economic Recovery," <i>The Wall Street Journal</i>	September 17, 2011
"VIX FAQ," CBOE, available at http://www.cboe.com/micro/vix/faq.aspx#2	
"Credit Ratings Definitions & FAQs," Standard & Poor's, available at http://www.standardandpoors.com/ratings/definitions-and-faqs/en/us	
SoundExchange Statement of Account for a Preexisting Satellite Digital Audio Radio Service: Sirius Satellite Radio Inc. - 2007 Calendar Year	
SoundExchange Statement of Account for a Preexisting Satellite Digital Audio Radio Service: XM Satellite Radio Inc. - 2007 Calendar Year	
SoundExchange Statement of Account for a Preexisting Satellite Digital Audio Radio Service: Sirius Satellite Radio Inc. - 2008 Calendar Year	
SoundExchange Statement of Account for a Preexisting Satellite Digital Audio Radio Service: XM Satellite Radio Inc. - 2008 Calendar Year	
SoundExchange Statement of Account for a Commercial Webcaster 2009 Usage (Web Streaming): Sirius XM Radio Inc. - December 2009	
SoundExchange Statement of Account for a Commercial Webcaster 2009 Usage (Web Streaming): XM Satellite Radio Inc. - December 2009	
SoundExchange Statement of Account for a Preexisting Satellite Digital Audio Radio Service: Sirius XM Radio Inc. - 2010 Monthly Liability	
SoundExchange Statement of Account for a Preexisting Satellite Digital Audio Radio Service: XM Satellite Radio Inc. - 2010 Monthly Liability	

Document Title, Bates Numbers

Document Date

SoundExchange Statement of Account for a Preexisting Satellite Digital Audio Radio Service: Sirius XM Radio Inc. - 2011 Monthly Liability

Transcripts of Selected Earnings Calls & Investors Meetings for Sirius XM Radio and Predecessor Companies

Selected SEC Filings for Sirius XM Radio and Predecessor Companies

Selected Analyst Reports for Sirius XM Radio and Predecessor Companies

Bloomberg's Credit Ratings: Sirius XM Radio Inc.

Moody's LT Corp Family Rating: Sirius XM Radio Inc.

Data Sources: Bloomberg; CRSP Data; Thomson Reuters Datastream; U.S. Bureau of Economic Analysis; Capital IQ

Any Other Sources Cited in the Report and Exhibits

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.**

In the Matter of

**DETERMINATION OF RATES AND TERMS FOR
PREEXISTING SUBSCRIPTION AND SATELLITE
DIGITAL AUDIO RADIO SERVICES**

**Docket No. 2011-1
CRB PSS/Satellite II**

**TESTIMONY OF WILLIAM R. ROSENBLATT
(On Behalf of Sirius XM Radio Inc.)**

Introduction and Qualifications

My name is William R. (Bill) Rosenblatt. I am president of GiantSteps Media Technology Strategies, a consulting firm based in New York City that I founded in June 2000. Before founding GiantSteps, I held IT management positions in two large publishing and media companies: Times Mirror Co. (Director of Publishing Systems, 1994-1996) and McGraw-Hill Cos. (1999). In between, I worked at Sun Microsystems in a series of positions related to the media and publishing market as a pre-sales consultant and market strategist. Immediately before founding GiantSteps, I was CTO of Fathom.com, an e-learning startup company founded by Columbia University and backed by other institutions such as the London School of Economics, University of Chicago, Northwestern University, New York Public Library, and Cambridge University Press.

I have consulted to a range of clients on digital content technology strategy, including the areas of digital rights technologies, digital copyright, online content business models, and digital content management and distribution. Clients have included technology companies ranging from early stage startups to companies such as HP, IBM, Microsoft, Adobe, and Sun Microsystems; copyright owners such as Walt Disney Co., Sony Pictures, Warner Music Group, McGraw-Hill, Readers Digest, Pearson, Christian Science Monitor, National Public Radio, and the Associated Press; consumer electronics makers such as Sony Electronics and LG Electronics; and service providers such as British Telecom, Videotron (Canadian cable and broadband operator), UPC

Broadband (European cable and broadband operator), and Beyond Oblivion (US-based digital music startup backed by News Corp. among others). Among my responsibilities at the latter company since early 2009 has been maintaining a detailed competitive analysis of online music offerings.

I have also consulted to or testified before various public policy entities on digital copyright related matters, including the U.S. Copyright Office, Federal Trade Commission, National Academies, European Commission (Information Society and Media Directorate under then-Commissioner Viviane Reding), Association of American Publishers, and Business Software Alliance. I have spoken at conferences on five continents worldwide, including the World Economic Forum (Davos); Congressional Internet Caucus State of the Net; ACM Computers, Freedom and Privacy; SET (Sociedade de Engenharia de Televisão, Brazil); European Union Online Content for Creativity (Slovenia); Asian Festival of Children's Content (Singapore); and Globes Business Conference (Israel).

I have written several technical books including *Digital Rights Management: Business and Technology* (Wiley, 2001) and the chapter "Digital Rights and Digital Television" in *Television Goes Digital* (Springer, 2010), and white papers including *The New Content Monetization Opportunities for Publishers: Best Practices, Strategy and Architecture* (2010).

My experience in legal matters concerning online content services includes nontestifying consulting regarding the following litigations:

- *A&M v. Napster* (music copyright dispute)
- *Allman v. Sony BMG Music Entertainment* (music royalty dispute)
- *Lewis v. Eatsleepmusic Corp (Yahoo!)* (patent dispute related to digital music services)
- *Intertainer v. AOL Time Warner* (antitrust and trade secret misappropriation dispute related to Internet video services)
- *Digital Reg of Texas v. Hustler* (patent dispute related to Internet video services)
- *Perfect 10 v. Giganews* (copyright dispute related to digital images)

In addition, I have served as a trustee of WPRB-FM, a student-run, commercially licensed radio station in Princeton, NJ, since 1984. I served as president of the trustee board (and thus as Chairman of the corporation that operates the station) from 2001-2010, during which time I provided written testimony to proceedings related to webcasting royalties that culminated in the Small Webcaster Settlement Act of 2002.

Overview of Online Audio Market from 2007 to the Present

I have been asked to provide an overview of developments in the market for online (Internet-delivered) audio content since the last satellite radio CRB proceeding in 2007 that have impacted satellite radio or will impact it going forward. The developments that have taken place since 2007 have been dramatic; the market for online audio content – in particular free music services with offerings comparable to Sirius XM – and the availability of that content in automobiles, the primary venue for satellite radio, has expanded significantly.

This report will discuss four key developments during the **2007-2010** time period that, when taken in combination, have fundamentally altered the mobile audio landscape in which Sirius XM competes:

1. **The massive uptake of smartphones for online audio listening**, such as the Apple iPhone, RIM BlackBerry devices, and portable devices running Google's Android platform. These mobile devices can run a wide variety of applications ("apps") that receive music and other content directly over wireless networks – networks available in the vehicle and elsewhere – instead of through wired networks or by connecting to PCs.
2. **Wireless broadband coverage rivaling the footprint of satellite radio**, in terms of geographic area and/or population, which allows consumers to connect their smartphones to the internet and the world of online content.
3. **A critical mass of automobiles with features that make it easy to connect smartphones to car audio systems**, and thus to listen to online audio services received on a smartphone through the car audio system.
4. **The expansion of online audio content** – including music and nonmusic content – that can be accessed on smartphones and enjoyed in the vehicle thanks to the technological developments highlighted in 1-3 above.

These four developments combine to enable a world of online audio entertainment options for consumers in their vehicles – and to allow those consumers to access that content simply by connecting their smartphones to their car stereo systems.

As I will show, recent studies indicate that even now, consumers are now 68% more likely to purchase automotive audio systems that play content from the Internet than those that play satellite radio,¹ and Internet radio by itself is now about as popular as satellite radio in vehicles.² As the latter statistic suggests, these trends are particularly relevant with regard to mobile music services, many of which are now available for free - and provide a wider variety of programming choices than Sirius XM. This development thus heightens the competitive significance of Sirius XM's non-music content, much of which either is not available over mobile audio services³ or, if available, is often priced at fees that currently exceed the subscription fees charged by Sirius XM for its entire package of music and non-music programming.

That said, market trends do not favor Sirius XM. The competitive developments discussed in this report – which were essentially unknown in 2007 – will present increasing and, as Professor Stowell describes, perhaps even life-threatening competitive challenges to the business of satellite radio during the 2013-2017 license term.

1. The Rise of Smartphone “Apps” and the Massive Uptake of Smartphones for Audio Listening

A. The Advent of Wireless Streaming to Smartphone “Apps”

By the time of the last satellite radio CRB proceeding, digital audio services operating over the Internet were well established. To recap, there were (and still are) two primary ways of receiving pure digital audio content:

¹ http://www.twice.com/article/468618-Mobile_Audio_What_Consumers_Want.php, May 23, 2011.

² *The Road Ahead: Media and Entertainment in the Car*. Arbitron/Edison Research/Scarborough Research study, September 2011, based on survey conducted in July 2011. Available at <http://www.slideshare.net/webby2001/the-road-ahead-in-car-entertainment-2011-from-edison-research>. See also “Will the Internet Kill Traditional Car Radio?” *The New York Times*, May 9, 2010, p. AU2: “...one player in this game of digital musical chairs may soon end up without a seat: Sirius XM Radio.”

³ I understand that Sirius XM's expert economist adjusts music service benchmarks to reflect the reality that those services do not offer the same type of non-music content that Sirius XM offers and do not themselves provide the delivery networks and receivers used to access the service.

- **Streaming:** digital audio signals are sent over a network such as the Internet in serial fashion, one bit after another. The user's device receives the digital data, decodes it into audio in real time, and renders it (plays it back) for the user. In most cases, the user's device just plays the content and doesn't store it. Thus streaming is somewhat like a digital version of broadcasting, except that whereas broadcasting is one-to-many by definition, streaming can be one-to-one as well.
- **Downloads:** digital audio is stored in a file, just like a Microsoft Word document or Excel spreadsheet, and sent to the user's device. The user's device stores the file in its non-volatile memory (e.g., hard disk or flash memory) for playback anytime.

By 2007, commercial services based on both technologies were popular; these included Apple iTunes, a download service, and various "streaming Internet radio" services such as SHOUTcast, Last.fm, Yahoo Music, and Live365 that simulcast terrestrial broadcast radio or offered Internet-only simulacra of terrestrial radio.

However, these services were inconvenient or impossible to use on portable devices. With downloads, users had to first download files to their PCs or Macs, then transfer the files from those computers to portable devices (such as iPods) via cables. Technology vendors such as Apple and Microsoft created digital rights management (DRM) schemes that helped ensure that files could be transferred to users' portables but otherwise kept secure from unauthorized use. It was technically possible to download music files "over the air" to certain mobile devices of that time,⁴ but doing so was slow, expensive,⁵ and inconvenient.

As for streaming audio, it was virtually impossible to access on portable devices: wireless network bandwidth and coverage was too limited, and few devices had the technical capabilities required to receive it. In fact, satellite radio was the only truly popular technology in the mid-2000s for delivering streaming audio (as distinct from traditional analog radio) to portable devices (namely satellite radio receivers) in automobiles and elsewhere. It worked around the

⁴ For example, AT&T Mobile Music offered over-the-air downloads on its network in 2006; see http://reviews.cnet.com/cell-phones/at-t-mobile-music/4505-6454_7-32175281.html.

⁵ For example, AT&T's 2006 mobile download service (*supra* note 4) charged \$1.99 per music track, compared to the typical price of 99 cents for Internet downloads over services such as iTunes. This price difference disappeared in later years.

limitations of streaming over wireless telephone networks at that time by using proprietary satellite networks.

The portable digital audio landscape has changed dramatically since then. First, a new class of wireless devices called *smartphones* has emerged. Although definitions of “smartphone” varied somewhat during the early period of such devices,⁶ a smartphone is essentially a portable computer that can run third-party applications and has wireless network connectivity built in. Smartphones can access native network services such as phone calls and text messages, as well as Internet services. Today’s smartphones can connect to the Internet at speeds that are several times those of the old dial-up connections through telephone land lines. As I show below, these speeds are sufficient to transmit audio content at good quality.

Smartphones run operating systems that are analogous to Microsoft Windows for PCs and Mac OS for Apple Macintosh computers. There are several smartphone operating systems (also called “platforms”), but three stand out as most important: Apple’s iOS for iPhones and iPads, RIM’s BlackBerry OS for BlackBerry devices, and Google’s Android for smartphones and tablets from several different manufacturers. Each of these platforms had at least a 24% U.S. market share as of January 2011, and together they comprise 86.3% of the U.S. smartphone market;⁷ other smartphone platforms⁸ currently have much smaller market shares.⁹

The technology transition summarized in the list on p. 3 began in 2007-2008 and ended by 2010. Apple revolutionized the industry with its launch of the iPhone in June 2007.¹⁰ It launched the App Store, its online app catalog, in July 2008.¹¹ The first Android smartphones shipped in early

⁶ For example, early devices that were called “smartphones” would now be called “feature phones,” a lesser class of device.

⁷

http://www.comscore.com/Press_Events/Press_Releases/2011/3/comScore_Reports_January_2011_U.S._Mobile_Subscriber_Market_Share.

⁸ Other smartphone platforms include Microsoft Windows Phone, HP WebOS, Samsung BADA, and a few others.

⁹ In a sense, Android resembles Windows in that both operating systems are designed to be used on devices from multiple makers: whereas one can get Windows PCs made by HP, Dell, Sony, Acer, Toshiba, etc., one can get Android smartphones made by Samsung, HTC, Motorola, Sony Ericsson, LG, etc. iOS only runs on Apple portables just as Mac OS only runs on Mac computers. The same is true for BlackBerry OS and RIM BlackBerry devices.

¹⁰ <http://www.nytimes.com/2007/06/27/technology/circuits/27pogue.html>.

¹¹ <http://www.apple.com/pr/library/2008/07/14iPhone-App-Store-Downloads-Top-10-Million-in-First-Weekend.html>.

2008,¹² and the Android Market (Google’s online app catalog for Android devices) launched in October 2008.¹³ The Apple App Store now contains over half a million different apps;¹⁴ the Android Market has over 200,000.¹⁵

In terms of wireless infrastructure, 2007 was the year when the first major U.S. wireless carriers, Verizon Wireless and Sprint, completed their nationwide buildouts of 3G networks, which (as explained below) are fast enough to deliver music and other audio content with good quality.

Apple and other manufacturers also make tablet computers, which for these purposes we can treat as large-screen smartphones. They run the same operating systems (mainly iOS and Android) and the same apps, they are portable, and many of them use the same wireless networks as smartphones.¹⁶ Therefore, when I use the term “smartphone” or “mobile device,” it should be interpreted to include tablets as well.

Web browsers are pre-installed on smartphones. Mobile web browsers are basically identical to traditional PC or Mac-based web browsers in terms of functionality, though not as easy to use due to smartphones’ smaller screen sizes.

More importantly, smartphones are also capable of running other programs – commonly known as applications, or “apps,” – which can provide smartphones with access to internet-based content services that one might otherwise view on a mobile browser, but which have been specifically designed to be easier to use on small portable devices. Importantly, whereas a web browser is a general purpose software program – one uses the same mobile browser to visit many different websites – mobile apps are designed to be service-specific: e.g., one uses the Pandora app to listen to music through the Pandora service, the New York Times app to read stories from the New York Times, etc.

Accordingly, such apps are designed to take advantage of the services’ various programming features in a way that is optimized for easy use on smartphones.

¹² <http://www.wired.com/gadgetlab/2008/09/official-first/>.

¹³ http://www.pcworld.com/article/152613/google_launches_android_market.html.

¹⁴ <http://www.apple.com/iphone/built-in-apps/app-store.html>.

¹⁵ http://www.computerworld.com/s/article/9218654/App_Store_Android_Market_spur_explosive_app_download_growth.

¹⁶ Some just use Wi-Fi for Internet access. The same is true for the Apple iPod Touch, which is essentially an iPhone without the phone.

Although smartphones come with some apps (such as web browsers) pre-installed, users can access vast online catalogs of apps that they can select, download, and install with just a few button pushes or taps on a touch screen.¹⁷ Just as PCs and Macs run applications from various different software vendors, many companies supply apps to smartphones' online catalogs. The biggest online app catalogs – those for iOS and Android – contain hundreds of thousands of apps, including dozens or hundreds of apps that access digital audio content – including, as explained in Section 4 below, the types of music and non-music content offered by Sirius XM – over the wireless Internet.

Thus, just as it is possible to use a mobile phone in a car, it is now possible to acquire one of many different smartphone models, select and install a variety of digital audio apps, and use the apps in the vehicle (and elsewhere) to access audio content over high-speed wireless networks with sufficient bandwidth to support high quality audio. It is no longer necessary to download files to PCs or Macs, transfer them to portable devices by cable, and choose from previously-loaded digital audio content in the car. Instead, consumers can take advantage of a large number of audio content services that run on smartphones and run them at any time, without any advance preparation and without limiting content to the files transferred onto the smartphone.

B. The Massive Growth of App-enabled Smartphones for Audio Listening

Smartphones are now highly popular: in 2010, 65 million smartphones shipped in the United States and Canada.¹⁸ To put this number in perspective, 84 million PCs were sold in the U.S. in the same year.¹⁹ The wireless industry trade association CTIA estimates that 95.8 million smartphones were in active use in the United States during the first half of 2010, up from 61.2 million the previous year, a 57% increase.²⁰

The growth of the smartphone market has been so rapid that smartphones have outpaced satellite radio as mobile devices for audio listening. As of September 2011, Sirius XM had 21 million subscribers in the U.S. and Canada. The number of smartphone owners who actually use their

¹⁷ In fact, the process of choosing, acquiring, and installing apps is easier on smartphones than it typically is on PCs and Macs, because those computing platforms date back to a time when downloading applications over the Internet was not practical.

¹⁸ <http://www.canalys.com/newsroom/north-american-smart-phone-shipments-exceed-65-million-units-2010>.

¹⁹ http://www.e forecasts.com/products/ES_pcww1203.htm.

²⁰ <http://www.ctia.org/media/press/body.cfm/prid/2133>.

devices to listen to music appears to be greater than this number. The comparison is shown in Figure 1 below.

Two recent studies enable us to estimate the number of smartphone users who listen to music on their devices:

- A 2010 Nielsen study put percentage of smartphone users who listen to music on their devices at 42%²¹ or, using the 95.8 million figure for U.S. smartphones in use, 40.2 million. Because I am only considering the three major smartphone platforms, which represent 86.3% of the U.S. smartphone market,²² I have adjusted this number down to **34.7 million**.
- This figure is corroborated by an NPD Group study from 2010 that found that 17% of all U.S. web users listened to music on mobile devices (including but not limited to smartphones) – up from 12% in 2009.²³ Given that there were 240 million Internet users in the United States in June 2010,²⁴ this equals about 40.8 million mobile music users.²⁵ This number is larger than the 34.7 million Nielsen smartphone figure derived above, but it includes mobile devices other than big-three-platform smartphones – for example, iPods and other mobile phones.²⁶

To put these numbers in perspective with respect to terrestrial broadcast radio, Arbitron data suggests that well over 100 million people in the U.S. listen to terrestrial radio in vehicles. While I have not found any data specifying the precise number of U.S. car-radio listeners, Arbitron estimates that there were about 241 million total U.S. radio listeners (including Internet radio) in September 2011²⁷ and that 64% of radio listening is done “away from home.”²⁸ Putting

²¹ <http://blog.nielsen.com/nielsenwire/wp-content/uploads/2010/09/NielsenMobileAppsWhitepaper.pdf>, results of August 2010 survey.

²² *Supra* note 7.

²³ http://npd.com/press/releases/press_110525.html.

²⁴ Internet Telecommunications Union, available at <http://www.internetworldstats.com/am/us.htm>.

²⁵ The same study gave 2009 figures of 12% of web users, which works out to 27.4 million mobile music users for that year.

²⁶ The Nielsen study mentioned above also found that 40% of U.S. mobile phones are smartphones, a finding very closely corroborated by the Pew Internet & American Life Project (39%). See http://blog.nielsen.com/nielsenwire/online_mobile/40-percent-of-u-s-mobile-users-own-smartphones-40-percent-are-android/; <http://www.pewinternet.org/Reports/2011/Smartphones.aspx>.

²⁷ <http://arbitron.mediaroom.com/index.php?s=43&item=783>.

²⁸ Arbitron Radio Today study, 2011.

these figures together (and recognizing that “away from home” includes locations other than vehicles) suggests an estimated upper bound of 154 million in-vehicle radio listeners. Terrestrial radio obviously remains a key competitor for Sirius XM in addition to the mobile services described here.

What matters are not the precise numbers, but the trend, as revealed in Figure 1. Figure 1 uses the Nielsen-derived figure of 34.7 million for 2010 and adjusts backwards for 2009 using the CTIA growth rate of 57% from 2009 to 2010. As the figure shows, music-listening smartphone owners appear to have outnumbered satellite radio subscribers sometime in early 2009.

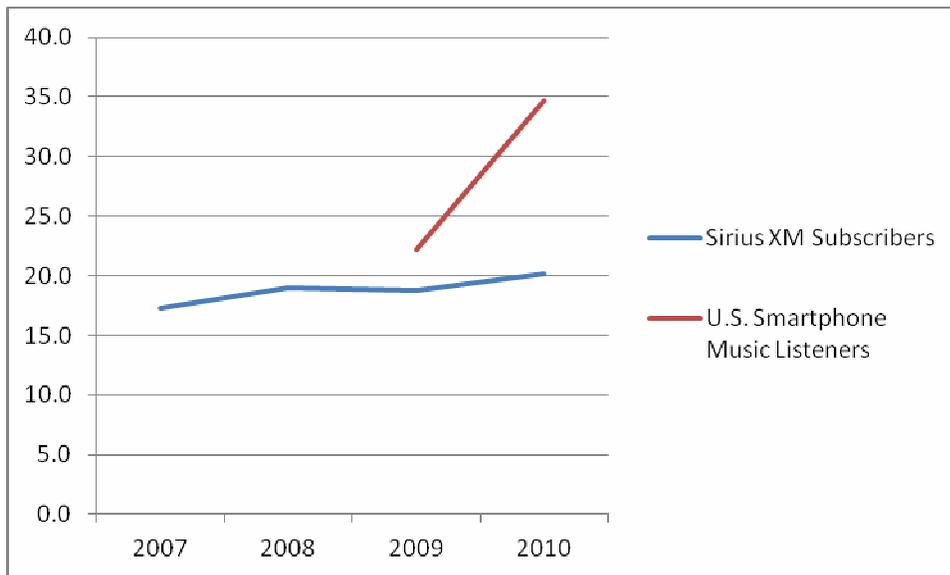


Figure 1: Sirius XM subscribers²⁹ versus North American smartphone music listeners (millions).

There is bound to be some overlap between the two sets of device owners (some mobile app listeners may also subscribe to satellite radio). But satellite radio subscribers clearly see smartphones as cutting into the satellite radio market. For example, Satellite Radio Playground, a website that describes itself as “Sirius XM News and Discussion,” has run articles with titles such as “Sirius XM’s (NASDAQ:SIRI) Competition: Pandora Issues New Apps, Spotify Rolls

²⁹ Sirius XM offers “News, Sports and Talk” subscriptions that do not include music; for a fair comparison, those subscribers should not be included. However, according to internal Sirius XM figures, there are fewer than 11,000 such subscribers as of November 2011 – not even a rounding error compared to the total of 21 million.

Back Free Service”³⁰ and “Sirius XM Radio’s (NASDAQ:SIRI) Competition: MOG Heading for Cars.”³¹

In addition, market studies confirm the increased use of smartphones for audio listening in cars. A May 2011 survey by MarketSource for TWICE (*This Week in Consumer Electronics*) found that many consumers already use their mobile devices for in-car music listening or are interested in doing so:

- 57% of respondents said they would be interested in listening to Internet radio and music services through their car stereo systems.
- 51% are interested in replacing their car stereo in the next year with one that has an iPod/iPhone dock.
- 64% also said they would be interested in buying an adapter in the next year to add this feature to their existing car stereo head unit.
- 52% said they already listen to music from an iPod, iPhone or other portable audio player through their car stereo systems, regardless of input type (see Table 1), up from 36% in a 2010 survey.³²

The survey did not measure the percent of respondents who actually *listen* to Internet audio content services in their cars now. Nevertheless, this survey did establish that smartphones for in-car listening are becoming more popular than satellite radio for new car buyers. It says, “Only 16 percent of people who don’t own satellite radio are very or somewhat interested in getting car satellite radio in the next year, down from last year’s 24 percent.”³³ If we add this 16% to the 18% that have active satellite radio subscriptions,³⁴ we get 34% of respondents who already use satellite radio or are interested in getting it. This is far lower than the 57% interest in in-vehicle Internet music services cited above; it means that 68% more people are currently interested in in-vehicle Internet listening than are interested in satellite radio.

³⁰ <http://satelliteradioplayground.com/2011/04/18/sirius-xms-nasdaqsir-competition-pandora-issues-new-apps-spotify-rolls-back-free-service/>

³¹ <http://satelliteradioplayground.com/2011/06/07/sirius-xm-radios-nasdaqsir-competition-mog-heading-for-cars/>.

³² *Supra* note 1.

³³ *Supra* note 1.

³⁴ *Supra* note 1; 30% of respondents have satellite radio receivers in their cars, and of these, 61% have active subscriptions.

For actual listening habits, we can turn to two even more recent studies. One was carried out by Arbitron, Edison Research and Scarborough Research in July 2011. It states, among other things:

- Whereas 8% of respondents use satellite radio in their cars, 6% use Pandora, 4% use Internet streams of terrestrial radio, and 2% use Internet streaming services other than Pandora. The latter three segments may overlap (i.e., they don't necessarily add up to 12% of respondents), but it would be fair to conclude from these findings that Internet audio services are about as popular as satellite radio.
- Respondents claimed to listen to "Digital audio using iPod/cell phone" 8% of the time in their cars, compared to 5% for satellite radio. Because that 8% includes non-Internet audio (e.g. files on iPods), it is again reasonable to surmise that mobile Internet audio services have popularity roughly equal to that of satellite radio.³⁵

In addition, a study by MAGNAGLOBAL covering the third quarter of 2011 reports that 11 million people in the U.S. listen to Pandora in their vehicles, up from 6.3 million in the previous year.³⁶

2. Mobile Broadband Coverage Now Rivals the Footprint of Satellite Radio

Smartphones are only good for audio listening (and, as we discuss in the next section, audio in cars) if sufficient network connectivity is available throughout the user's listening period. Satellite radio covers all of North America from satellites augmented by terrestrial repeaters; only in certain areas hidden from the sky and not covered by repeaters, such as valleys and tunnels, is reception unavailable.

3G wireless data service, which Verizon Wireless began to deploy in the U.S. market in late 2003, features bandwidth in the hundreds of kilobytes per second (KBps). Digital audio bit rates are measured in kilobits per second (kbps) while wireless signal bandwidth is measured in kilobytes per second (KBps). 1 KBps equals 8 kbps,³⁷ meaning that a bandwidth of hundreds of KBps is capable of handling digital media signals totaling *thousands* of kbps. Modern streaming

³⁵ *Supra* note 2.

³⁶ MAGNAGLOBAL Media Access Quarterly, October 2011, p. 26.

³⁷ This is the general mathematical rule; there are a few minor exceptions in the realm of telecommunications.

Internet music services tend to use at least 64kbps bit rates. In short, 3G bandwidth is more than enough to accommodate superb digital audio quality.

3G is standard data service on all of the major mobile carriers today throughout the country. The emerging 4G standard is even faster, with typically 20-100 times the bandwidth of 3G; in fact it has been cited specifically by industry observers as a threat to satellite radio.³⁸

The major wireless carriers completed their nationwide rollouts of 3G service between 2007 and 2010. Of the four major U.S. wireless carriers:

- **Verizon Wireless** completed its buildout of high-speed EV-DO (3G-based) service in **June 2007**.³⁹ It currently covers more than 280 million people, representing over 91% of the current U.S. population, with 3G speeds of 400 KBps or greater.⁴⁰ Verizon Wireless is in the process of rolling out LTE (Long Term Evolution), an even higher-speed service.
- **Sprint's** EV-DO 3G service reaches over 250 million people.⁴¹ It completed its EV-DO rollout at the **end of 2007**.⁴²
- **T-Mobile's** 4G service, with average download speeds of 10 Mbps, reaches over 200 million people.⁴³ (Coverage data on its 3G service is not available publicly but surely reaches more than that.) T-Mobile completed the bulk of its initial 3G rollout in **late 2008**.⁴⁴
- **AT&T Mobility** was the last of the four major carriers to complete its 3G rollout, despite having exclusivity on the Apple iPhone until 2011. It completed the 3G rollout in **December 2010**.^{45,46}

³⁸ <http://www.istockanalyst.com/finance/story/5286872/sirius-faces-increasing-competition-as-4g-adoption-rises>.

³⁹ http://aboutus.vzw.com/bestnetwork/network_facts.html.

⁴⁰ <https://www.verizonwireless.com/b2c/mobilebroadband/?page=coverage>.

⁴¹ <http://www.mobile-broadband-reviews.com/best-3g-coverage.html>.

⁴² http://newsroom.sprint.com/article_display.cfm?article_id=571.

⁴³ <http://t-mobile-coverage.t-mobile.com/4g-wireless-technology>.

⁴⁴ <http://newsroom.t-mobile.com/articles/t-mobile-3G-wireless-broadband>.

⁴⁵ <http://www.att.com/gen/press-room?pid=18859&cdvn=news&newsarticleid=31452&mapcode=wireless-networks-general/broadband>. This was the last of AT&T's many "AT&T Expands 3G Mobile Broadband to [geographic area]" press releases.

⁴⁶ Population numbers specific to AT&T Mobility's 3G coverage are not available, because AT&T's population numbers conflate its 3G and 2G networks; the latter may not be fast enough to support good quality audio streaming.

It is currently possible to get mobile coverage in the United States at speeds fast enough to support audio quality at least as good as that of satellite radio -- and in the vast majority of locations, including a few that satellite radio doesn't reach.⁴⁷

3. A Critical Mass of Automobiles Now Offer Features Allowing the Easy Use of Online Audio Services Through Vehicle Entertainment Systems

The third critical factor driving the change in the digital audio landscape is how easy it has become to use the mobile devices and national mobile broadband networks discussed above to listen in automobiles.

Since the last SDARS royalty proceeding, it has become increasingly easy for consumers to bring their digital music and podcast (typically spoken-word audio content) collections into their cars. As explained previously, playing digital music in one's car usually meant transferring files from a PC or Mac to an iPod or other portable device and connecting that device to the car stereo.

As also described in the preceding sections, the more dramatic and more recent development is the ability for users to receive internet-based audio content services "over the air" in their automobiles via their smartphones. In the following, I will describe how these services can be heard easily through car audio systems and, increasingly, accessed via controls in the vehicles themselves. There are several ways to play audio from mobile devices through an automotive audio system, as shown in Table 1.

⁴⁷ For example, some wireless carriers provide strong signals in tunnels in cities such as New York and Boston, whereas satellite radios receive no signals there. Wireless carriers also sometimes provide signals in valleys that satellite radio does not reach.

Method	Typical Price	Picture
<p>1. Cassette adapter Output audio from a portable device through a transducer that feeds the play head of an in-dash cassette player.</p>	\$23 ⁴⁸	
<p>2. Wireless FM transmitter Transmit the output of a portable device on an FM frequency that a car radio can receive.</p>	\$25-80 ⁴⁹	
<p>3. Wired FM modulator Feeds an audio signal to a car FM radio by hardwire connection to the antenna jack on the back of the unit, as opposed to actual FM signal transmission as above.</p>	\$50 ⁵⁰	
<p>4. Direct audio connection Sends the audio signal directly from a portable device to the automotive audio system by means of a simple cable (typically 3.5mm stereo), iPod/iPhone dock, or Bluetooth wireless connection.</p>	Cable: \$2-8, ^{51,52} otherwise free	
<p>5. In-vehicle infotainment system integration Technology built into cars that enables integration of features and functions (not just the audio signal) of online audio content services into car controls and displays.</p>	Vehicle option	

Table 1: Options for connecting portable music player to car audio system.

Photo sources: Scosche Industries, except Amazon.com for audio cable and MOG for in-dash service integration.

⁴⁸ <http://www.radioshack.com/product/index.jsp?productId=3932756>.

⁴⁹ <http://www.radioshack.com/search/index.jsp?kwCatId=&kw=wireless%20fm%20transmitter&origkw=wireless+fm+transmitter&sr=1>.

⁵⁰ http://www.crutchfield.com/p_142FMMOD02/Scosche-FM-MOD02.html?tp=1701.

⁵¹ http://www.amazon.com/3-5mm-Stereo-Male-Cable-ft/dp/B000GZ6ZQW/ref=sr_1_9.

⁵² <http://www.radioshack.com/family/index.jsp?categoryId=4382059&allCount=12&fbc=1&f=PAD%2FCable+Type%2FMini+plug&fbc=Cable+type%2FMini+plug&filterName=Cable+type&filterValue=Mini+plug>.

The first three of the schemes shown in Table 1, shaded in gray, are “kludges”: they have the disadvantages of higher price, inferior sound quality, and/or the need for technical expertise to install or use them.^{53,54} For example:

- The cassette adapter suffers from mediocre sound quality and potential mechanical problems;⁵⁵ furthermore, new cars stopped including cassette players in 2010.⁵⁶
- The wireless FM transmitter option also suffers from inferior sound quality as well as potential interference from other FM signals.⁵⁷
- The wired FM modulator provides good FM-quality sound but requires the in-dash car stereo to be removed to access the antenna input on its rear, an operation best left to professionals.⁵⁸

The last two of the schemes in Table 1, however, constitute the breakthrough that makes the expanded choice of online audio content services easily available in automobiles. The possibility of connecting one’s portable device with the car audio system by connecting a simple cable to a “jack” (input) on the front of the car stereo, through a Bluetooth wireless connection, or through an iPod dock in the vehicle, is a major change; it is the first scheme that combines excellent sound quality with real convenience and ease of use, and it has grown with great speed. Direct audio input capability in new vehicles started reaching critical mass starting with the 2007 auto model year, when 60% of new models included it.⁵⁹ This figure grew to **90%** in 2008.^{60,61}

Direct audio inputs, whether by cable or Bluetooth, are sufficient to make it easy to use mobile

⁵³ See for example http://www.crutchfield.com/S-Q5A6lCpEJmK/learn/learningcenter/car/satellite_faq.html#9.

⁵⁴ I have had personal experience with the first three methods in connecting both a satellite radio receiver and smartphone to my car audio system. I can attest that the FM Modulator was the only option with good sound quality and yet the only option that I had to pay a professional technician to install. The sound quality of wireless FM transmitters is particularly poor.

⁵⁵ http://www.ehow.com/way_5463508_car-cassette-adapter-problems.html.

⁵⁶ <http://www.nytimes.com/2011/02/06/automobiles/06AUDIO.html>.

⁵⁷ <http://www.popularmechanics.com/technology/how-to/gadgets/4307160> (“Sound Quality: Poor”).

⁵⁸ http://www.crutchfield.com/S-Q5A6lCpEJmK/learn/learningcenter/car/satellite_faq.html#9.

⁵⁹ Telematics Research Group (now iSuppli), http://www.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20061219005774&newsLang=en.

⁶⁰ <http://techtips.salon.com/ipod-compatible-car-stereos-794.html>.

⁶¹ The average age of household motor vehicles in the United States was 9.38 years in 2009. (Summary of Travel Trends, 2009 National Household Travel Survey. U.S. Department of Transportation, Federal Highway Administration, June 2011. Available at <http://nhts.ornl.gov/2009/pub/stt.pdf>. 2009 figures are the latest available from the FHA.) This means that by the end of the upcoming royalty rate period (2017), over half of the cars on the road in the U.S. will have direct audio inputs (because half of the cars on the road will be 2008 model year or newer, i.e. introduced in Fall 2007 or later).

audio apps such as those described in this report in cars – and to do so right now in almost every new car.

The final entry in Table 1 represents an even more recent trend: that of automakers integrating mobile wireless audio services into a car’s controls and displays in a fashion that appears to be similar to the user’s current radio interface. With such “connected car” integration, the user no longer needs to interact with the music app on his or her mobile device (with the signal then transmitted to the vehicle audio system); rather, the user controls the app with the same audio-system controls (buttons, dials, touch-screens, etc.) he or she would use to control terrestrial radio, satellite radio, or other audio sources such as CDs.⁶²

Some car models have had iPod/iPhone “docks,” as opposed to (or in addition to) audio jacks, since BMW introduced the concept in 2007. New BMW models enable owners to plug their iPods into a cable in the glove compartment and control the device through buttons on the steering wheel and center console of the car.⁶³ Other automakers have followed suit, so that most automakers now offer optional iPod integration. There are also various after-market products that provide iPod docks for cars.⁶⁴

In addition to iPod integration, vehicle makers have begun to offer more sophisticated in-vehicle integrations of audio content than the iPod’s simple download-and-play capability. A handful of so-called infotainment platforms for integrating data services with automobiles are starting to appear, many of which incorporate online music services described in the section below, such as Pandora, Slacker, and MOG. A prominent example of an infotainment platform is Ford/Microsoft Sync, which enables a wide range of data services to be integrated with Ford vehicles through their controls, display panels, and audio systems. Services that can be

⁶² This functionality can actually work in one of two ways, depending on whether the wireless connectivity comes through a smartphone or from within the car itself. In the former version, the transmission is still received via a smartphone app, but viewed and controlled on the car radio interface rather than the screen of the smartphone; in the latter version, the wireless receiver and app are built into the car radio itself, with no mobile device needed. See for example <http://arstechnica.com/gadgets/news/2011/03/in-car-computing-smartphones-and-the-future-of-cars.ars> and <http://bits.blogs.nytimes.com/2011/10/13/the-next-boom-in-mobile-devices-is-the-car>.

⁶³ http://www.bmw.com/com/en/owners/accessories/ipod/ipod_function.html.

⁶⁴ <http://www.apple.com/ipod/car-integration/#mercedes>.

integrated through Sync include hands-free calling, navigation, location-based search, and traffic information as well as various types of audio content.⁶⁵

Similarly, BMW's BMW Apps platform was released in February 2011.⁶⁶ It currently includes integrations of **iTunes**, **Pandora**, **MOG**, and **Internet radio**. (These music providers are described in more detail in Section 4 below.) Toyota's Entune infotainment system, from Harman (parent company of such well-known audio brands as Harman-Kardon and JBL), launched in January 2011;⁶⁷ it currently includes **Pandora** and **iHeartRadio**.

Finally, **Pioneer Electronics**, a leading maker of automotive audio systems, offers an infotainment platform called Zypr,⁶⁸ which is designed to integrate with vehicles from multiple automakers. Service providers can access Zypr by means of a freely available API (application programming interface). **Slacker** (also see Section 4 below) is one of a handful of services that announced in January 2011 that it will integrate with Zypr.⁶⁹

Some of the more prominent digital music services have in-vehicle integrations, either through one of the above-mentioned platforms or otherwise, including the following:

- **Pandora** has in-vehicle integrations with several automakers, including Ford through Sync.⁷⁰ Pandora added integration with Mercedes vehicles in 2010,⁷¹ and BMW,⁷² Scion,⁷³ Buick,⁷⁴ Cadillac,⁷⁵ Hyundai,⁷⁶ Lincoln,⁷⁷ and Toyota⁷⁸ in 2011, with plans for more such integrations in the near future.⁷⁹ A video demo of the Pandora app running on

⁶⁵ <http://www.ford.com/syncmyride/>.

⁶⁶ http://telematicsnews.info/2011/02/23/bmw-officially-announces-apps-feature-and-smartphone-integration_f2232/.

⁶⁷ http://www.harman.com/EN-US/Newscenter/Pages/HarmanToyotaEntune_01042011.aspx.

⁶⁸ Formerly PAIS for Platform for Aggregation of Internet Services.

⁶⁹ <http://www.pioneerelectronics.com/PUSA/Press-Room/Car-Audio-Video/Pioneer+Cloud+API+for+voice+controlled+Internet+mashups+available+now>.

⁷⁰ http://reviews.cnet.com/8301-13746_7-10243239-48.html.

⁷¹ <http://content.usatoday.com/communities/driveon/post/2010/10/mercedes-benz-interface-pandora-ipod-iphone/1>.

⁷² <http://www.bmwusa.com/standard/content/uniquely/bmwconnecteddrive/apps.aspx>.

⁷³ http://blog.pandora.com/archives/press/2011/07/pandora_broaden.html.

⁷⁴ http://blog.pandora.com/archives/press/2011/10/buick_adds_pand.html.

⁷⁵ http://blog.pandora.com/archives/press/2011/10/pandora_announc_2.html.

⁷⁶ http://blog.pandora.com/archives/press/2011/09/hyundai_offers_1.html.

⁷⁷ http://blog.pandora.com/archives/press/2011/10/lincoln_launch.html.

⁷⁸ <http://www.prnewswire.com/news-releases/pandora-hits-the-road-with-toyota-131211184.html>.

⁷⁹ See Equity Research: Pandora Media, Wells Fargo, July 25, 2011: "We eventually see competition with Sirius XM in the satellite radio market as Pandora becomes embedded in automobiles." (p. 9)

Toyota's Entune infotainment system is included as an exhibit to my testimony and shows how seamless the functionality has become.⁸⁰ Several makers of third-party car audio equipment also have integrated Pandora into their products.⁸¹

- **MOG** has an in-vehicle service for BMW Mini cars, which it demonstrated in March 2011.⁸² BMW is currently adding MOG to its BMW Apps infotainment system on other models; a video demo of this app is available as well and is also included as an exhibit to my testimony.⁸³ More recently, MOG has also been working to integrate its service with several makers of in-dash smartphone and service integration technology, including Airbiquity, which works with Ford, and Tweddle, which works with Toyota.⁸⁴ These developments should result in MOG being integrated into Ford and Toyota models in the near future.
- **iHeartRadio** has in-vehicle integration with Toyota⁸⁵ and Ford⁸⁶ vehicles. A video demo of the app in Toyota's Entune system is included as an exhibit to my testimony.⁸⁷

Such integrations are evidence that automakers are eager to expand audio entertainment options beyond the usual array of terrestrial radio, CD players, and satellite radio. iSuppli predicted in an August 2011 study that sales of cars with in-vehicle music service integration will grow to 10.9 million units in the United States by 2018.⁸⁸

A popular venue for introduction of these in-vehicle services is the Telematics trade show in Detroit, which takes place in June every year. It is especially clear from events at the 2011 Telematics show that in-vehicle online audio content services are aimed squarely at disrupting

⁸⁰ See SXM Dir Ex. 15 (available at <http://www.youtube.com/watch?v=ZkaKQOY188w>) (Pandora demo starting at 6 minutes 37 seconds).

⁸¹ http://blog.pandora.com/archives/press/2011/07/pandora_broaden.html.

⁸² http://mog.com/media_center/press_releases?pr_id=18.

⁸³ See SXM Dir Ex. 16 (available at <http://www.youtube.com/watch?v=drS2hYO2uUY>).

⁸⁴ <http://wheels.blogs.nytimes.com/2011/06/07/mog-streaming-music-service-syncs-up-with-car-audio-manufacturers/>.

⁸⁵ <http://www.toyota.com/entune/what-is-entune/apps/iheartradio.html>.

⁸⁶ http://reviews.cnet.com/8301-13746_7-20108847-48/ford-integrates-iheartradio-blackberry-app-with-sync/.

⁸⁷ See SXM Dir Ex. 15 (available at <http://www.youtube.com/watch?v=ZkaKQOY188w>) (iHeartRadio demo starting at 2 minutes 45 seconds).

⁸⁸ <http://www.isuppli.com/Automotive-Infotainment-and-Telematics/News/Pages/Automotive-Internet-Radio-Market-Set-to-Boom.aspx>. Note that iSuppli's use of the term "Internet radio" encompasses all types of streaming music services, including interactive streaming services such as Spotify and custom radio services such as Pandora and Slacker.

the satellite radio business.⁸⁹ (Indeed, this is part of a larger trend whereby music service providers are pushing aggressively into other devices previously dominated by other media types, such as Internet-enabled table-top radios and TV set-top boxes.)

As noted above, direct audio connections such as audio cable, iPod/iPhone docks, and Bluetooth are already well established, built into most new vehicles since 2009, and more than adequate for easy use of mobile audio services in most automobiles today. In other words, I view in-vehicle service integration as an important development but not strictly necessary for the enjoyment of audio content services in vehicles.

4. The Market for Mobile Online Audio Content Applications Has Become Firmly Established Since 2007

The final piece of the puzzle is the content itself that can be accessed through a connected smartphone in the vehicle. The market for mobile music in particular has become well-established since 2007. In addition, some of the non-music content that Sirius XM offers has become available via mobile apps – some at a price, some free. Users can now choose from a variety of audio content and features that in many cases rival the offerings of Sirius XM and, as discussed above, stream it in their cars through their car audio systems. This development presents serious threats to the sustainability of Sirius XM’s business.

In the section that follows, I discuss the major programming types represented on Sirius XM.

A. Music Content Available to Mobile Listeners

I start with music, which makes up roughly half of Sirius XM programming depending on the subscription package that the user chooses. Many innovations have occurred in online music since 2007, owing in part to the music industry’s search for alternative models that would entice consumers into use of legitimate (as opposed to “pirate”) services, as well as consumers’ increasing level of comfort with Internet music services that do not emulate pre-Internet models such as record stores and radio.

⁸⁹ <http://wheels.blogs.nytimes.com/2011/06/07/mog-streaming-music-service-syncs-up-with-car-audio-manufacturers/>: “It puts some pressure on the terrestrial stations, but satellite radio is at the greatest risk[.]”

Table 2 lists, in the leftmost column, the major online music services (or, in the case of “Internet Radio,” categories of services) available via mobile apps at the time of this writing. (For the sake of comparison, the table includes the 2001 launch of Sirius XM on satellite radio receivers. As the table also shows, Sirius XM became available through apps on the three major smartphone platforms by 2010.) The features listed in the remaining columns, which are explained below, are presented, from left to right, in rough chronological order of introduction into the market. Shaded entries denote the features for which the listed services are primarily known or marketed. A date instead of a checkbox denotes the year in which the given feature was added to the service, e.g. Apple iTunes introduced shared playlists in 2010 (in its iTunes Ping feature). Note that aside from Sirius XM, Table 2 begins in 2007, which coincidentally happens to be the year in which the current SDARS royalty rates were set.

Digital Music Service	Mobile Launch	(a) Curated Playlists	(b) Permanent Download	(c) Custom Playlists	(d) Interactive Streaming	(e) Shared Playlists	(f) Cloud Sync
Sirius XM	2001	<input checked="" type="checkbox"/>					
iTunes	2007		<input checked="" type="checkbox"/>			2010	2011
Internet radio	2007	<input checked="" type="checkbox"/>					
Amazon MP3	2008		<input checked="" type="checkbox"/>				
Pandora	2008	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
Last.fm	2008	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
Rhapsody	2009	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Naxos Music Library	2009	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Slacker	2009	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	2011		
YouTube	2009	<input checked="" type="checkbox"/>			Limited		
Sirius XM mobile apps	2010	<input checked="" type="checkbox"/>					
Napster	2010	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
MOG	2010	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Rdio	2010	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7Digital	2011	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Spotify	2011	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PLAY by AOL Music	2011	<input checked="" type="checkbox"/>			Limited	<input checked="" type="checkbox"/>	
iHeartRadio Custom Radio	2011	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			

Table 2: Major digital music services with apps for mobile devices that operate over wireless networks. ^{90,91}

⁹⁰ See below for an explanation of “Streaming Internet radio.”

⁹¹ “iHeartRadio Custom Radio” refers to Clear Channel’s launch in September 2011 of a “custom radio” feature (as described below) into its iHeartRadio app. Previously, and as explained below, iHeartRadio had mainly been a service that simulcasts many of Clear Channel’s terrestrial radio stations on the Internet. See

Table 2 shows a steady pace of innovation in mobile Internet music services from 2007 to the present. The thick stepped internal line indicates how services have added features over time, starting with permanent over-the-air downloads in 2007 and reaching cloud sync in 2010 (these features are described below).

The services listed in Table 2 meet the following criteria:

- They run on at least one of the three major mobile platforms listed above (or, in the case of Sirius XM in 2001, on satellite radio receivers);
- They have licenses to content from a plethora of record companies, e.g. most or all of the major music companies⁹² and/or major independent label aggregators;⁹³
- They are in full production at the time of this writing; and
- Their easy availability on mobile devices and the widespread proliferation of apps was largely unforeseen as of the time of the last CRB SDARS proceeding.

The table does not include well-known services that do not have licenses from copyright owners. Examples of these include Amazon Cloud Player,⁹⁴ Google Music, MP3tunes, and Grooveshark.⁹⁵

I start by briefly discussing the entry “Internet Radio,” which appears in Table 2 after “Sirius XM” and “iTunes.” Many internet radio services now provide smartphone apps for easy access to their music streams on mobile devices. Such apps first became available in 2007.⁹⁶

<http://www.billboard.biz/bbbiz/industry/digital-and-mobile/clear-channel-echo-nest-team-up-for-heartradio-1005338342.story>.

⁹² EMI Recorded Music, Sony Music Entertainment, Universal Music Group (UMG), and Warner Music Group are the “majors.” At this writing, UMG has agreed, pending regulatory approval, to acquire EMI Recorded Music.

⁹³ Examples include The Orchard, IODA (Independent Online Distribution Alliance), and INgrooves.

⁹⁴ Amazon Cloud Player is an add-on capability to the Amazon MP3 app for Android that was introduced in 2011. It is not licensed by music copyright owners.

⁹⁵ Grooveshark has a license from EMI which resulted from the settlement of copyright litigation in 2009; see <http://www.wired.com/epicenter/2009/10/emi-drops-suit-against-grooveshark-music-service-licenses-it-instead/>. However, it is still a defendant in copyright litigation brought by Universal Music Group.

⁹⁶ There were some rudimentary music services available on mobile phones prior to 2007; Sirius itself offered a subset of its satellite channels for streaming through Sprint as early as 2005, and XM did the same through Alltel as early as 2006. See also *supra* note 4. The advent of smartphones and streaming apps in 2007, however, presented a fundamentally different and improved user experience, and an entirely new level of consumer acceptance.

It is important to note that “Internet radio” or “streaming radio” is a broad term that encompasses many different services with (for these purposes) similar programming features. Many so-called “streaming radio” or “Internet radio” services play music through fixed curated playlists (see below), in the same way that Sirius XM does: the music selections are predetermined (although not disclosed to users in advance), are not generated on the fly, and are licensed under 17 U.S.C. §114(d). Many of these are simulcasts of terrestrial broadcast radio, enabling consumers to listen to terrestrial stations anywhere and not just in their terrestrial signal coverage areas. Other Internet-only services, such as LAUNCHcast (now Yahoo! Music), enable individual users to create “custom” playlists influenced by their tastes, yet are not fully on-demand or “interactive.”⁹⁷

Some of the larger internet radio services do not necessarily program stations themselves, but rather aggregate hundreds, thousands, or even tens of thousands of streaming radio stations/channels⁹⁸ through a single app. Representative streaming radio aggregators are shown in Table 3. (The columns showing numbers of non-music channels by programming type are relevant to the discussion of non-music programming below.)

App	Launched	Platforms	Total Channels	Sports	News/Talk	Comedy	Old Time Radio
SHOUTcast	2007	All	49,000+	150	750	26	36
iHeartRadio	2008	All	750+	35	82	2	n/a
TuneIn Radio	2009	All	50,000+	1,625+	1,000+	443	102
vTuner	2009	iPhone, Android	45,000+	399	318	47	33
Live365	2010	iPhone, Android	5,000+	45	248	87	85
Radio.com	2010	iPhone, Android	600+	15	39	0	0
Reciva iRadio	2010	iPhone	100,000+	298	1,000+	65	n/a

Table 3: Streaming radio stations offered through representative radio aggregator apps.

⁹⁷ This was established in *Arista Records v. Launch Media* (578 F.3d 148 (2d Cir. 2009)). Note that “Streaming Internet radio” as defined here is not intended to encompass all music services that, as I understand it, the law defines as “noninteractive.” For example, Pandora is licensed exclusively under §114(d) but does not just provide fixed playlists, while other services that provide fixed playlists (like Last.fm and Slacker) have voluntary licenses that grant rights beyond those granted under §114(d).

⁹⁸ Note that many of the same stations or channels are available through multiple apps. For example, TuneIn Radio, vTuner, and Reciva all offer simulcasts of most of the terrestrial radio broadcasters in the United States.

The first important streaming radio aggregator to release a mobile app was iRadio; its app for iPhone was released in late 2007,⁹⁹ even before the iPhone App Store launched. This allowed users to listen to thousands of stations available through SHOUTcast (AOL), a directory and platform for publishing streaming radio stations. SHOUTcast radio is also available on mobile platforms other than the iPhone through apps such as WinAmp (also owned by AOL) and A Online Radio. The availability of statutory licenses for music in radio-like services has made it easy for anyone to create such “radio stations” on the Internet.

Other major aggregators of streaming radio include:

- **iHeartRadio**, which primarily features simulcasts of over 750 terrestrial radio stations owned by Clear Channel, the largest radio broadcasting chain in the United States. iHeartRadio’s iPhone app first appeared in 2008.¹⁰⁰ Since then, iHeartRadio has added apps for BlackBerry, Android, and other platforms. iHeartRadio also added Custom Playlist features (see below) in September 2011.¹⁰¹
- **TuneIn Radio**, which was the first mobile app to offer a large directory of streaming radio services including simulcasts of most U.S. terrestrial broadcasters. TuneIn Radio’s iPhone and Android apps launched in 2009,¹⁰² and the app is now available on many mobile platforms. A handful of such directory services exist; they are used in devices such as tabletop radios and Internet TVs, but a few have mobile apps as well.
- **vTuner**, which is a streaming radio station directory and service that presently includes over 45,000 stations, is integrated into the Livio Car Internet Radio and vTuner Radio apps. vTuner Radio launched in 2009.¹⁰³ Livio Car Internet Radio, an app for iPhone and Android that uses vTuner, has a user interface that was designed specifically for use in cars; it launched in 2011.
- **Radio.com**, which features simulcasts of terrestrial stations owned by CBS, Inc. (the second-largest U.S. radio broadcasting chain) as well as Internet stations from Yahoo!

⁹⁹ <http://mac.softpedia.com/get/iPhone-Applications/News/iRadio.shtml>.

¹⁰⁰ <http://arstechnica.com/apple/news/2008/11/iheartradio-brings-clear-channel-to-iphone.ars>.

¹⁰¹ *Supra* note 91.

¹⁰² <http://techcrunch.com/2010/09/01/radiotime-tunein-radio/>.

¹⁰³ <http://www.pr.com/press-release/148946>.

and AOL. Radio.com has apps for iPhone and Android that launched in 2010¹⁰⁴ and 2011¹⁰⁵ respectively. Radio.com has added Custom Playlist features through integration with Last.fm, also owned by CBS.

- **Live365**, which is a collection of over five thousand Internet-only fixed-playlist “Internet radio” channels. Live365 launched an iPhone app in 2010¹⁰⁶ and an Android app in 2011¹⁰⁷.
- **Reciva**, which is a UK-based streaming radio service provider that competes with vTuner. It has its own iPhone application, Reciva iRadio, which launched in 2010¹⁰⁸. Like vTuner, Reciva simulcasts most terrestrial radio stations in the United States. It also streams channels from Live365, Pandora, Sirius XM, and other non-terrestrial sources. As Table 3 shows, Reciva has the largest number of channels available of any streaming radio aggregator.

In summary, tens of thousands of simulcasts and internet-only radio stations have become available for streaming on mobile handsets through mobile apps. Many of these are simulcasts of terrestrial stations, meaning that consumers can use these services to listen to their favorite terrestrial stations outside of their terrestrial signal areas. These were not available, except in nascent form, in 2007.

I turn now to descriptions of each of the features identified in the columns in Table 2, their value to consumers, and typical consumer pricing. Bear in mind once again that the dates of introduction and feature sets pertain to the services’ *mobile apps* (not applications for PCs, Macs, or even web browsers), since that is the crucial competitive development from the perspective of satellite radio.

- **Column (a) - Curated Playlists (offered by Sirius XM on satellite radio since 2001 and on smartphones since 2007):** a *playlist* is simply a list of songs to be played in order. In most of the mobile services listed in Table 2, users can create playlists for their

¹⁰⁴ <http://www.rbr.com/media-news/internet/cbs-radio-launches-new-radio-com-app-for-iphone.html>.

¹⁰⁵ <http://radioalice.radio.com/2011/02/01/get-the-radio-com-app-for-android-today/>.

¹⁰⁶ <http://www.iphoneappsplus.com/music/live365-radio/index.htm>.

¹⁰⁷ <http://www.prweb.com/releases/2011/7/prweb8625514.htm>.

¹⁰⁸ <http://www.reuters.com/article/2010/03/18/idUS110223+18-Mar-2010+BW20100318>.

own use (e.g., from tracks they have downloaded or selected for on-demand streaming). A *curated playlist*, by comparison, is a list of songs selected by someone other than the user, presumably someone whose tastes the user trusts. The original curators were, of course, radio programmers. Sirius XM uses radio programmers, as do terrestrial radio stations. Online music services have given rise to other types of curators, including programmers hired by the service operators as well as algorithms that create “channels” or “stations” automatically, including genre stations, stations that play artists and others with similar-sounding music, etc. Streaming radio is a simple form of curated-playlist music service. As mentioned above, streaming radio through mobile apps dates back to the introduction of iRadio for iPhone in 2007.

Value to the user: the expertise of the curator (whether human or algorithmic) in combining music the user may know in compelling ways and/or exposing the user to new music that the user may not know but will probably like.

Pricing: Sirius XM charges \$7-17/month; streaming radio services are free (usually supported by advertising), except that most streaming aggregators with very large catalogs of stations (Reciva iRadio, vTuner) charge small one-time fees for their mobile apps.

- **Column (b) - Permanent Downloads, introduced for Mobile by Apple’s iTunes Store (2007):** this is a digital emulation of the long-established model of owning music products such as LPs, 45 RPM singles, and CDs. In this case, mobile users pay piecemeal for each track or album, the music is downloaded “over the air,” and the user can keep it indefinitely as files in the device’s nonvolatile memory.¹⁰⁹ The iTunes Music Store launched in 2003 for use on desktop PCs. iTunes began offering over-the-air downloading when the iPhone launched in 2007. A few other over-the-air music download services were available earlier,¹¹⁰ but iTunes was the first one available as an app on any of the major smartphone platforms.

Value to the user: “ownership” of the music, akin to physical media such as CDs, LPs,

¹⁰⁹ I do not take services into account that enable transfer of music from home computers to portable devices using a cable or even local wireless (Bluetooth) connection. This is not as convenient as downloading music directly from the service provider to the portable device.

¹¹⁰ See *supra* note 4.

and singles.

Pricing: typically \$0.99 per track and \$9.99 per album.

- **Column (c) - Custom Playlists, introduced for Mobile by Pandora (2008):** a custom playlist adapts to mobile users' individual tastes via user feedback such as "play more like this song," "play music from this artist and similar artists," "add this artist to the mix," "skip this song," and "I like/don't like this song." This type of streaming service is generally known as "custom Internet radio." This category of mobile services ranges from services that operate exclusively under the §114(d) statutory license (e.g., Pandora) to services like Slacker, Last.fm, and MOG that have obtained voluntary licenses in order to offer features exceeding those available under §114(d). (I describe some of these services, which I understand may be used as benchmarks in this proceeding, in more depth below.) These services are often offered in a choice of free and paid versions. The free services include restrictions such as lesser sound quality, limited hours of listening per month, and/or limits on functionality such as "skip this song." Paid versions of these services may remove limits on listening hours per month and other features, as well as offering non-§114(d) features such as pre-loading and caching of custom channels on devices or "save this song on my device." The term "freemium" was coined to describe services that have limited free and premium paid tiers.¹¹¹

Value to the user: the value of curated playlists plus the ability to adapt to users' tastes over time.

Pricing: These services typically offer free versions with ads and/or limitations.

Subscription versions of these services with enhanced functionality usually cost about \$3/month.¹¹²

- **Column (d) - Interactive Streaming, a/k/a On Demand, introduced for Mobile by Rhapsody in 2009:** with these services, a mobile user can select any track from the service's library for instant playback and can combine tracks to create and save user-generated playlists. Such services meet the definition of "interactivity" under 17 U.S.C. §114(j)(7). Many interactive streaming services also offer other features that are covered here in different combinations.

¹¹¹ Its origin is generally attributed to a 2006 blog post comment; see http://avc.blogs.com/a_vc/2006/03/my_favorite_bus.html.

¹¹² See the further discussion of Slacker and Last.fm below.

Value to the user: this model is the so-called “celestial jukebox,”¹¹³ in which a user can listen to virtually any song he or she wishes on demand.

Pricing: These services typically charge \$10/month for use on mobile devices.¹¹⁴ Many of them also have free versions with ads or limitations that are similar to those for custom radio services as described above. Freemium interactive streaming began in July 2011 when Spotify entered the U.S. market with its freemium model, causing competitors such as MOG and Rdio to adopt freemium models as well.

- **Column (e) - Shared Playlists, introduced for Mobile Users by iTunes, MOG and Rdio (2010):** a shared playlist is a type of curated playlist where the “curators” are other users. Services like these offer various ways for users to publish, share, “follow,” and collaborate on playlists. iTunes added this type of feature in 2010 as part of iTunes Ping.

Value to the user: shared playlists offer a “social” component that the above playlist types do not; they make music discovery processes collaborative instead of guided by curators. They also give each user potentially many more playlists to choose from. In fact, some services that support shared playlists are designed so that users can share playlists outside of the service itself. For example, Spotify’s shared playlist feature has given rise to independent websites such as sharemyplaylists.com. Others enable playlists to be automatically published on users’ Facebook pages so that their “Facebook friends” will see them and be able to click to play them if they also subscribe to the same music service.

Pricing: Spotify, MOG, and Rdio are priced as Interactive Streaming services at \$10/month, as described above.

- **Column (f) -- Cloud Sync, introduced for Mobile by MOG and Rdio (2010):** this feature gives users the ability to send copies of songs from their home computers wirelessly and automatically to online storage lockers and/or to the nonvolatile memory of their mobile devices; those uploaded tracks can then be played on users’ mobile devices either by streaming from the online storage locker or playing them directly from the mobile devices’ nonvolatile memory. Cloud sync functionality also allows users to

¹¹³ This phrase is generally attributed to Stanford Law Professor Paul Goldstein, in his 1996 book *Copyright's Highway: From Gutenberg to the Celestial Jukebox*.

¹¹⁴ Rhapsody charges \$15/month for a premium service that lets the user use it on up to three devices. Some interactive services offer a \$5/month service for PCs and Macs only (i.e., non-mobile).

sync their playlists from their home computers to their mobile devices wirelessly and (if desired) automatically. Apple iTunes also offers cloud sync for downloaded files through iCloud, introduced in 2011.

Value to the user: cloud sync enables mobile device users to access music and playlists created initially on their home computers in an automated, effortless fashion, without having to plug in cables or do anything in advance. Cloud-synced playlists created for use with on-demand streaming services (e.g., MOG and Rdio) obviate the need for file downloads, because the music tracks referenced in the playlists are available for immediate streaming from the services' servers.

Pricing: MOG and Rdio are priced as Interactive Streaming services at \$10/month, as described above. Apple iCloud storage is free for the first 5GB (enough for roughly 1000 tracks), and additional storage is priced in tiers at the rate of \$2 per GB (roughly 200 tracks).

Notice that the services shown in Table 2 on p. 21 include different combinations of the six primary features, with little duplication. The only two services with identical rows in the table are Pandora and Last.fm, but they have differences that are apparent to users even though they are not captured in the table.¹¹⁵

To give a flavor of the variety of functionality available through mobile music apps and the vibrancy of the market today, I provide descriptions of some of the services listed in Table 2 that fit in multiple service categories and/or have innovative functionality not captured in the table, and which may be used as benchmarks in this proceeding:

- **Last.fm** is a UK-based service that was launched in 2000 and acquired by CBS in 2007 for about \$450 Million.¹¹⁶ It is known primarily as a “custom radio” service, as described above; it also offers curated playlists a la streaming radio or Sirius XM. Yet Last.fm is also well known for an innovative technology called the Scrobbler. The Scrobbler automatically collects information about the songs that registered users play on several different music services (including several of those listed in Table 2). Last.fm registered

¹¹⁵ For example, see below and *infra* note 117 for differences between Pandora's and Last.fm's approaches to “custom radio.”

¹¹⁶ <http://mashable.com/2007/04/27/lastfm-viacom/>.

users can “scrobble” their plays on an opt-in basis. Last.fm uses Scrobbler data to help create customized music recommendations. Thus Last.fm uses what is known as a “crowdsourced” approach to music recommendation.¹¹⁷ This powerful approach has become pervasive among digital music listeners: Last.fm performed over 50 billion “scobbles” as of April 2011¹¹⁸ and has amassed a registered user base of 40 million as of September 2010.¹¹⁹ In the United States, Last.fm has a free ad-supported service that plays on PCs and a \$3/month subscription service with no ads and clients for several smartphone platforms and in-home digital entertainment devices.¹²⁰

- **Slacker**, which launched in 2007, supports curated playlist, custom radio, and on-demand subscription models. The basic Slacker custom radio service is ad-supported and imposes limitations such as the number of “skips” per user per day. Slacker charges \$4/month for its Slacker Plus service, which eliminates ads and skip limitations. Slacker Plus also lets users save songs heard on playlists on their devices (“radio station caching”) – a capability that other custom radio services such as Last.fm and Pandora do not offer, and one that likely explains the additional dollar per month that Slacker charges compared to those other services. In May 2011, Slacker launched Slacker Premium, which includes Slacker Plus functionality plus on-demand interactive streaming and artist radio for a subscription price of \$10/month.¹²¹ All Slacker services run on a variety of platforms, including PCs, smartphones, home entertainment devices, and (as explained above) automobiles. Slacker had over 25 million registered users as of May 2011.¹²²
- **Rhapsody** was the first on-demand subscription service to obtain licenses from all of the major recording companies, which it did in 2002, a year after its launch.¹²³ Today Rhapsody offers a PC-only subscription service for \$5/month, a \$10/month service for mobile devices, and a \$15/month service that allows controlled music portability from

¹¹⁷ In comparison, Pandora’s custom radio engine is based on its core technology, the Music Genome Project, which is a large database of complex information about music tracks maintained manually by a staff of trained musicologists. Pandora selects from music entered into the database, which currently numbers about 800,000 tracks. Last.fm draws from a catalog of over ten times that many tracks.

¹¹⁸ <http://thenextweb.com/media/2011/04/16/last-fm-50-billion-scobbles-and-the-return-of-the-mix-tape/3/>.

¹¹⁹ <http://www.pcmag.com/article2/0,2817,2368729,00.asp#fbid=KHfLvuVIE73>.

¹²⁰ <http://www.last.fm/subscribe>.

¹²¹ <http://www.slacker.com/company/pressreleases/05172011-Slacker-Premium.jsp>.

¹²² <http://blog.sfgate.com/techchron/2011/05/17/slacker-radio-launches-on-demand-service-with-8-million-songs/>.

¹²³ <http://www.drmwatch.com/ocr/article.php/3107011>.

PCs to mobile devices. Over time, Rhapsody has added different types of functionality to the service, including curated playlists and paid permanent downloads. The service also includes rich information about artists, “similar album” recommendations, artist samplers, and various other features. As of July 2011, Rhapsody had only about 800,000 paying subscribers.¹²⁴ In October 2011, Rhapsody agreed to acquire Napster, which will add many of Napster’s estimated 300,000-400,000 subscribers to that number.¹²⁵

- **MOG**, originally called MOG All Access, was the first service to combine custom radio with interactive on-demand streaming in an integrated offering. MOG offers a “slider” control that lets users move seamlessly on a continuum from “artist-only radio” to “music like this” custom radio; users can save favorite tracks and (subject to licensing restrictions) play them on demand later. MOG originated in 2005 as a music blog network; it added a recommendation engine and other features before launching its own licensed music service in late 2009.¹²⁶ MOG charges \$5/month for access on PCs and Roku TV set-top boxes, and \$10/month for access on smartphones as well as the latter devices. MOG is one of a handful of recent services that offers playlist sharing (see above). In September 2011, MOG launched FreePlay, a free service that limits the amount of music that users can hear and gives them opportunities to raise the limits by engaging in activities such as playlist creation and sharing. MOG does not disclose the size of its subscribership.

The implications of these many developments in online music services are clear: the period 2007-2011 has seen a tremendous increase in the number of choices for mobile music listening beyond the comparatively simple curated-playlist offerings of satellite radio – which has stayed largely the same while these other services have been built and launched. These Internet music services offer listeners a vast array of choices on their mobile phones – tens of thousands of streaming radio stations/channels, mobile track downloads, on-demand streaming services, and the like – that compete directly with satellite radio in a way that did not exist during the prior CRB proceeding.

¹²⁴ <http://www.billboard.biz/bbbiz/industry/branding/hey-spotify-rhapsody-tops-800-000-subscribers-1005270862.story>.

¹²⁵ <http://mediadecoder.blogs.nytimes.com/2011/10/03/rhapsody-to-acquire-napster-in-deal-with-best-buy/>.

¹²⁶ <http://www.allaccess.com/net-news/archive/story/65333/mog-set-to-launch-new-digital-music-service>.

B. Non-Music Content: Sports, News, Talk, Traffic, and Media Brand Related Programming Available to Mobile Listeners

As suggested by the preceding section, Sirius XM's music programming is now one among many options for in-vehicle music listening through Internet-connected mobile apps, many of which are either free or offer greater choice or control over the music experience. This clearly represents a major competitive threat to Sirius XM. Yet music represents less than half of the channels in Sirius XM's most popular subscription packages. Sirius XM continues to offer a variety of exclusive non-music content. Howard Stern and Opie & Anthony, to name just two, are not available anywhere else, and content such as professional football (NFL) and baseball (MLB) games (other than teams in the local areas of terrestrial broadcasters and limited national network games) are not available on terrestrial radio. Sirius XM's non-music content therefore continues, for now, to provide a competitive advantage for Sirius XM over its would-be in-vehicle competitors.

However, that situation is changing: an increasing amount of non-music content comparable to that available on Sirius XM is available to online listeners – and thus in the car via mobile apps on smartphones.

Sports, for example, accounts for a large and popular chunk of Sirius XM's non-music programming. In addition to live game coverage, Sirius XM features about a dozen channels of sports news and talk on each platform (Sirius and XM). Several of these channels, such as Mad Dog Radio, The PGA Tour Network, and Sirius XM Fantasy Sports Radio feature programming exclusive to Sirius XM.

Table 4 shows that, like music programming, live audio (or video) of most major-league sports events has become available on mobile apps for the major platforms during the current SDARS royalty period, starting with the NBA in 2009. Live coverage of professional football (NFL), basketball (NBA), NASCAR racing, baseball (MLB), hockey (NHL), major college sports, and IndyCar racing is available on mobile apps now. Most of these apps also incorporate many visual elements – scores, statistics, etc., in addition to video – that Sirius XM does not.

League	SiriusXM	App	Platforms	User Price	Launched
NBA	<input checked="" type="checkbox"/>	NBA League Pass Mobile	Android, iPhone	\$45/season (7½ mo.)	2009
NASCAR	<input checked="" type="checkbox"/>	NASCAR Sprint Cup Mobile	Android, BlackBerry	Included with Sprint unlimited data plans	2009
IndyCar	<input checked="" type="checkbox"/>	IZOD IndyCar	Android, iPhone	Free	2009
NFL	<input checked="" type="checkbox"/>	NFL Mobile Live	All	Included with Verizon Wireless unlimited data plans	2010
MLB	<input checked="" type="checkbox"/>	MLB At Bat	All	\$7/season (6 mo.)	2010
NHL	<input checked="" type="checkbox"/>	NHL Game Center Premium	All	\$20/season (8 mo.)	2010
SEC (major college sports)	<input checked="" type="checkbox"/>	CBS Sports Mobile	iPhone	Free	2010
PGA	<input checked="" type="checkbox"/>	n/a			

Table 4: Live sports applications for mobile devices. “All” under Platforms means Android, iPhone, BlackBerry, and possibly others.

ESPN Radio, another mainstay of Sirius XM’s sports lineup, is likewise available through apps on all of the major mobile platforms.¹²⁷ Similarly, Fox Sports has a free iPhone app that includes Fox Sports Radio.

Regarding news, Sirius XM offers audio programming from ten major news networks. All of these networks have free apps for mobile devices; all but two of those include audio streams (or video streams) of news programming. (Bloomberg’s and CNBC’s apps provide text and data but no audio or video, yet these are business information networks whose primary offerings are text and data.) In addition, two major American news networks, CBS and ABC, do not offer news programming on Sirius XM, although both offer free mobile apps.

Apart from sports and news, Sirius XM offers a large variety of other non-music programming; yet as with sports and news, analogous programming is increasing available online and in the vehicle through mobile apps:

- Sirius XM provides continuous local **traffic and weather** for 22 United States metro area markets. However, all of those metro areas have at least one terrestrial radio station that

¹²⁷ <http://m.espn.go.com/mobile/promos?wjb> (iPhone),
<http://sports.espn.go.com/espnradio/story?page=espnradioandroidapp> (Android),
<http://sports.espn.go.com/espnradio/story?id=5638039> (BlackBerry).

provides regular traffic and weather reports, usually every 10 minutes. All of these radio stations are available on mobile devices via streaming radio aggregator apps such as TuneIn Radio, vTuner Radio, Livio Car Internet Radio, and Reciva iRadio. Consumers can use these simulcasts of terrestrial radio to obtain traffic and weather information for remote cities, such as those to which they plan to travel.

- Sirius XM offers four comedy channels, a Radio Classics (**old time radio**) channel, and a number of channels devoted primarily to **talk**, including SiriusXM Stars Too, NPR Talk, POTUS Politics, SiriusXM Patriot, Fox News Talk, SiriusXM Left, The Power, and Family Talk. Most of the content on these talk channels is exclusive to Sirius XM. Of course, many talk stations are available on streaming Internet radio. Table 3 (p.23) shows that thousands of Internet radio news and talk stations are available through the major Internet radio aggregators (News/Talk is usually lumped together into a single category), including special-interest topics such as trucking, health, and religion, which are also categories of channels represented on Sirius XM. Table 3 also shows hundreds of comedy and old time radio stations available in the same way.
- Sirius XM also offers an audiobook channel called Book Radio. Audiobooks can be obtained on demand (via both streaming and download) on mobile devices through Audible (Amazon.com), which has apps for every major mobile platform. Audible offers a vast selection of audiobooks, while the selection available on Sirius XM Book Radio is much more limited.

C. Pricing Comparison

While Sirius XM non-music offerings are increasingly available elsewhere, as suggested above, many are not – at least for now – free, like much of the music programming that is available. Table 4 above, for example, shows that many of the live sports apps carry subscription charges, whether these are separate or bundled with wireless carriers' monthly subscription plans.

Table 5 below summarizes mobile app pricing for some of the different types of audio content services included in Sirius XM’s popular subscription packages.¹²⁸ As Table 5 shows, mobile *music* apps are significantly less expensive than Sirius XM’s base packages; in particular, mobile streaming Internet radio apps – including custom radio – are available for free from various sources. On the other hand, regarding non-music offerings, Sirius XM subscription offerings bundle together many types of programming that would cost more if purchased separately through mobile apps. For example:

- Sirius XM Premium packages include live sports coverage that would be priced at about \$9.67/month if purchased as separate mobile apps.¹²⁹
- Audiobooks on demand cost \$9.56-14.95 each through Audible, while a non-interactive audiobook channel is included in the Sirius XM base packages.
- Media brand mobile apps, such as Cosmopolitan and Playboy, sell for \$0.99-2.99/month each. Audio programming from these same brands is included in Sirius XM base packages; most of these mobile apps are based more on magazine content.
- While Howard Stern programming is not available via mobile apps, Howard TV, an on-demand service that includes highlights from his Sirius XM shows, is available on digital cable television through several major cable operators. However, it is priced above Sirius XM “Select” packages, usually at a separate charge of \$13.99/month.¹³⁰

¹²⁸ Sirius XM provides a range of subscription options. The most popular subscriptions by far are the base (“Select”) packages, which are currently priced at \$12.95/month, and, to a lesser degree, “Premier” packages combining the base Sirius and XM packages with premium content from the other service for \$16.99/month. Other options include \$10/month for non-music packages or a “Mostly Music” package (including 80-83% music channels). Subscribers can also select a la carte packages at prices ranging from \$7-15/month for up to 100 channels.

¹²⁹ Some of these apps are priced per season; to calculate a per-month price, I use the season lengths shown in Table 4, which are derived from official league schedules.

¹³⁰ <http://my.howard.tv/faq>, item 3.

Content	Service Type	Typical Price	Representative Apps
Sports			
	Live game coverage – major sports	\$7 - \$45/season (a la carte or bundled with wireless plans)	NBA League Pass Mobile, NASCAR Sprint Cup Mobile, NFL Mobile Live, MLB At Bat, NHL Game Center Premium
	Live game coverage – lesser sports	Free	CBS Sports Mobile, IZOD IndyCar
	News & talk	Free ¹³¹	ESPN Radio, Fox Sports, streaming radio
News, Weather, Traffic			
	Network news	Free	CBS News, ABC News, Fox News
	Local weather & traffic	Free ¹³¹	Streaming radio
Talk & Spoken Word			
	Talk, special interest, comedy, old-time radio	Free ¹³¹	Streaming radio
	Audiobooks	\$9.56 - 14.95 per audiobook on demand	Audible (Amazon)
Media Brands			
	Radio	Free	Disney Radio, Harpo Radio (Oprah)
	App-based programming	\$0.99-2.99/month	Cosmopolitan, Playboy
Music			
	Curated playlists (streaming radio)	Free ¹³¹	iHeartRadio, TuneIn, Radio.com, vTuner, Reciva iRadio
	Basic custom Internet Radio	Free	Pandora, Slacker, iHeartRadio
	Premium custom Internet radio	\$3 - 4/month	Pandora One, Last.fm, Slacker Plus

Table 5: Pricing summary for audio content apps.

¹³¹ There is a one-time charge of up to \$1.99 for some apps.

Taken together, Sirius XM's prices for subscriptions that offer a variety of audio programming (particularly non-music programming) in a single convenient package are reasonable relative to market prices for apps that offer that programming on an a la carte basis. The cost of live sports plus Howard Stern or one audiobook per month alone is at least as much as any Sirius XM subscription.

Summary and Conclusions

Four factors that have changed the online audio content landscape since 2007, and these factors coalesced by 2010 to seriously threaten satellite radio's place in the market:

- **Music listening on smartphones exceeds satellite radio subscribers:** Online music services are available on a rapidly-growing number of smartphones. In fact, the number of such devices actually used for music listening has grown so fast that it now exceeds the number of satellite radio subscribers. This milestone occurred in **2009** (Figure 1, p. 10). By late 2011, Pandora alone had over half as many in-vehicle listeners as Sirius XM.
- **Pervasive mobile broadband coverage:** By **2010**, mobile broadband coverage from all four major US wireless carriers was available on 3G networks nationwide, with sufficient speed to stream music in good quality and to reach roughly as many people as satellite radio does.
- **Integration of mobile audio apps with automobiles:** A critical mass of automobiles are now available with audio systems that can play music from portable devices with excellent sound quality and ease of use through direct audio connections or integration with in-vehicle infotainment systems (Table 1, p. 15). As of **2008**, 90% of new models had direct audio inputs that can be used to connect mobile music players with simple patch cables, Bluetooth wireless connections, or iPhone/iPod docks. Infotainment system integration of mobile audio content apps began in 2009 with the integration of Pandora into select Ford vehicles via the Ford/Microsoft Sync platform.
- **Wide variety of mobile audio content services available:** Online music services have proliferated; they now offer a wide variety of value propositions at different price points, including many free options. Most of these new value propositions have been around

since the early 2000s, but they became available on internet-connected portable devices starting with the first iPhone apps in 2007 and continuing through the 2009 launch of Rhapsody for the iPhone and Slacker apps for iPhone and Android. Several other music services launched mobile apps in 2010 (Table 2, p. 21). Sirius XM also offers a wide variety of non-music content, including news, sports, talk, weather, traffic, and entertainment content; some of this is exclusive to Sirius XM or is available through mobile apps at significant prices.

	Smartphone Proliferation	Wireless Network Ubiquity	Online Audio Vehicle Integration	Mobile Audio Content Apps
2007	<ul style="list-style-type: none"> • iPhone launch 	<ul style="list-style-type: none"> • Verizon 3G rollout complete • Sprint 3G rollout complete 	<ul style="list-style-type: none"> • iPhone dock in BMWs • 60% of autos have direct audio inputs 	<ul style="list-style-type: none"> • iTunes over-the-air downloads • SHOUTcast iPhone app
2008	<ul style="list-style-type: none"> • iPhone App Store launch • First Android phones • Android Market launch 	<ul style="list-style-type: none"> • T-Mobile 3G rollout complete 	<ul style="list-style-type: none"> • 90% of autos have direct audio inputs 	<ul style="list-style-type: none"> • Pandora iPhone app • Last.fm iPhone app • Clear Channel iHeartRadio iPhone app
2009	<ul style="list-style-type: none"> • BlackBerry App World launch • Smartphone music listeners exceed Sirius XM subscribers 		<ul style="list-style-type: none"> • Pandora and Internet radio integrated into Ford vehicles 	<ul style="list-style-type: none"> • Rhapsody and Slacker mobile apps • NFL and NASCAR mobile apps • Mobile apps for most major news networks • TuneIn Radio and vTuner apps
2010	<ul style="list-style-type: none"> • Android exceeds iPhone unit volume 	<ul style="list-style-type: none"> • AT&T 3G rollout complete 	<ul style="list-style-type: none"> • Pandora integrated into Mercedes vehicles 	<ul style="list-style-type: none"> • Napster, MOG, Rdio, and other mobile music apps • CBS Radio.com apps • Reciva iRadio and Radio.com apps • NFL, MLB, NHL, and other live sports apps

Table 6: Timeline of key developments in mobile content that may disrupt the satellite radio market.

Table 6 summarizes the timeline of these developments. The shaded boxes indicate the years in which each of the four factors discussed here reached critical mass to compete with satellite radio.

Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.

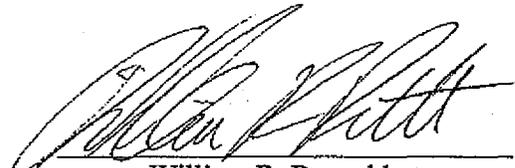
In the Matter of)
)
)

DETERMINATION OF RATES AND TERMS)
FOR PREEXISTING SUBSCRIPTION AND)
SATELLITE DIGITAL AUDIO RADIO)
SERVICES)

Docket No. 2011-1
CRB PSS/Satellite II

DECLARATION OF WILLIAM R. ROSENBLATT

I, William R. Rosenblatt, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 28th day of November 2011 at New York, New York.



William R. Rosenblatt

**Before the
COPYRIGHT ROYALTY BOARD
LIBRARY OF CONGRESS
Washington, D.C.**

_____)
In the Matter of)

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Adjustment of Rates and Terms for)
Preexisting Subscription and Satellite)
Digital Audio Radio Services)
_____)

Docket No. 2006-1 CRB DSTRA

WRITTEN DIRECT TESTIMONY OF JEREMY M. COLEMAN

(On behalf of Sirius)

Background and Experience

1. My name is Jeremy M. Coleman. I am the Vice President, Talk, Entertainment and Information Programming, at Sirius Satellite Radio Inc. ("Sirius"), a position I have held since July 2003. I oversee the programming on Sirius' 54 news, talk, and other non-music, non-sports entertainment channels. In this capacity, my responsibility is to work with program directors, talent, producers, agents, writers, production personnel, researchers, engineering, and Sirius' content providers to create innovative programming that will maximize the attractiveness of the Sirius service to current and potential subscribers and advertisers through spoken-word, entertainment, comedy, informational, news, religious and foreign-language broadcasts. This includes both selecting the right creative mix among formats and creating, monitoring and improving the programming on each of the individual channels.

2. I began my involvement with radio when I was attending college at Old Dominion University ("ODU") in Norfolk, Virginia. I hosted a show on the ODU non-

commercial campus radio station, WODU, and later became responsible for running the station. I graduated from ODU in 1988 with a Bachelor's degree in Business Management.

3. Even before I graduated from ODU, I began to work professionally in the radio industry. I originally was hired by Saga Communications to fill a programming position in Norfolk, Virginia at WNOR-FM. I later was transferred to a station in Milwaukee, Wisconsin, WKLH-FM, where I was Assistant Program Director and was responsible for developing on-air product and managing talent. Saga Communications then transferred me back to WNOR-FM as Marketing Director, where I oversaw the station's research, promotions, and marketing.

4. In 1992, I was hired by Infinity Broadcasting, one of the largest companies in the terrestrial radio industry, to help oversee the transformation of an established classic rock station in Washington, D.C. (WJFK-FM) to a talk-based format. As Program Director and Operations Manager, I was responsible for creating the sound of the new station, including the selection and hiring of on-air talent, to maximize appeal to an FM-band demographic typically served by music stations. I was responsible for adapting for national syndication many of the shows that I had helped develop in the D.C. market. This was my first personal experience with national radio programming. In 2000, I was sent to New York to become Program Director of WNEW-FM, another Infinity station, where I also supervised development of a talk-based format and syndicated certain content nationally. I continued to work for Infinity at WNEW-FM in New York until 2002, and joined Sirius in 2003.

Summary of Testimony

5. The purpose of my testimony is to describe Sirius' news, talk and entertainment channels and to explain their critical importance to Sirius' service. My staff of program

directors and I devote a tremendous amount of creative effort, time, and energy to ensure that these channels contain exciting, innovative programming that will enhance the appeal of Sirius' service and thereby attract and keep subscribers. Below, I describe some of the ways we accomplish this and outline some of the specific improvements that we have instituted in Sirius' programming to achieve that goal. I base the following testimony on information that I have learned in my eighteen years in the radio industry, my personal experience at Sirius, and on sources that are available to me and upon which I commonly rely in carrying out my duties.

Overview of Sirius' News, Talk and Entertainment Channels

6. The Sirius strategy to offer a variety of audio entertainment channels of interest to paying subscribers necessitates a substantial offering of news, talk and entertainment channels, for a variety of reasons that has formed the basis of our programming decisions, and supports our marketing slogan of "The Best Radio On Radio."

- Traditionally, AM and FM radio stations have offered, proportionally, very little in the way of non-music formats in any given market. Our non-music offering of a variety of content that is not available on AM or FM increases demand for our service.
- Talk radio content that relies on strong personalities (traditionally as AM talk shows and FM morning shows) creates high loyalty among listeners. Loyalty to our Sirius personalities increases our word of mouth advertising, and reduces subscriber turnover or "churn."
- Talk radio content can support a larger quantity of commercial time than music, because talk audiences have nothing comparable to tune to. In the case of Sirius, while we run far fewer commercials during talk programming than terrestrial radio, we are able to run some commercials. Therefore, our non-music programming allows us to supplement subscriber revenue with advertiser revenue.
- There are many more types of talk radio of interest to listeners than traditional radio offers. Because of the number of channels we program and national reach, Sirius can offer formats and concepts not available on terrestrial radio,

from stations for truckers to stations that simulcast Fox News, increasing demand in Sirius.

7. Sirius offers a wide variety of channels to appeal to a diverse listening audience. SIR Ex. 28 is a printout of website pages showing the diversity of our channel lineup. Our 54 news, talk and entertainment channels can be subdivided into six basic formats: news (16 channels); talk and entertainment (16 channels); comedy (3 channels); family and kids (3 channels); religion (3 channels); and traffic and weather (13 channels). These channels appear as channels 100 and higher in the Sirius channel guide that is SIR Ex. 24. Website descriptions showing some of the highlights of the Sirius news, talk and entertainment channels are provided in SIR Ex. 17. SIR Ex. 25 provides more website information about certain of our channels. I discuss the largest of these formats, and their importance to Sirius, below.

8. In addition to format, a second important factor that can be used to differentiate our news, talk and entertainment channels is the source of program content. Some of our channels – principally, but not exclusively, our news channels – employ what we refer to as “pass through” programming. In this model, the originating source (e.g., CNN) provides the programming feed to Sirius for compensation and Sirius transmits that programming unaltered to subscribers (although Sirius inserts promotional announcements and commercials where the format dictates). My group works with others at Sirius to select content providers and negotiate agreements with them. Generally, we are looking for strong brands that are household names with high subscriber appeal and content that will work well on radio. Once an agreement is in place with the content provider, the principal responsibilities of my team are to monitor the quality of the programming, make sure that it continues to serve the needs of

our listeners, and to resolve any technical issues that may arise. When I joined Sirius, the majority of the news, talk and entertainment programming followed this model.

9. More recently, Sirius has focused its efforts on developing original programming. For example, Sirius Patriot and Sirius Left, conservative and liberal talk radio channels, respectively, were created by Sirius using both syndicated programming and programming originating in our own studios in New York. In other instances (for example, Maxim Radio and Cosmo Radio), we have taken established non-radio brands – in this case, magazine brands – and created entirely new but complementary radio stations for their audiences. In both of these situations, the programming content is selected by Sirius and often created by Sirius. In addition, Sirius generally incurs the costs of development, talent and production, which can be very substantial, and pays royalties and other financial incentives to the brand owners for their creative contributions and the use of their marks.

10. A third critical factor to consider in evaluating programming is satellite radio exclusivity. While it is useful to have established non-exclusive brands such as Disney, CNN, Fox News, etc., the ability to attract and retain paying subscribers requires exclusive content. This is for two primary reasons. First, we must convince potential subscribers to pay for satellite radio when they can always receive terrestrial radio for free. Second, we must differentiate Sirius from XM and convince potential subscribers to choose Sirius over XM. In both instances, the key is highly attractive content that subscribers cannot get anywhere else. Exclusive content is also critical to retaining subscribers. Although the best known example of Sirius exclusive content is the Howard Stern Show, we also have important exclusives with a number of other established brands and hosts, as discussed below, as well as with the channels

and shows that we have developed ourselves. A website description showing many of the Sirius stars is SIR Ex. 18.

Sirius News Channels

11. Sirius' news programming includes renowned offerings such as the FOX News Channel, CNN, CNN Headline News, BBC World Service News, CNBC, ABC News & Talk, Bloomberg Radio and two NPR channels. These are all well-known brands and their presence in our channel lineup ensures that all listeners can stay informed through an established favorite source or multiple sources.

12. Most Sirius news programming is pass through, as described above, and most of it is non-exclusive. Our news content is a substantial differentiator between satellite radio and terrestrial radio, and as most radio listening is done in the car, subscribers nationwide appreciate being able to hear strong news brands such as Fox and CNN, even without the television pictures. Wide-ranging news programming is an essential component of Sirius, and the ability of our listeners to access the same news channels nationwide and at any time of the day is an important selling point over terrestrial radio.

13. Sirius does presently have an exclusive relationship with NPR insofar as satellite radio is concerned. We have a similar exclusivity with the World Radio Network, which delivers international news.

Sirius Entertainment and Talk Channels

14. Sirius has a wealth of entertainment channels, including two Howard Stern channels (Howard 100 and Howard 101), E! Entertainment Radio, Maxim Radio, Court TV Radio, Cosmo Radio, Martha Stewart Living Radio, LIME (a healthy living channel), Sirius

OutQ, and others. The Sirius entertainment lineup also includes Playboy Radio, which subscribers can elect to receive or not to receive for no additional charge. The Sirius talk group includes Sirius Left (liberal) and Sirius Patriot (conservative), Fox News Talk, and Road Dog Trucking.

15. Some of our entertainment channels, like our news channels, are programmed on a pass through basis. For example, Court TV Radio and the E! Entertainment channel are primarily programmed on a pass through basis. However, particularly where the originating source is a television network, we attempt to work with our established content providers to develop exclusive content or to create radio specific content in order to improve the experience for our subscribers. For example, during much of the day, Court TV Radio carries the same programming as would be heard (and seen) on Court TV itself. However, in conjunction with Court TV, we have created a new three hour live morning show – Court TV Morning with Vinnie Politan – that is exclusive to Sirius. Thus, in this situation, we have taken a well known and established brand from another medium and improved it for radio, at substantial expense to Sirius. We used our in-house expertise to develop the show, assisted in selecting the talent, provide funding for the production costs, provide studio space for the show's production, and provide technical and operational support.

The Howard Stern Channels

16. By far the two most popular entertainment channels on Sirius (and, indeed, the two most popular Sirius channels altogether) are the two Howard Stern channels. The differences between the Howard Stern programming that appeared on terrestrial radio and the Howard Stern programming that now appears exclusively on Sirius illustrates some of the differences between terrestrial and satellite radio. On terrestrial radio, Howard Stern had a

weekday morning drive time show. Since he came exclusively to Sirius in January 2006, however, Howard Stern programming has appeared full-time on two channels, on a 24/7 basis. This programming includes not only a live morning show, but also other programming developed to appeal to the same audience, including strategic re-airings of the morning show, new call-in shows, shows hosted by the supporting cast on the morning show, etc. Thus, on satellite radio, there is freedom to provide a more comprehensive experience and more of the content that most appeals to listeners. Subscribers expect more content because they are paying for Howard Stern, which they previously received for free.

17. Enormous effort went into the creation of a Howard Stern value proposition that would maximize the conversion of Stern's terrestrial radio fans into Sirius subscribers. We explored numerous programming options and invested substantially in the Howard Stern channels – both tried-and-true moves such as the hiring of other talk talent appropriate for Howard's channels based on their previous terrestrial radio ratings experience, and new ideas that had never been attempted before such as the creation of the Howard 100 News team, a team of experienced reporters assembled by a television news director with the singular goal of reporting the news of Howard Stern's activities. Many of these elements required substantial investments in both time and expense. The success of this effort is confirmed by the fact Howard 100 and Howard 101 are rated No. 1 and No. 2 among all Sirius channels. A promotional release for a special Howard Stern worldwide event is SIR Ex. 29.

Creation of Sirius Programming

18. Sirius generates substantial subscriber revenue by offering non-music programming, particularly non-music programming from extremely popular brands, and non-music programming that is exclusively available on Sirius. In addition, Sirius generates a

second revenue stream through non-music programming, by selling on-air commercials to advertisers. Our goals are achieved by us offering the widest variety and most unique lineup of content. Our marketing differentiates Sirius from our competition by promising "The Best Radio on Radio." To license and/or create programming that fulfills our business goals and satisfies consumer demand, Sirius must invest heavily in the recruitment, licensing, hiring, development, support and broadcast of our content, including a large number of non-music channels and shows to attract and satisfy various constituents among our larger target audience.

19. In allocating the substantial but nonetheless limited bandwidth that is available to Sirius, we target potential subscribers who are not already being served by Sirius or who could be better served by Sirius, so that we can increase our subscriber base. In making these determinations, we consider research and survey data, listener comments, demographic data, current media and entertainment trends, and the combined experience of the substantial group of radio programming experts employed by Sirius. My colleagues and I consider whether we can create a channel and a sound that will attract the new target audience and, we hope, create a "buzz" around the channel and a relationship between the channel and its audience. These factors are taken into consideration regardless of whether we are considering a news, talk or entertainment channel.

20. Historically, Sirius' subscribers have been predominately male, and Sirius' programming to some degree has reflected that fact. Sirius' male-oriented programming became even stronger between 2004 and early 2006, when we added the NFL and Howard Stern. Our exclusive deal with NASCAR, which will begin in January 2007, is likely to strengthen our position with the male audience even further. With this in mind, we have

attempted to develop more programming that will appeal to women. Two of our principal efforts in this regard are Cosmo Radio, produced jointly with Cosmopolitan Magazine, and Martha Stewart Living Radio. Growing awareness of Sirius, growing demand for Sirius, and growing availability of the Sirius service is broadening our audience demographics.

21. The development and launch of Cosmo Radio was complex and time-consuming, but typical for our approach with brands and talent that are successful in other media and willing to expand into radio with Sirius. While Cosmopolitan is a very strong magazine brand and appealed to a young female demographic in which we were interested, the brand had not previously been expanded beyond print in any significant way. Thus, we were required to determine whether it would be possible to create a radio station out of the concept of the brand. Among other planning exercises, we attempted to determine what the format of a potential Cosmo radio station would look like. In other words, we considered how we would fill a programming day in a way that would be consistent with the established brand identity – which the brand owner had developed over many years and had a strong interest in protecting – but also would work on radio.

22. In this instance, we worked closely with the staff at Cosmopolitan Magazine so that we could learn about their brand and they could learn about radio. For example, some staples of content that works well in a magazine (e.g., lists of “25 ways to ...”), in my experience would not work well at all in radio; it is far better to have a detailed discussion of a single, more interesting or controversial topic. Likewise, many creative and valued contributors to the magazine, such as columnists, may not transition well to the unscripted, spontaneous, and oral world of radio. All of these considerations make the creation of a new radio station – even when starting with a strong brand such as Cosmopolitan – a difficult

venture. Moreover, even with the best planning, there is simply no substitute for trying out new ideas and new contributors, seeing how could they work for the audience, and thereafter, making changes as necessary to enhance the experience. We invested six months in off-air development, and later adjusted the format further based on listener response. Even now, as with all of the channels that we program, we continue to make adjustments to improve the quality of the programming.

23. Many of these same considerations were involved in our development of Martha Stewart Living Radio. Martha Stewart Omnimedia was successful in other media but had a history of “visual” presentation. Her company had a large group of accomplished experts who were enthusiastic about being on radio but who did not have any on-air radio experience. Thus, we provided extensive radio training. When Martha Stewart announced that she would have a radio channel exclusively on Sirius, the publicity was invaluable and created a high level of interest. Moreover, because of Martha Stewart’s presence in other media, and her credibility in the female demographic, she had the opportunity to promote the Sirius brand to women very effectively. As just one example, in order to address the concern that some of Martha’s fans might feel a technological aversion to Sirius, we have a link in the Martha Stewart Radio portion of the Sirius website where she explains the options for installing a Sirius satellite radio in a car.

24. The substantial investment in content development extends not only to partner channels but also individual shows. We work with many hosts who have been successful in other media but have never hosted their own radio show before. These hosts are chosen based on their appeal to target audiences and their innate creativity – Judith Regan, Candace Bushnell, Senator Bill Bradley, Richard Simmons, Barbara Walters, Jane Pratt, Jim Breuer,

Deepak Chopra, and a collection of actors from *The Sopranos*, to name some. Our development process remains consistent – to invest time and creativity to designing an appropriate radio premise, format and production strategy. Often, we produce several “rehearsal” shows to hone the concept before we launch on the air. As with *Martha Stewart*, the hosts’ celebrity helps garner substantial publicity for their show and Sirius overall.

25. While many of our entertainment channels are affiliated with established brands, in other instances we have sought to create our own brand. A prime example of this is Sirius OutQ, a channel developed exclusively by Sirius and targeted to the gay and lesbian community. The target audience is a “niche” that has never been served significantly in terrestrial radio. However, that same niche is extremely loyal and, as such, OutQ is the kind of unique station that can make a person decide to subscribe to satellite radio and convince that subscriber to continue paying for the service when it is time for renewal. As such, we consider OutQ to be both a creative and commercial success. Other niche stations – for example, the Catholic Channel and Road Dog Trucking – serve a similarly dedicated group of listeners. Talent and hosts for these stations are developed much as our other entertainment creations – we generally hire people who have expressed talent in other media and develop them into radio hosts. For example, our OutQ hosts include a former *Billboard Magazine* writer, a Comedy Central comedian, an author, and a personal advice columnist, to name some.

26. Some of our hosts come from terrestrial radio backgrounds but still require substantial investment in content and talent development in order to succeed on Sirius. For example, Andrew Wilkow, a conservative host from New York radio whom we hired for our Sirius Patriot station, underwent significant program development to adjust his format and

content to our demographic (younger, more active, and more national than the AM radio stations at which he had been successful before).

27. I have discussed the launching of Sirius talk and entertainment channels and shows. A substantial amount of effort also goes into maintaining shows (successful radio shows have long, long shelf lives of many years). I manage a team of six Program Directors, all with major-market programming experience, skilled in managing talent and talk formats. Each show and channel is assigned to one of these Program Directors, who spends his or her days working directly with talent, producers and production staffs to maintain and evolve the format, react to timely occurrences in the news, monitor quality of topics and guest bookings, create promotional opportunities, synergize with ad sales, and keep the teams motivated and enthusiastic.

28. Sirius also carries channels in its "Family and Kids" category (Radio Disney, Discovery Channel, Radio Classics) and "Religion" category (The Catholic Channel, EWTN Global Catholic Network, and Christian Talk). These channels, in line with our other talk and entertainment channels, contain a mix of "pass through" programming and originally-produced exclusive content.

29. In making programming decisions, my team and I rely most heavily on our professional judgment and extensive experience with what works in talk and entertainment programming – an intangible skill that comes through years of seeing exactly what does and does not appeal to listeners. Based on that judgment and experience, I look at the pool of available programming and select the programs that flow best with the other programs on a particular channel to achieve a consistent sound and draw a large audience. For personality-

driven programs, we often look for up and coming talent who would fit within the confines of a particular format. In many cases, we find personalities from other media or other walks of life and train them into radio, because there are no available radio hosts appropriate for a particular initiative. I attempt to include a consistent blend of various hosts who complement each other, yet stay true to the focus of the channel.

30. I also buttress my programming decisions with research. Sirius carefully evaluates each station, generally on a semi-annual basis. Among other parameters, we evaluate frequency of listening, satisfaction, how likely a subscriber is to talk with others about a particular situation, and how likely a subscriber would be to cancel Sirius service if a particular channel were discontinued. Listener feedback is another very important input into Sirius content programming decisions. Sirius takes that feedback very seriously and has used it to adjust its programming. We monitor calls and emails to particular shows, levels of calls to talk shows during certain topics and contests, and calls and emails to our Sirius Customer Care department. I also personally speak to subscribers whenever possible, at promotions and events, and on the phone.

31. Listener feedback has influenced our programming decisions. We have discontinued certain channels based on low levels of satisfaction and enthusiasm. We have also adjusted formats within a channel based on listener feedback. Our Cosmo Radio station is now much more focused on "relationship" topics as a category of content, as a result of listener response.

32. As much time as it takes to develop new shows and channels, Sirius also has the ability to move very quickly based on market needs or creative ideas. For example, we are

creating a one-day radio station called "Sirius Halloween Radio", that will air only on Halloween, providing a soundtrack of fun, scary sound effects for listeners during trick or treating or office parties.

Sirius Comedy Channels

33. Sirius has three comedy channels: Blue Collar Comedy, Raw Dog, and Laugh Break. Each of these stations has a different sound and features a different kind of humor. Blue Collar Comedy is based on the successful brand of the Blue Collar Comedy Tour. Raw Dog is uncensored comedy, allowing subscribers to feel that they are in a stand-up comedy club. Laugh Break runs the gamut from classic Bob Newhart and Bill Cosby routines to Jerry Seinfeld and Monty Python's Flying Circus, and is family-friendly and kid-safe. We augment these channels with original content, such as the daily Jim Breuer Unleashed radio show on Raw Dog, starring former Saturday Night Live comedian Jim Breuer. All three Sirius comedy channels are very popular (particularly Raw Dog, which is among our most listened-to stations) and all three are produced in-house by Sirius under my direction, although they include recorded performances. Based on minutes, we have estimated that 83% of Blue Collar Radio, 81% of Laugh Break and 71% of Raw Dog programming uses commercial recordings.

Sirius Traffic and Weather Channels

34. Sirius provides traffic and weather information for twenty major metropolitan areas on Channels 148-58. While this is a significant commitment of bandwidth, Sirius is first and foremost a service that subscribers enjoy when they are traveling in their cars. Therefore, it is important for subscribers, including those on extended road trips, to have at their fingertips the latest traffic and weather information and driving conditions in the areas where traffic is generally most congested.

35. Sirius also has a National Weather and Emergency channel. The primary content is provided by the Weather Channel, covering weather for the entire country. In the event of a civil emergency or major weather event, the Sirius Emergency Desk, staffed by Sirius employees 24 hours a day, year-round, broadcast specific alerts, evacuation information, disaster information, shelter locations, and more. This channel is the one channel that will broadcast on all Sirius radios even if the subscription is not activated.

Preemption of Talk and Entertainment Channels

36. Despite the number of channels we have at Sirius, bandwidth is still a limited resource. Thus, for example, on fall weekends when our sports department is broadcasting large numbers of sporting events simultaneously (e.g., college football on Saturday afternoons and the NFL on Sunday) programming on some of our news, talk and information channels is preempted to allow play-by-play coverage of sporting events.

Use of Music on Talk and Entertainment Channels

37. A few of our news, talk and entertainment channels fill some time with recorded music. Sirius OutQ frequently plays music during weekends and overnights, Road Dog Trucking features a music block for two hours every afternoon, while Maxim Radio, Radio Disney, Radio Korea and Cosmo Radio include music in their mix of talk and phone calls. The remaining news, talk and entertainment channels generally do not feature recorded music.

Importance of Programming in Enhancing Subscriber Appeal

38. My testimony illustrates that, unlike services like Music Choice, which offer programming that consists entirely of music, Sirius offers listeners a significant array of news, talk, and entertainment programming in addition to its music channels. As I have discussed, Sirius places tremendous value on that programming and has devoted considerable time, energy, creative and technological effort, and financial resources to maximizing the appeal of those channels to attract and maintain subscribers.

39. The power of news, talk and information programming to induce consumers to purchase and continue to subscribe to Sirius' service cannot not be underestimated. Radio has a long history of being driven by "non-music" content - making a personal connection to its listeners beyond simply playing songs, in a tradition that is still true today. Radio gained initial popularity by presenting news, sports matches, radio dramas and comedy. Radio continued to grow through stars - the legendary disk jockeys such as Wolfman Jack; then through the creation of two-way telephone talk that allowed people to share conversations, opinions and advice with wide audiences. Radio has always brought communities together through words, stories and stars. Sirius incorporates all of those traditions - including the biggest star in radio, Howard Stern - in its news, talk, entertainment and other non-music offerings. Sirius then uses its technology, breadth and nationwide coverage to offer the best in radio, in an even better way than terrestrial radio, for example, by offering talk radio for previously underserved groups such as women and niches. Our data and empirical experiences show that our subscribers focus on non-music stations with particular passion. Most of the "top reason I chose to subscribe" responses from subscribers, relating to specific content, name non-music content, such as Howard Stern, the NFL, NASCAR, NPR, Fox News and

others. Our subscriber growth has gone hand in hand with dramatic growth in non-music channels developed by Sirius featuring strong brands and unique, exclusive content. Our substantial investment in the people, partnerships, time, and risks associated with creating new original content has been imperative to our differentiation from our competition, our growth in awareness and ultimately our growth in subscriber and advertiser revenue.

Before the
COPYRIGHT ROYALTY BOARD
LIBRARY OF CONGRESS
Washington, D.C.

In the Matter of)
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)
)
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)

Adjustment of Rates and Terms for
Preexisting Subscription and Satellite
Digital Audio Radio Services

Docket No. 2006-1 CRB DSTRA

DECLARATION OF JEREMY COLEMAN

I, Jeremy Coleman, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 30th day of October 2006 at New York, New York.



Jeremy Coleman

Before the
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LIBRARY OF CONGRESS
Washington, D.C.

APPEARANCES: (CONT.)
On Behalf of Music Choice
PAUL M. FAKLER, ESQ
Moses & Singer LLP
406 Lexington Avenue
New York, New York 10174-1299
(212) 554-7800
pfakler@mosessinger.com

In the matter of:)
)
Adjustment of Rates and Terms)
for Preexisting Subscriptions) Docket No.
Services,) 2006-1
and) CRB DSTR
Satellite Digital Audio Radio)
Services)
)

Room LM-408
Library of Congress
First and Independence
Avenue, S.E.
Washington, D.C. 20540
Thursday,
June 7, 2007

The above-entitled matter came on for hearing,
pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES
On Behalf of SoundExchange
DAVID A. HANDZO, ESQ
MICHAEL B. DeSANCTIS, ESQ
JARED O. FREEDMAN, ESQ
THOMAS J. PERRELLI, ESQ
MARK D. SCHNEIDER, ESQ
Jenner & Block
601 Thirteenth Street, N.W.
Suite 1200 South
Washington, D.C. 20005
(202) 639-6060
dhandzo@jenner.com
On Behalf of XM Satellite Radio Inc.
BRUCE RICH, ESQ
JONATHAN BLOOM, ESQ
TODD LARSON, ESQ
BRUCE S. MEYER, ESQ
RALPH MILLER, ESQ
Weil Gotshal & Manges
567 5th Avenue
New York, New York 10016
(212) 310-8238
On Behalf of Sirius Satellite Radio Inc.
BRUCE G. JOSEPH, ESQ
KARYN K. ABLIN, ESQ
MATT J. ASTLE, ESQ
JENNIFER L. ELGIN, ESQ
THOMAS W. KIRBY, ESQ
MICHAEL L. STURM, ESQ
JOHN WYSS, ESQ
Wiley Rein
1776 K Street, N.W.
Washington, D.C. 20006
(202) 719-7528
bjoseph@wileyrein.com

WITNESS	DIR	CROSS	REDIR	RECCROSS
Mel Karmazin				
By Mr. Wyss			29	
Terrence Smith				
By Mr. Kirby	36		130	
By Mr. DeSanctis		90		
Doug Wilsterman				
By Mr. Sturm	143			
Jeremy Coleman				
By Mr. Sturm	197		285	
By Mr. DeSanctis	226		305	
Steve Cohen				
By Ms. Elgin	333			
EXHIBIT NO.	DESCRIPTION			MARK RECD
24	Sirius contract with NBA			withdrawn
26	Sirius contract with NBA with 2 Amendments		6	8
27	Sirius contract with 112 (Stern)		9	10
28	5/1/07 Sirius Earnings Guidance		14	15
29	12/08/04 email Ryan to Karmazin		23	26
30	Satellite Orbit		90	
31	Satellite Update Report		103	108
32	Martha Stewart Agreement		227	230
33	Fox News Study		243	244
34	June 2006 Sirius Satellite Radio Listener Study		251	253
35	August 2006 Customer Satisfaction Survey			262
Sirius				
32	Written testimony of T. Smith		39	40
33	August 2005 Sirius News Channel Evaluation		144	144
34	June 2006 Sirius Satellite Radio Listener Study		199	199

1 had these deals.

2 Q Are any of your partners putting
3 in things like HD radios?

4 A Yes, they are, absolutely. And in
5 fact, one of -- you know, the company that you
6 mentioned, you asked me to talk about that I
7 had had the longest standing relationship
8 with, BMW, they actually are already
9 installing HD radios in their vehicles, and
10 a number of others have plans to, although at
11 this point they haven't made them public
12 information.

13 Q Are there also other devices that
14 are coming on to take your place?

15 A I hope this number is accurate,
16 but I believe somewhere in the current
17 calendar year, and there's an estimate that
18 about 70 percent of the vehicles out there
19 will have an iPOD adapter or iPOD jack so that
20 you can take your MP3 player or your iPOD into
21 the vehicle.

22 And then as we well know every

1 kind of a service that you're getting in
2 addition to the cell phone, the music
3 services, the navigation systems, you know,
4 traffic, any of that kind of stuff, sports
5 scores, you can get all of that into the
6 vehicle seamlessly integrated, and it's not
7 just cell. It's iPODs and everything else.

8 So any kind of handheld device
9 that you can bring into the vehicle, you know.

10 Q And that's all competition for
11 your spot on the dashboard?

12 A Absolutely. It's absolutely
13 competition for us, yes.

14 MR. STURM: Thank you, Your Honor.
15 I have no further questions.

16 CHIEF JUDGE SLEDGE: Any questions
17 by XM?

18 MR. MEYER: No, Your Honor.

19 CHIEF JUDGE SLEDGE: Any questions
20 by Music Choice?

21 MR. FAKLER: No, Your Honor.

22 CHIEF JUDGE SLEDGE: Any cross by

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1 vehicle has got an AM or FM radio. You know,
2 I would say probably on the order of about 75
3 percent of them have CD players or multiple CD
4 players.

5 Q And are there other newer devices
6 that are coming in as well?

7 A There's one in particular that
8 comes to mind, and again, you know, it's one
9 of our partners. Ford Motor Company announced
10 a device that they call Synch and the word
11 "synch" for them means that you can synch up
12 with the vehicle's electronic system, with
13 their entertainment system any device that you
14 bring into the vehicle, any handheld device.

15 So if you bring your cell phone
16 and through a Blue Tooth connection they'll be
17 able to have that work seamlessly with the
18 vehicle's electronics. Unlike Sirius where we
19 have to put the actual radio in the car, do
20 the wiring, put in the antenna, you just bring
21 that handheld device into the vehicle, and
22 when you do that, you're able if you have any

1 SoundExchange?

2 MR. DeSANCTIS: No, Your Honor.

3 CHIEF JUDGE SLEDGE: Any questions
4 from the bench?

5 (No response.)

6 CHIEF JUDGE SLEDGE: Thank you,
7 sir.

8 THE WITNESS: Okay. Thank you.

9 (The witness was excused.)

10 CHIEF JUDGE SLEDGE: All right.

11 Mr. Sturm.

12 MR. STURM: Your Honor, Sirius
13 calls Jeremy Coleman.

14 CHIEF JUDGE SLEDGE: Are you going
15 to skip and not call Law and Moore?

16 MR. STURM: Yes, Your Honor. Mr.
17 Law, we advised the Court the other day was
18 being submitted on the written testimony only.

19 CHIEF JUDGE SLEDGE: So you're not
20 going to call Law.

21 MR. STURM: We're not going to
22 call Law, and Mr. Moore advised SoundExchange,

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1 and I apologize if we failed to advise the
2 Court. We moved faster than expected, and so
3 Mr. Moore will be here on -- he wasn't able to
4 get here today. He will be here on Monday,
5 with the Court's permission obviously.

6 CHIEF JUDGE SLEDGE: All right.
7 Mr. Coleman, would you raise your right hand,
8 please?
9 Whereupon,

10 JEREMY COLEMAN
11 was called as a witness by counsel for the
12 Sirius Satellite Radio, Inc., and, having been
13 first duly sworn, was examined and testified
14 as follows:
15 CHIEF JUDGE SLEDGE: Thank you.
16 Please be seated.

17 THE WITNESS: Thank you.
18 MR. STURM: Your Honor, if we
19 could provide copies of Mr. Coleman's direct.
20 Thank you, Your Honor.
21 DIRECT EXAMINATION
22 BY MR. STURM:

1 title, do the statements remain true to the
2 best of your knowledge, sir?

3 A They do.
4 MR. STURM: I would move the
5 admission of Sirius Exhibit 34, which is Mr.
6 Coleman's written direct testimony.

7 CHIEF JUDGE SLEDGE: Any objection
8 to the Exhibit 34?
9 (No response.)

10 CHIEF JUDGE SLEDGE: Without
11 objection the exhibit is admitted.

12 MR. STURM: Thank you, Your Honor.
13 (Whereupon, the document
14 referred to was marked
15 as Sirius Exhibit No. 34
16 for identification and
17 received in evidence.)

18 BY MR. STURM:
19 Q I want to talk about some of the
20 specifics of your testimony, but before we get
21 to that, could you tell the Court just very
22 briefly about your background before you came

1 Q Good afternoon, Mr. Coleman.
2 Would you state your name, please?
3 A Jeremy Coleman.
4 Q You have a large book in front of
5 you that I believe is your written direct
6 testimony and some associated exhibits. Could
7 you take a look quickly through that and
8 identify it as your testimony?

9 A It is, indeed.
10 Q I understand that your job title
11 has changed since that testimony was
12 presented; is that right?

13 A I'm now Vice President and General
14 Manager of Talk Entertainment and Information
15 Programming.

16 Q Okay. So you've added general
17 manager to the title?
18 A That's true.

19 Q Have you looked at your testimony
20 again recently?

21 A I have.
22 Q And apart from that change to the

1 to Sirius and I guess start with how you got
2 your start in radio.

3 A Started on my university radio
4 station in Old Dominion University in southern
5 Virginia. Worked my way up to the point that
6 I was running that radio station, which
7 allowed me to get into professional radio.

8 I worked in Norfolk at a rock
9 radio station in a programming and a
10 promotional position, then Milwaukee at a
11 classic rock station, back to Norfolk as you
12 sometimes do in radio.

13 Then to Washington, D.C. where I
14 started in 1992 working here at 106.7 WJFK,
15 which at the time was a classic rock station
16 that we then transitioned to a talk station on
17 FM. Infinity Broadcasting was the owner, and
18 in 2000 they moved me to New York to work at
19 a radio station there.

20 And then in 2003, I joined Sirius.

21 Q Okay. When you joined Sirius, and
22 your responsibility is the talk-entertainment

1 end, news programming, right?
 2 A Correct.
 3 Q When you joined Sirius in 2003,
 4 can you sort of describe generally the kind of
 5 talk and news and entertainment programming
 6 that Sirius had?
 7 A Yeah. When I joined it was at a
 8 time that the company had made a decision to
 9 expand its non-music programming because it
 10 was looking to further differentiate from
 11 terrestrial radio and to drive its
 12 subscriptions. So --
 13 Q So what did they have at the time?
 14 A At the time though we had not
 15 started, and we had far fewer non-music
 16 stations, and they mainly consisted of
 17 partners that were providing the audio of
 18 their content, which we called it pass-
 19 through, we would then pass through and
 20 transmit to our subscribers.
 21 Q So can you give us some examples
 22 of the kind of channels that you're talking of

1 us to produce ourselves. News is a phenomenal
 2 example there where it's very expensive to
 3 have a whole lot of bureaus all over the
 4 world. So those were the pros of carrying
 5 those partners.
 6 Q What was the general --
 7 A I was going to mention -- sorry?
 8 Q Was it also high quality
 9 programming?
 10 A Correct. They would do a good job
 11 of the content they were doing, and another
 12 advantage was that they were generally well
 13 branded. So a lot of people were very
 14 familiar with CNN, for example, or National
 15 Public Radio.
 16 Q Now, you've done the good. What
 17 was the bad? What were the negative aspects
 18 of that kind of programming?
 19 A The two most significant negatives
 20 are, one, generally we were carrying the audio
 21 of television stations in those case, and that
 22 audio just is not produced for a radio

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1 pass-throughs?
 2 A The audio of CNN's Television
 3 News, the audio of Fox News. We carried two
 4 channels of national public radio.
 5 Q And at that time did you also have
 6 sports within your umbrella?
 7 A I did overseas sports at the time.
 8 It was a very limited amount of sports and was
 9 also generally pass-through programming, such
 10 as ESPN.
 11 Q What are the good and bad aspects
 12 of that kind of pass-through programming?
 13 A The good aspects are generally
 14 it's the kind of content that people like
 15 elsewhere. So if you are a fan of watching
 16 CNN on television, the idea that you could
 17 hear CNN in your car while you're driving
 18 around through Sirius satellite radios seemed
 19 to be a good thing.
 20 The other advantage is that some
 21 of these partners were able to produce
 22 programming that it just wasn't feasible for

1 audience. It's produced for people to watch
 2 while they are also watching pictures. So it
 3 was not as good radio as generally people
 4 enjoy.
 5 And the other advantage was that
 6 it was generally available elsewhere and
 7 our --
 8 Q Do you mean the other
 9 disadvantage?
 10 A Sorry. The other disadvantage.
 11 Sorry. Is that it was generally available
 12 elsewhere. So it is less likely that someone
 13 would subscribe to Sirius for something like
 14 this if they can already get it on their cable
 15 TV company.
 16 Q Did it --
 17 CHIEF JUDGE SLEDGE: Mr. Coleman,
 18 let me make sure that I understand. Did you
 19 just say that television news is high quality?
 20 (Laughter.)
 21 THE WITNESS: It is a higher
 22 quality than we could produce ourselves, given

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1 our --

2 CHIEF JUDGE SLEDGE: Ah, that's
3 very different.

4 BY MR. STURM:

5 Q Did that kind of pass-through
6 programming differentiate you substantially
7 from XM?

8 A No, it did not.

9 Q Why not?

10 A At the time they generally had the
11 same partners that we did. So it was not a
12 significant differentiator.

13 Q And did it differentiate you from
14 terrestrial radio to any great extent?

15 A To terrestrial radio, somewhat.
16 But terrestrial radio also carried news
17 content.

18 Q Now, given those strengths and
19 weaknesses of the programming line-up that you
20 described, what was your job when you were
21 hired in 2003?

22 A I was hired to substantially

1 Q Why don't we just start with a
2 list of a few of the new branded stations that
3 you've developed and then we can discuss them?

4 A Most significant would be the
5 Howard Stern. We also developed a radio
6 station with Martha Stewart. We developed a
7 radio station with Cosmopolitan Magazine for
8 younger women called Cosmo Radio. We
9 developed a radio station with the Archdiocese
10 of New York called the Catholic Channel.
11 Those are some of the most significant.

12 Q Okay, and how about the unbranded
13 things where you've developed your own brand
14 independently?

15 A Several. We developed a radio
16 station to target gay and lesbian listeners
17 called Sirius OutQ. We targeted truckers,
18 long distance truck drivers with a station
19 called Road Dog Trucking. We created a new
20 kind of political talk with two stations,
21 Sirius Left and Sirius Patriot, and we created
22 a station called Sirius Stars, which is a

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1 expand the amount of content that fit into
2 several categories. One is content that is
3 exclusive, that if someone is going to
4 consider subscribing to Sirius, they would be
5 more likely to subscribe for something that
6 they might like that they can't get anywhere
7 else.

8 The second would be something that
9 is differentiating, again, more likely to
10 subscribe to Sirius if we are different than
11 those around us, and we were also looking for
12 ways to derive advertising revenue, which is
13 not a significant revenue driver as
14 subscription revenues, but it was still
15 something we were looking to expand.

16 Q I don't want to go through
17 everything that you've added in that time, but
18 let's talk about a few of the most significant
19 ones and maybe we can differentiate between
20 branded content and content where you've
21 developed your own brands.

22 A Sure.

1 collection of celebrity hosts.

2 Q What --

3 JUDGE ROBERTS: My colleague is
4 laughing because he wants to know why it's
5 Sirius Left and not Sirius Right.

6 (Laughter.)

7 THE WITNESS: Would you like an
8 answer?

9 JUDGE ROBERTS: One is a patriot
10 and one is not.

11 (Laughter.)

12 CHIEF JUDGE SLEDGE: You hired
13 Howard Stern. What else can we say?

14 (Laughter.)

15 BY MR. STURM:

16 Q Why is it Sirius Patriot and not
17 Sirius Right?

18 A It actually started as Sirius Left
19 and Sirius Right, and we found that Sirius
20 Right wasn't just resounding enough and Sirius
21 Patriot got us more attention. It was not
22 Howard Stern's decision.

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1 Q Okay. I think there has been
2 prior testimony about Howard Stern. So let's
3 talk about some of the things that you have --
4 some of the other concepts that you have
5 worked on. Start with Martha Stewart.

6 Whose idea was it to develop a
7 Martha Stewart station?

8 A It started with the thought that
9 at the time we had a lot of programming that
10 was targeted towards --

11 Q Well, first of all, whose idea was
12 it to hire Martha Stewart specifically or to
13 get involved with Martha Stewart?

14 A Mel Karmazin had a prior
15 relationship with Martha.

16 Q Okay, and why did you want to
17 develop a Martha Stewart radio station?

18 A We had a lot of programming for
19 guys. This was partly due to our distribution
20 at the time, where guys were more likely to be
21 early adopters of this technology, but we had
22 no significant programming for women, and we

1 interactive, to talk to listeners and live
2 phone calls not knowing what they were going
3 to ask, was the bulk of the challenge with
4 that station.

5 Q What is the process that you go
6 through in developing a station like the
7 Martha Stewart channel?

8 A Starts with what the existing
9 assets are, analyzing those to see if any of
10 those are appropriate for radio, then looking
11 at --

12 Q When you say the "existing
13 assets," what do you mean?

14 A For example, Martha Stewart had a
15 television show, a bunch of magazines, some
16 properties on the Internet, and were any parts
17 of those possibly applicable to radio where
18 there's stored audio that might be useful,
19 that kind of thing.

20 In the case of Martha, the answer
21 was there was almost nothing, and so then we
22 had to go through the attributes of the Martha

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1 also thought it would be very differentiating
2 to have programming for women since
3 terrestrial radio does not have significant
4 talk programming for women.

5 Q Now, Martha Stewart even at the
6 time you hired her, I think she had a TV show
7 and a magazine, and I'm sure she was
8 everywhere else in the world. Why was it so
9 difficult to develop a radio station for
10 Martha Stewart?

11 A Martha, Martha Stewart is an
12 individual who also is about 100 experts that
13 represent her, a lot of people involved in
14 being Martha Stewart. At the same time, they
15 were in many other media, all visual, and in
16 early meetings we found out very quickly that
17 if you ask a Martha Stewart person any
18 question, they answer by showing you a picture
19 or thrusting a plant in your direction.

20 And so to teach them the art of
21 radio, to communicate through words and
22 conversation and to teach them to be

1 Stewart world that people would like and
2 develop from scratch radio applications that
3 would be enticing to an audience.

4 Q Can you give an example of that?

5 A The biggest single challenge was
6 training her people to be able to have an off-
7 the-cuff conversation on the radio without
8 preplanning and pre-editing every single thing
9 that they did, which took a great deal of
10 training, and once they got comfortable with
11 it and we were able to work with it over a
12 period of time, they got very good at it.

13 Q So first you study the brand and
14 select things that may be useful, and then how
15 do you go forward from there?

16 A Once we develop a plan for content
17 that works for this radio station, then comes
18 the hiring of appropriate radio people. Those
19 might be hosts. They might be producers.
20 They might be people to run the controls, to
21 screen the phone calls.

22 Then comes incorporating any

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1 existing people like her editors; training for
2 a significant period of time; ultimately
3 launching some parts of it on the radio live
4 so that we can really feel that out.

5 Generally when we launch a station
6 we'll do it in two phases. We'll do what we
7 internally call the soft launch, which means
8 we might start with just a couple of shows
9 quietly and get a feel for things, and then
10 we'll expand over a period of time to the full
11 radio station.

12 Q Does it take time for a station
13 like that to build its audience in your
14 experience?

15 A It took time for two things. It
16 took time to build the station in the first
17 place, months, months. And then any talk
18 station takes a significant amount of time to
19 build an audience.

20 Q What were the benefits of
21 association, in addition to the programming;
22 what were the benefits of associating with the

1 Q And did you have her do something
2 about how to install a sirius radio?

3 A We had her do a piece on her
4 television show where she demonstrated how to
5 install a Sirius radio, and she did it with
6 one of our other stars, Richard Simmons, which
7 made the segment amusing as well as
8 informative. But she has been very good in
9 multiple occasions about explaining the
10 complexity of Sirius.

11 Q And is that one of the challenges
12 you face in getting subscribers?

13 A The complexity of Sirius?

14 Q Yeah.

15 A In my opinion, it's a tremendous -
16 - it's a tremendous challenge.

17 Q Why is that?

18 A People understand very quickly the
19 costs of satellite radio. They understand
20 that you have to get some sort of radio. They
21 aren't quite sure about that. They understand
22 that they have to pay for radio, which they've

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1 Martha Stewart brand and with Martha Stewart
2 herself?

3 A Thinking back to our goal, which
4 is to use our radio stations to get
5 subscribers, Martha Stewart, very famous. As
6 soon as she announced that she was doing
7 something with Sirius, we got an enormous
8 amount of publicity for Sirius for that.

9 The second advantage is that she's
10 a brand that an awful lot of people like.
11 There are a lot of people who will follow
12 Martha to any project that she might do, and
13 so we felt that a lot of people would follow
14 her to Sirius.

15 Another aspect is that she has an
16 awful lot of existing media, and in that
17 existing media she will promote her Sirius
18 radio station. So you open up her monthly
19 magazine or you watch her daily television
20 show on NBC, and she'll promote her Sirius
21 radio station, which we believe drives
22 subscribers.

1 never done.

2 It's a lot harder for them to
3 understand the benefits of radio, that there
4 is a Martha Stewart station and what that
5 actually might mean to them in terms of
6 planning for a family holiday and how this
7 might become an important part of their daily
8 lives, and that's across many, many of our
9 radio stations. To understand our depth of
10 content is a big challenge.

11 Q Another station that you mentioned
12 was your Cosmo radio station. How is that
13 similar to and different from Martha Stewart?

14 A Similarities: Cosmo Radio is
15 associated with Cosmopolitan Magazine, which
16 is one of the most popular magazines in
17 existence and is tremendously popular with
18 young women. It was also an area of content
19 that really no one in radio was focusing talk
20 programming on, and so we felt it was
21 tremendously differentiating for us.

22 The other similarities was that

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1 they had gotten involved in other medias, then
2 particularly magazines, and had not gotten
3 involved in radio before.

4 Q What were the challenges in
5 building the Cosmo radio station?

6 A Compared to Martha, one of the
7 biggest challenges with the Cosmo station was
8 that it didn't have a lead personality. The
9 Martha Stewart empire is led by Martha. There
10 was an actual human being who is able to get
11 on the radio and talk. Cosmo didn't have
12 that. So we had the additional step of having
13 to develop a personality for Cosmo in addition
14 to training some of their editors, hiring
15 hosts, hiring producers, developing content
16 that was appropriate to the brand and also
17 worthwhile on the radio.

18 Q So what kind of shows do you have
19 on Cosmo Radio?

20 A We have shows that have hosts
21 within the demographics of young women or the
22 guys that they love, and we give an awful lot

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1 of advice and an awful lot of comfort to young
2 women who are trying to make their way through
3 the world.

4 Q Switching gears substantially, you
5 also said that you had a branded deal with the
6 Archdiocese of New York, right?

7 A Correct.

8 Q And that's a relatively new
9 channel, is it?

10 A That is new. That's very recent.

11 Q Okay, and can you describe that
12 channel briefly, please?

13 A It is a religious station. We've
14 added several religious stations to our non-
15 music line-up. We actually had a Catholic
16 station or have a Catholic station already
17 called EWTN, but we felt that part of us
18 offering a variety of content to target a
19 significant demographic, there was more than
20 one way to reach the large number of Catholics
21 in America.

22 EWTN is very much like going to

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1 church. The Catholic channel that we
2 developed with the Archdiocese of New York,
3 even though it is a nationally focused
4 channel, was designed to be sort of the mirror
5 image of EWTN and provide a station that
6 brought Catholicism to people living their
7 regular lives.

8 This was particularly intriguing
9 to us because it had never been done before.
10 So not only was it differentiating. It was
11 actually ground breaking, and it required the
12 same sort of development that we put into our
13 other radio stations where developing the
14 context, developing the premises, hiring the
15 people, people who had never done this before,
16 training them into it, and ultimately
17 launching the station.

18 Q And you worked closely with all of
19 the people who were involved in launching that
20 station?

21 A Correct.

22 Q Those are some of the branded

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1 content that you have added. Let's switch
2 gears to the brands that you've developed
3 yourself. I think one of them you mentioned
4 was your OutQ station.

5 A Yes.

6 Q What were the reasons that that
7 station was created?

8 A Again, we were looking for
9 differentiating and exclusive content, and no
10 one in terrestrial radio had ever dedicated a
11 radio station to targeting the gay and lesbian
12 community, and it's understandable. In
13 terrestrial radio, in any given market you
14 only have so many radio station, and so you
15 try to aggregate the largest number of people
16 and by the time you get down to a niche like
17 gays and lesbians, you've kind of used up all
18 of your radio stations.

19 But you start looking over a
20 national footprint, and you start aggregating
21 those niches together on a national level and
22 there's a really significant number of people

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1 there to serve, which was enticing to us
2 because we felt we could drive subscribers
3 with it, and also we had seen that there were
4 a lot of advertisers that were interested in
5 reaching that community in a targeted way. So
6 we felt we could solve some problems for
7 advertisers as well with that station.

8 Q And did those advertisers have
9 other places to go on the radio?

10 A There might be a few shows
11 generally late at night, but in any
12 significant way, no.

13 Q You also discussed the -- well,
14 actually, what has been the response to OutQ?

15 A The OutQ response has been really
16 exactly what we had hoped for because we don't
17 just care about any number of people who are
18 listening to a station. We care very strongly
19 how passionate they are. We feel that
20 we've -- that it was a way to set us apart so
21 that they would want to subscribe to Sirius,
22 and when they become listeners, they are among

1 sort of younger skewing way, generally there
2 were no radio stations for you. So we
3 developed Sirius Left and Sirius Patriot.

4 Q And finally, how about Road Dog
5 Trucking?

6 A You know, that was another radio
7 station that took advantage of our national
8 footprint because if you're a long distance
9 truck driver, poor people were very frustrated
10 that if they wanted to listen to radio the
11 long periods of time that they were in their
12 truck, they would listen to a local radio
13 station and then 50 miles later the thing
14 would fade out and then they'd have to find
15 another one.

16 So to be able to give them a radio
17 station that they could listen to seamlessly
18 nationwide was one good thing.

19 The second good thing is truckers
20 are a tremendous community. The more I've
21 gotten to know the trucking community, the
22 more I'm amazed by it. These people are bound

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1 the most loyal listeners that in the years of
2 experience I've had I have witnessed. They
3 are extremely likely to participate in the
4 station, extremely likely to tell their
5 friends, which in turn drives more subscribers
6 for us. So we've been very pleased.

7 You mentioned briefly at the start
8 the Left and Patriot stations. Why did you
9 create those?

10 A Looking to differentiate from
11 terrestrial radio. Terrestrial radio does a
12 fairly limited amount of political coverage
13 proportionally. National Public Radio does a
14 very good job, and then the political stations
15 that tend to be significant tend to be AM
16 stations, which because AM tends to draw older
17 listeners, tends to be conservative, tends to
18 be built around Rush Limbaugh.

19 So we were looking at available
20 political stations, and we found that if you
21 wanted to talk about liberal issues, if you
22 wanted to talk about conservative issues in a

1 together by their life style, which is really
2 very unlike any other life style that you
3 know. You spend your life in a truck,
4 generally alone.

5 So to create a radio station that
6 built a community for them that allowed them
7 to interact in much the same way that in the
8 1970s they would interact over CB radios; now
9 they do it over cell phones and generally
10 calling into our radio station.

11 So it has been really rewarding to
12 do that station.

13 Q All of these news, talk, and
14 entertainment channels that we've discussed,
15 what was your sort of overall goal in creating
16 them?

17 A The overall goal with everything
18 we do is to drive subscribers. So we felt
19 that to drive subscribers we needed to
20 differentiate from what's out there. We
21 needed to have exclusive content so that
22 people would want thing and need to subscribe

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1 to Sirius in order to get them.
2 We needed to work with partners
3 that would amplify our promotion because they
4 would get attention through their activities,
5 and the odd sales aspect also helped as well.

6 Q Are any of those channels
7 available on XM?

8 A The channels that we have
9 developed?

10 Q Yes.

11 A No. All of those channels are
12 exclusive to Sirius.

13 Q Okay, and are any of them
14 available on terrestrial radio?

15 A No, they are not.

16 MR. STURM: I don't have further
17 questions, Your Honor.

18 CHIEF JUDGE SLEDGE: Any questions
19 by XM?

20 MR. RICH: No.

21 CHIEF JUDGE SLEDGE: Music Choice?

22 MR. FAKLER: No, Your Honor.

1 marked as Sirius Exhibit 2, I believe. Could
2 you please turn to page --

3 JUDGE ROBERTS: Thirty-four.

4 MR. DESANCTIS: Thirty-four. I
5 apologize.

6 BY MR. DESANCTIS:

7 Q Could you please turn to page 16
8 of your written direct testimony? I
9 apologize. Let me start by handing out a
10 different exhibit, and then we can get back to
11 that, okay?

12 A Sure.

13 Q I'd like to hand out what I've
14 marked as SoundExchange Trial Exhibit Number
15 32.

16 (Whereupon, the above-referred to
17 document was marked as
18 SoundExchange Exhibit No. 32 for
19 identification.)

20 BY MR. DESANCTIS:

21 Q Do you recognize this document
22 marked as Sirius Exhibit 32, Mr. Coleman?

1 CHIEF JUDGE SLEDGE: Any cross by
2 SoundExchange?

3 MR. DeSANCTIS: Yes, Your Honor.

4 CHIEF JUDGE SLEDGE: Okay. Well,
5 this would be a good time to take a short
6 break. We'll recess ten minutes.

7 (Whereupon, the foregoing matter
8 went off the record at 2:34 p.m.
9 and went back on the record at
10 2:48 p.m.)

11 CHIEF JUDGE SLEDGE: Mr.
12 DeSanctis?

13 MR. DESANCTIS: Thank you, your
14 Honor.

15 CROSS EXAMINATION

16 BY MR. DESANCTIS:

17 Q Good afternoon, Mr. Coleman.

18 A How are you?

19 Q Well. And you?

20 A Good.

21 Q I wanted to begin with your
22 written direct statement, which is the binder

1 A Yes.

2 Q SoundExchange Exhibit 32.

3 A Yes.

4 Q What is it?

5 A It is an agreement with the Martha
6 Stewart organization for her radio channel.

7 Q That's the Martha Stewart channel
8 that you were discussing in your direct
9 testimony?

10 A Correct.

11 Q And it's true, is it not, that
12 your group works to select content providers
13 and negotiates the agreements, correct?

14 A My group does not negotiate the
15 agreements. My group produces the content.

16 Q Let me direct your attention to
17 page four of Sirius Exhibit 34, which is your
18 direct testimony, paragraph number eight, the
19 third sentence, the fourth sentence; excuse
20 me.

21 A Correct.

22 Q It reads, "My group works with

1 others at Sirius to select content providers
2 and negotiate agreements with them."
3 A That is correct. We do work with
4 others at Sirius to do that. There is a
5 business affairs office, the head of which's
6 office is right next to mine, and we work
7 together on deals, along with our President of
8 Entertainment, Scott Greenstein. Generally,
9 the role that I play represents the art of it,
10 and the role that he plays represents the
11 business of it.

12 Q I see. So you're the content side
13 --

14 A Correct.

15 Q -- of the deal, and he's the
16 finance or business side of the deal?

17 A Correct.

18 Q Do you have input into content
19 portions of contracts with content providers?

20 A Can you explain which part you're
21 talking about? You're talking about where it
22 says the radio station will do this --

1 MR. STURM: Your Honor, this is a
2 highly-confidential document with one of our
3 content providers. The terms are not
4 generally disclosed publically, and so it
5 would cause substantial competitive harm to
6 Sirius if the terms were disclosed. And,
7 therefore, I would ask that it would be
8 protected and be received.

9 CHIEF JUDGE SLEDGE: Any objection
10 to the motion?

11 MR. DESANCTIS: No, your Honor.

12 CHIEF JUDGE SLEDGE: Without
13 objection, the motion is granted.

14 MR. STURM: Thank you, your
15 Honor.

16 BY MR. DESANCTIS:

17 Q Now, Mr. Coleman, I'd like to
18 direct your attention to Sirius Exhibit Number
19 34, which is your written direct statement.

20 A Sure.

21 Q Just quickly go over a couple of
22 things that were not in your oral testimony.

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1 Q Exactly.

2 A Yes.

3 Q Okay. And do you recognize what
4 has been marked as SoundExchange Trial Exhibit
5 32 as the current, existing and active Sirius
6 agreement with Martha Stewart Omnimedia?

7 A I believe so, yes.

8 MR. DESANCTIS: Your Honor, I'd
9 like to move for the admission of
10 SoundExchange Trial Exhibit 32.

11 CHIEF JUDGE SLEDGE: Any objection
12 to Exhibit 32?

13 MR. STURM: No objection, your
14 Honor. I would just note that it is a
15 restricted document and, if this is the
16 appropriate time, I would ask that it be
17 protected.

18 CHIEF JUDGE SLEDGE: Without
19 objection, the exhibit is admitted.
20 (Whereupon, SoundExchange Exhibit
21 No. 32 was received into
22 evidence.)

1 I'd like to turn your attention to paragraph
2 36, please, page 16. You discuss here that
3 occasionally other programming, such as sports
4 programming, if there's a special event, the
5 sports programming might preempt the
6 programming on your talk and entertainment
7 channels.

8 A Right.

9 Q Do you recall that testimony?

10 A Yes.

11 Q And that's because, as you put it
12 in the first sentence, bandwidth is still a
13 limited resource, right?

14 A Correct.

15 Q Are you aware of the fact that --
16 well, strike that. It's true, is it not, that
17 music channels occupy, roughly, double the
18 bandwidth of talk channels?

19 A You're talking about the amount of
20 bandwidth it takes to broadcast a particular
21 channel?

22 Q Right.

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1 A Yes.

2 Q Okay. And it's also true that,
3 when there's special events, special sporting
4 events for example, Sirius may broadcast those
5 by preempting certain news, talk, and
6 information channels, but they don't preempt
7 the music channels; is that correct?

8 A That is correct.

9 Q Let's look down on paragraph 37 of
10 your testimony. Something else that didn't
11 come out on direct. It says, "A few of our
12 news, talk, and entertainment channels fill
13 some time with recorded music." By that, you
14 mean sound recordings that are the subject of
15 this proceeding, correct?

16 A Correct.

17 Q And you mentioned the channels
18 that do so. Sirius OutQ frequently plays
19 music during the weekends and overnights; Road
20 Dog Trucking, which features a two-hour block
21 every afternoon; Maxim Radio; Radio Disney;
22 Radio Korea; and Cosmo Radio include music in

1 Martha Stewart; primarily of broadcast of the
2 audio portion and/or adapted content based on
3 MSO archive material. Does that mean her old
4 TV shows?

5 A Or old shows that she used to do
6 for Westwood One, which was a terrestrial
7 radio syndication company; that kind of thing.

8 Q And, third, primarily music play
9 lists and other content tied to MSO experts'
10 fields, as agreed to by the parties. And then
11 it goes on, "It is understood that the musical
12 recordings played on the MSO channel will be
13 provided primarily from Sirius' library;"
14 correct?

15 A It does say that.

16 Q Did you consult this before you
17 submitted your testimony?

18 A We never did that.

19 Q Okay.

20 A You know, this happens an awful
21 lot with contracts where we do a deal with a
22 partner, and when you're doing the deal you're

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1 their mix of talk and phone calls. The
2 remaining news, talk, and entertainment
3 channels generally do not feature recorded
4 music. So the ones listed here are the only
5 ones that do feature recorded music?

6 A As part of their format? Correct.

7 Q Let me turn your attention back to
8 SoundExchange Exhibit 32, which was the Martha
9 Stewart agreement.

10 A Yes.

11 Q Turn to the third page of, fourth
12 page of the document, please. In the middle
13 of the page is the word, the heading,
14 "Content."

15 A Yes.

16 Q That's your department, right?

17 A Correct.

18 Q And it reads, "The content of the
19 MSO channel," that's the Martha Stewart
20 Omnimedia, "shall be provided by MSO and will
21 consist primarily of the following," so
22 primarily of newly-created content hosted by

1 doing it in sort of a vacuum, you know. You
2 haven't worked together yet, you barely know
3 each other, a lot of lawyers involved. And,
4 ultimately, when the deal gets done, then the
5 creative folk get together and you start to
6 really develop the radio station. And, often,
7 the content sort of looks like what's in the
8 contract, but everyone has agreed that there's
9 a different plan that actually does a better
10 job. And the Martha station was a phenomenal
11 attempt. This happened to be low-hanging
12 fruit at the time that we were doing the deal,
13 but the station actually developed into a
14 hosted interactive radio station that does not
15 play music, uses tiny amounts of archival
16 material, and is generally fresh material that
17 we created from scratch because that's more
18 differentiating, more exclusive, higher
19 quality, more interesting for Martha to
20 promote in her other media. So, no, we never
21 did that.

22 Q Okay. How about music on Howard

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1 Stern? Is it your testimony there also that
 2 there's no music on the Howard Stern channel?
 3 A Howard Stern doesn't regularly
 4 play music as part of his format.
 5 Q Fade in, fade out, in between
 6 skits, in between interviews, there's no
 7 recorded music?
 8 A Oh, you're talking about coming
 9 back from a break?
 10 Q Coming back from a break,
 11 switching gears into some other kind of
 12 programming, segue way music?
 13 A I think that actually was in my
 14 testimony. That is something that isn't just
 15 specific to Howard Stern. We do it on a lot
 16 of our talk stations. It's sort of a
 17 convention that I personally am not a fan of
 18 because it's a convention from terrestrial
 19 radio. Rush Limbaugh would always use songs
 20 coming back from break, and I suppose that
 21 made him seem better. But I'm not a fan of it
 22 because it's not differentiating, so actually,

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1 in some cases, we've been getting away from
 2 that.
 3 Howard might do it if, you know,
 4 if he had an artist on and he was talking to
 5 that artist, and he used a bit of their music
 6 to illustrate their work or something else
 7 happened that sort of made it appropriate.
 8 It's not a significant part of his format.
 9 Q Not everyday?
 10 A As far as coming into and out of a
 11 break, that's the convention. That's --
 12 Q So that is every time they come in
 13 and out of breaks?
 14 A Sure.
 15 Q And he's playing sound recordings
 16 at that time, right? Not live music?
 17 A Correct.
 18 Q And that's the case on most of
 19 your talk channels?
 20 A Most talk radio shows will use
 21 some sort of music. It's sometimes sound
 22 recordings, sometimes it's production music

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1 that's been specifically created for a show.
 2 You know, in the case of Howard Stern
 3 actually, you raise a good point because we
 4 have an in-house composer who creates a lot of
 5 that what we call interstitial music himself
 6 in the studio. So it's a mix.
 7 Q In your direct testimony, Mr.
 8 Coleman, you explained that many of your news
 9 programs, many of your news channels are not
 10 exclusive.
 11 A Correct.
 12 Q They're passed through.
 13 A Correct.
 14 Q And then you talked about
 15 exclusive programming which is only on Sirius,
 16 like Howard Stern and Martha Stewart. And you
 17 just felt that you prefer exclusive
 18 programming, in a sense, because it draws more
 19 customers, right?
 20 A I do.
 21 Q Okay. So the reason why Sirius
 22 likes exclusive programming is because it

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1 draws customers; is that correct?
 2 A Yes.
 3 Q And I think you testified that
 4 everything Sirius does ultimately is about
 5 drawing subscribers; is that correct?
 6 A The majority of what we do is to
 7 draw subscribers. A smaller percentage is to
 8 draw advertising revenue.
 9 Q Okay. And the music channels are
 10 not exclusive, are they?
 11 A I'm not sure I understood the
 12 question.
 13 Q The music channels on Sirius,
 14 they're not exclusive, are they?
 15 A We produce the music channels in-
 16 house. I don't oversee the music stations,
 17 but I walk by them everyday. They're produced
 18 at Sirius.
 19 Q Okay.
 20 A Or by Sirius.
 21 Q I direct your attention to page 17
 22 of your testimony, please, paragraph 39. It

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1 begins, "The power of news, talk, and
2 information programming to induce consumers to
3 purchase and continue to subscribe to Sirius'
4 service cannot be underestimated." Is that
5 still your testimony today?

6 A Correct.

7 Q Down near the bottom of that page,
8 "Our data and empirical experiences show that
9 our subscribers focus on non-music stations
10 with particular passion. Most of the top
11 reasons I choose to subscribe responses from
12 subscribers relating to specific content name
13 non-music content." Do you see that?

14 A I do.

15 Q When you say most of the top
16 reasons I choose to subscribe responses,
17 you're referring to surveys that Sirius
18 conducts of its subscribers, right?

19 A Correct.

20 Q And it often asks what are the
21 reasons you choose to subscribe to Sirius or
22 satellite radio, correct?

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1 A Correct.

2 Q And you consult and use these
3 surveys frequently?

4 A When they come out.

5 Q And you do that to base
6 programming decisions on, right?

7 A I do that to influence programming
8 decisions.

9 Q On page 14 of your testimony,
10 paragraph 30, "I also buttress my programming
11 decisions with research. Sirius carefully
12 evaluates each station generally on a
13 semiannual basis." Are those the kinds of
14 surveys that you were talking about later in
15 your testimony that we just read?

16 A Correct. There are different
17 kinds of surveys. In paragraph 30, I was
18 specifically talking about a listener study
19 that we do to analyze certain radio stations.

20 Q Okay. And you use them to
21 influence programming to be responsive to your
22 subscribers' wants and preferences, correct?

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1 A Up to a certain point, yes. It's
2 a tricky thing because you're also looking to
3 see what has worked, what might work in the
4 future, what doesn't work as well, and you're
5 using that as one way to influence your
6 decisions, along with a variety of other
7 influences.

8 Q I'll direct your attention what
9 I'm marking as SoundExchange Trial Exhibit 33,
10 please.

11 (Whereupon, the above-referred to
12 document was marked as
13 SoundExchange Exhibit No. 33 for
14 identification.)

15 BY MR. DESANCTIS:

16 Q Do you recognize this document,
17 Mr. Coleman?

18 A I do.

19 Q What is it?

20 A It's a study that was done by our
21 executives when we were trying to determine
22 whether or not it was a good idea to renew Fox

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1 News, which had some costs associated with it,
2 to try and get a sense of whether we needed to
3 renew it or whether we would be fine without
4 it.

5 Q Did you renew Fox News?

6 A We did end up renewing Fox News.

7 MR. DESANCTIS: Your Honor, I
8 would move to move the admission of
9 SoundExchange Trial Exhibit 33.

10 CHIEF JUDGE SLEDGE: Any objection
11 to Exhibit 33?

12 MR. STURM: No objection, your
13 Honor.

14 CHIEF JUDGE SLEDGE: Without
15 objection, it's admitted.

16 (Whereupon, SoundExchange Exhibit
17 No. 33 was received into
18 evidence.)

19 MR. STURM: Your Honor, this is a
20 confidential survey, fairly recent, within the
21 last two years, of Sirius subscribers with
22 very specific data points showing the

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1 awareness of different channels --
 2 CHIEF JUDGE SLEDGE: This is going
 3 to be a hard sale for you, so you have to be
 4 very specific on this document.
 5 MR. STURM: I understand, your
 6 Honor. Looking at page, the second to last
 7 page, there is specific awareness of various
 8 competing branded content from the service
 9 that would be useful and cause competitive
 10 harm both if it were disclosed to Sirius'
 11 competitors and if it were disclosed to the
 12 providers of the branded content because that
 13 would make --
 14 CHIEF JUDGE SLEDGE: This has been
 15 testified through throughout this trial.
 16 MR. STURM: Well, one difference
 17 is it's very specific data, your Honor, with
 18 respect to specific program providers, not
 19 just generally types of programming but tied
 20 directly to specific providers.
 21 CHIEF JUDGE SLEDGE: I'm sorry.
 22 I'm not seeing where we refer to specific

1 that from this document, though, so that
 2 really isn't relevant as to when they're
 3 coming up or not. It would be one thing if
 4 the document said Fox to expire such and such
 5 a date.
 6 MR. STURM: Well, regardless of
 7 whether the document indicates a deal is going
 8 to expire sometime shortly, if the provider
 9 had this document, it could be used as an
 10 argument for a different rate.
 11 CHIEF JUDGE SLEDGE: Move on to
 12 another specific.
 13 MR. STURM: Those are the most
 14 specific on here. The next box is likelihood
 15 to pay more for a specific service. That's
 16 the same situation.
 17 CHIEF JUDGE SLEDGE: You've not
 18 met your burden to establish protective order.
 19 The motion is denied.
 20 BY MR. DESANCTIS:
 21 Q Mr. Coleman, I'd like to direct
 22 your attention to the last page of this

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1 providers.
 2 MR. STURM: Top left box: ESPN,
 3 Fox, CNN, NFL, CNBC, NPR.
 4 CHIEF JUDGE SLEDGE: Are these the
 5 same as the ratings that come out on news
 6 programs every week?
 7 MR. STURM: No, your Honor. These
 8 are, as the box indicates, awareness of these
 9 particular services on Sirius, these aren't
 10 the public ratings of the networks.
 11 JUDGE ROBERTS: I'm still at a
 12 loss here, Mr. Sturm, to understand how, in
 13 August 2005, what subscribers knew about
 14 Sirius in August of 2005 would potentially
 15 hurt Sirius now in June of 2007.
 16 MR. STURM: Well, one, all those
 17 providers, I believe, are still on. I don't
 18 know exactly when. One, I don't know when
 19 contracting renewals with those particular
 20 providers are coming up, although perhaps Mr.
 21 Coleman would be able to provide that --
 22 JUDGE ROBERTS: You can't tell

1 document. The top box on the right reads,
 2 "Importance of services on Sirius," correct?
 3 Are we on the same page?
 4 A We are.
 5 Q Okay. On a five-point scale,
 6 where five is extremely important and one is
 7 not at all important, how important to you is
 8 it that Sirius have blank, right? And then
 9 there's percentages listed for responses,
 10 right? Seventy-seven percent of subscribers
 11 said that music is the highest two ranks,
 12 either a four or a five on this scale of one
 13 to five in terms of importance, correct?
 14 A Music channels, yes.
 15 Q The Fox Channel, which I think you
 16 said was the purpose of this, was only 46; is
 17 that right?
 18 A It was 46.
 19 Q And you did renew that, correct?
 20 A We did.
 21 Q And Fox was the next highest after
 22 music, right?

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1 A That would assume -- because
2 there's a point I'd like to make about this.
3 That would assume that you can compare Fox to
4 music channels, and this was an issue I had.
5 I didn't help devise this study. I did see
6 the results, and I made the same point at that
7 time, which is, and this is something I run
8 into with a lot of our channels, music
9 channels as a group is 69 radio stations
10 designed to appeal to practically everyone.
11 As a group, it is a very powerful group.
12 You're then trying to compare it to one
13 individual radio station, which is targeted to
14 a specific demographic. And so trying to
15 compare the two of them is sort of like, it's
16 not even an apples to oranges comparison.
17 It's almost like an apple to like a grove of
18 oranges. I don't think you can compare the
19 two.

20 Q Let's look at the next box, the
21 one on the bottom left. "Action if services
22 were removed." Does the first paragraph show

1 services. "How likely would you be to pay
2 \$2.00 in addition to the basic monthly charge
3 in order to receive this service? Using a
4 five-point scale, where five is highly likely
5 and one is not at all likely," and when asked
6 that about music channels, 40 percent of the
7 Sirius subscribers rated that in terms a four
8 or a five in terms of likelihood, correct?

9 A Correct.

10 Q This shows that the NFL is only 12
11 percent said they would pay extra for the NFL
12 channel, correct?

13 A Twelve percent of an entire
14 population, yes.

15 Q Right. And the numbers go down
16 from there, correct?

17 A They do.

18 Q I'd like to show you what I'm
19 marking as SoundExchange Trial Exhibit 34.
20 (Whereupon, the above-referred to
21 document was marked as
22 SoundExchange Exhibit No. 34 for

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1 that if music channels were removed, 80
2 percent responded that they would be less
3 likely to subscribe?

4 A That is what it says.

5 Q And if Fox News were removed, 71
6 percent said they would not be affected in
7 their decision whether to subscribe, correct?

8 A Correct.

9 Q Turn to the previous page, please.
10 The bottom box is a similar question, "Action
11 if services were removed."

12 A Yes.

13 Q Except this time, an additional
14 answer option is added, which is cancel your
15 subscription altogether. And for music
16 channels, when asked what action would be
17 taken if music channels were removed, 69
18 percent said they would cancel their
19 subscription, correct?

20 A Yes.

21 Q Finally, the box on the upper
22 right, likelihood to pay \$2.00 more for

1 identification.)

2 BY MR. DESANTIS:

3 Q Have you seen this document
4 before, Mr. Coleman?

5 A I have.

6 Q This is the Sirius Satellite Radio
7 Listener Study dated June 2006, correct?

8 A Correct.

9 Q Do you understand this to be a
10 survey of Sirius listeners conducted either by
11 or for Sirius?

12 A Correct. It's conducted both by
13 and for Sirius.

14 MR. DESANTIS: Your Honors, at
15 this time, I'd like to move for the admission
16 of SoundExchange Trial Exhibit 34.

17 CHIEF JUDGE SLEDGE: Any objection
18 to Exhibit 34?

19 MR. STURM: Your Honor, I believe
20 it's already in evidence as Sirius Exhibit 22.
21 But since we've entered it, there's otherwise
22 no objection.

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1 CHIEF JUDGE SLEDGE: Twenty-two
 2 has already been admitted; do we know?
 3 MR. STURM: Twenty-two was
 4 submitted with the written direction. It
 5 hasn't come up yet.
 6 CHIEF JUDGE SLEDGE: Without
 7 objection, Exhibit 34 is admitted.
 8 (Whereupon, SoundExchange Exhibit
 9 No. 34 was received into
 10 evidence.)
 11 CHIEF JUDGE SLEDGE: Yes, sir?
 12 MR. STURM: Your Honor, I would
 13 request that Exhibit 34 be admitted only under
 14 seal. It is a comprehensive study of every
 15 Sirius channel ranking. You can see that
 16 every channel is ranked on various metrics.
 17 It is, looking, for example, page 59 is just
 18 one example. It is a roadmap of popularity of
 19 these channels. It would give a roadmap for
 20 XM as to how to compete with Sirius. It is
 21 June 2006. I will represent, and I believe
 22 that the witness can confirm, this is the most

1 MR. STURM: Your Honor, if we're
 2 going to go into the specifics of the numbers
 3 on here, I would request that we do it in a
 4 closed session.
 5 CHIEF JUDGE SLEDGE: That question
 6 does not involve any restricted information.
 7 BY MR. DESANCTIS:
 8 Q The question was 13 of the top 20
 9 are music channels, correct?
 10 A But my count, yes.
 11 (Whereupon, the proceedings went
 12 into Closed Session.)
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1 recent and, therefore, the most current
 2 document of this type that we have. There has
 3 been no such comprehensive survey since that
 4 time. The vast majority, if not all, of these
 5 channels are still the ones that are on
 6 Sirius, and it would be extremely
 7 competitively damaging if this document were
 8 to be allowed into the public record.
 9 CHIEF JUDGE SLEDGE: Any
 10 objections?
 11 MR. DESANCTIS: No, your Honor.
 12 CHIEF JUDGE SLEDGE: Without
 13 objection, the motion is granted.
 14 BY MR. DESANCTIS:
 15 Q Mr. Coleman, let me direct your
 16 attention to page 38 of what has just been
 17 marked as Exhibit 34, the Satellite Radio
 18 Listener Study of June 2006. This is a
 19 listing of responses showing the top 20 most
 20 listened to channels by surveyed listeners.
 21 And isn't it true, Mr. Coleman, that 13 of the
 22 20 are music channels?

1 BY MR. DESANCTIS:
 2 Q Do you recognize this document,
 3 Mr. Coleman?
 4 A I do.
 5 Q This is the customer satisfaction
 6 monitor created August 28, 2006 and indicated
 7 on the first page final; is that correct?
 8 A Correct.
 9 Q So this is another survey of
 10 Sirius subscribers either commissioned by or
 11 for Sirius which you have seen prior to today?
 12 A Correct.
 13 MR. DESANCTIS: Your Honor, I
 14 would move for the admission of SoundExchange
 15 Trial Exhibit 35.
 16 CHIEF JUDGE SLEDGE: Any
 17 objection?
 18 MR. STURM: No objection, your
 19 Honor.
 20 CHIEF JUDGE SLEDGE: Without
 21 objection, Exhibit 35 is admitted.
 22 (Whereupon, SoundExchange Exhibit

1 No. 35 was received into
 2 evidence.)
 3 CHIEF JUDGE SLEDGE: Yes, sir?
 4 MR. STURM: Your Honor, with this
 5 customer satisfaction monitor, as with the
 6 listener study, I would move that you admit it
 7 only on a restricted basis. This, again, is
 8 an extremely detailed roadmap --
 9 CHIEF JUDGE SLEDGE: Mr. Sturm,
 10 everything is really or extreme. I don't know
 11 that you need to keep saying that.
 12 MR. STURM: Well, it is a very
 13 detailed examination of all the different
 14 aspects at the Sirius system. It would
 15 provide a tremendous competitive advantage to
 16 XM to be able to look at subscribers' likes
 17 and dislikes with specific numerical
 18 percentages attached in all the aspects of the
 19 Sirius system. Therefore, I would request you
 20 submit it under seal.
 21 CHIEF JUDGE SLEDGE: You want to
 22 give me an example?

1 A Correct.
 2 Q The questions are listed at the
 3 bottom of the page in small type; is that
 4 right?
 5 A Yes.
 6 Q So the first question is, "Last
 7 week, how many total hours did you spend in
 8 your vehicle in which the Sirius service has
 9 been installed?" And then the questions go on
 10 to ask about time spent listening to Sirius,
 11 correct?
 12 A Correct.
 13 Q And in the second quarter of 2006,
 14 which is the most current quarter surveyed by
 15 this study, which is the column on the far
 16 right, total listening hours --
 17 MR. STURM: May I ask that this be
 18 maintained in conference, as well, under the
 19 protective order?
 20 CHIEF JUDGE SLEDGE: Why do you
 21 need to go into those numbers?
 22 MR. DESANCTIS: To show the

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1 MR. STURM: Page 30. That's very
 2 aspects of Sirius over time. As with the
 3 listener study, the 2006, August 2006 data are
 4 the most current available. It not only does
 5 that, but also all of the trends historically.
 6 Also, page 39, complaints. Again, it would be
 7 a significant advantage to Sirius' competitor
 8 to be able to target directly against those
 9 complaints and to know what those complaints
 10 are.
 11 CHIEF JUDGE SLEDGE: Any
 12 objection?
 13 MR. DESANCTIS: No objection, your
 14 Honor.
 15 CHIEF JUDGE SLEDGE: Without
 16 objection, the motion is granted.
 17 BY MR. DESANCTIS:
 18 Q Mr. Coleman, let me direct your
 19 attention to page 22 of SoundExchange Exhibit
 20 35. This shows listening hours in the past
 21 week immediately prior to the respondent being
 22 asked the question, correct?

1 relative hours listened between music and
 2 everything else on Sirius. Well, not -- yes,
 3 and everything else. I don't have to ask the
 4 questions, your Honor.
 5 CHIEF JUDGE SLEDGE: Good.
 6 MR. DESANCTIS: If the document is
 7 already in evidence.
 8 CHIEF JUDGE SLEDGE: All right.
 9 And in light of that spirit, XM and Sirius
 10 both will stipulate that the large majority of
 11 their listenership is to music. Their only
 12 contention is that that's not why people
 13 subscribe. So they have said consistently
 14 that people mostly listen to music, but that's
 15 not what drives our subscriptions. You're not
 16 going to disagree with that, Mr. Joseph, are
 17 you?
 18 MR. JOSEPH: Your Honor, I think I
 19 do take issue with the large majority. I
 20 think if you look you will see a trend moving
 21 in the other direction. I think the document
 22 does speak for itself and --

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1 CHIEF JUDGE SLEDGE: It does, and
2 it shows a large majority of all the evidence
3 we've seen of listeners listening to music and
4 arguments being made. A witness has recently
5 said we don't dispute that most of our
6 listeners listen to music; we just say that
7 that's not what drives them to subscribe.

8 MR. JOSEPH: Saying most listeners
9 listen to music at some time, your Honor,
10 isn't quite the same thing as talking about
11 total time spent listening. Obviously, your
12 Honor can draw and will draw --

13 CHIEF JUDGE SLEDGE: Perhaps I
14 didn't phrase it correctly. The latter is
15 what I intended to say. Most of the time,
16 listeners listen to the radio, they're
17 listening to music.

18 MR. JOSEPH: I have to admit, I
19 don't recall that testimony, your Honor; but
20 the record will certainly speak for itself.

21 CHIEF JUDGE SLEDGE: All right.
22 Go ahead, Mr. DeSanctis.

1 CHIEF JUDGE SLEDGE: Redirect?

2 MR. STURM: Your Honor, I am going
3 to be asking questions I believe exclusively
4 about these two documents, so I would ask to
5 continue in restricted section.

6 CHIEF JUDGE SLEDGE: Any
7 objection?

8 MR. DESANCTIS: No, your Honor.

9 CHIEF JUDGE SLEDGE: All right.
10 Well, you said these two documents. There
11 were pages on these documents that were
12 subject to the protective order.

13 MR. STURM: I believe that the
14 documents were received subject to protective
15 order.

16 CHIEF JUDGE SLEDGE: No, the
17 questions about pages on these documents that
18 were subject to protective order.

19 MR. STURM: That's right, your
20 Honor.

21 CHIEF JUDGE SLEDGE: So questions
22 about these documents would not be subject to

1 MR. DESANCTIS: All right. I do
2 intend to continue questioning on the
3 document, just not those numbers that we were
4 working on at that time. Thank you. And to
5 go direct with your Honor's point, actually.

6 (Whereupon, the proceedings went
7 into Closed Session.)

1 protective order.

2 MR. STURM: Understood, your
3 Honor.

4 REDIRECT EXAMINATION

5 BY MR. STURM:

6 Q Do you have the customer
7 satisfaction monitor, Exhibit 35, in front of
8 you?

9 A I do.

10 Q Okay. The top box was an
11 individual's top response, and then all of
12 those were put together; is that correct?

13 A Which page are you talking about?
14 I'm sorry.

15 Q We're still on page 17.

16 MR. STURM: I'm sorry, your Honor,
17 may I have one moment?

18 CHIEF JUDGE SLEDGE: Yes.

19 MR. STURM: Thank you.

20 BY MR. STURM:

21 Q Let's go back to the way this
22 question worked. All of the reasons given by

1 individuals were taken down; is that correct?

2 A Correct.

3 Q Okay. And then the top ones of
4 everything that was listed was put on to the
5 chart; was that your understanding?

6 A As I understand it, the top ones
7 were built into categories that were then
8 listed on the chart.

9 Q So it wasn't necessarily each
10 individual's one and only response that
11 appears on this chart; is that correct?

12 A Correct.

13 Q Now, let's look at, Mr. DeSanctis
14 pointed out the different answers for the
15 groups with different subscription tenures; do
16 you see that?

17 A I do.

18 Q And the size of the samples in
19 each of those groups is indicated with the N
20 number, correct?

21 A Correct.

22 Q And of those, by far, the largest

1 Exhibit 35. Now, without going into the
2 specific numbers, is there a trend in the
3 listening of music versus talk, news, and
4 sports?

5 A There was. I was very pleased
6 with this number. It substantially grew over
7 the period of times that this question was
8 asked.

9 Q The talk program that you're
10 responsible for substantially grew?

11 A That is correct. And I was happy
12 for it for two reasons. One is, obviously, we
13 put a lot of effort into things, but we had
14 added an awful lot of programming in the non-
15 music radio stations. The second is non-music
16 stations take longer to sink into people's
17 minds in order to get reported in the surveys
18 because the hosts are unfamiliar, the content
19 is unfamiliar. So to see that kind of growth
20 was very, very encouraging for me.

21 Q Has music listening actually
22 declined in the most recent survey?

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1 is the January to April '06?

2 A That is correct.

3 Q And why would that be?

4 A There were more subscribers. In
5 general with the overall universe, there were
6 more subscribers signing up at that point than
7 in subsequent months because that was the time
8 that Howard Stern had ceased to be on
9 terrestrial radio and was only hearable
10 through Sirius. This is also just a survey of
11 a sample of the larger universe, and that's
12 the way that the sample fell out.

13 Q Now, going back to the overall
14 second-quarter numbers, of the subnets which
15 is the largest category? Is it talk or music?

16 A Of the subnets?

17 Q Yes.

18 A Talk is at 36 percent; music is at
19 24; sports is at 10; and news is an additional
20 3. And specific personalities, like Howard
21 Stern, is 35.

22 Q Let's move on to page 22 of

1 A Yes, it has.

2 Q Now, if you would switch to
3 Exhibit 34, which is the listener study.

4 A Exhibit 34.

5 Q Do you have it there?

6 A I am.

7 Q We talked about the listening,
8 which starts on page 37.

9 A Yes.

10 Q And what are the, in this study,
11 what are the most, the two most listened to
12 channels on Sirius?

13 A The two channels that are part of
14 the Howard Stern offering on Sirius.

15 Q Then the next metric I want to
16 look at is satisfaction, which starts on page
17 50. A Yes.

18 Q The top five channels in terms of
19 satisfaction are all talk and entertainment
20 non-music channels?

21 A They are. Which if I might make
22 the point is to what my group and I do.

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1 Our goal is not necessarily to get
2 listenership. Our goal is to drive our
3 business by attracting subscribers, retaining
4 subscribers, and having subscribers tell their
5 friends so that we get more subscribers. We
6 find that satisfaction and another measure
7 that we call evangelism are actually the
8 things that I rush to first in a survey like
9 this.

10 Q Well, since you spoke about
11 evangelism, that's the next metric that's on
12 page 54.

13 CHIEF JUDGE SLEDGE: Mr. Sturm,
14 would you please repeat what you determined
15 from page 34? I was slow catching up to you.

16 MR. STURM: I'm sorry, your Honor.
17 On page 34? I didn't --

18 CHIEF JUDGE SLEDGE: Wasn't that
19 the last page you asked about?

20 MR. STURM: Page 54, your Honor.

21 CHIEF JUDGE SLEDGE: Fifty-four.
22 No wonder I couldn't figure it out.

1 A Evangelism was our term for trying
2 to measure whether a subscriber, as a result
3 of some of our programming, would rush out and
4 speak to friends about our programming,
5 thereby spreading word-of-mouth, which is a
6 powerful marketing tool, and, thereby,
7 endorsing Sirius, which is a powerful way to
8 get other people to subscribe.

9 Q And the evangelism scores are on
10 page 55?

11 A They are.

12 Q And the top one, two, three, four,
13 five, six, seven are all news, talk, and
14 entertainment channels; is that right? On
15 evangelism?

16 A They are.

17 Q And then next is a comedy channel,
18 correct?

19 A Correct.

20 Q And the highest music channel is
21 number nine --

22 A Correct.

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1 MR. STURM: Well, no, 54 we
2 haven't gotten to.

3 CHIEF JUDGE SLEDGE: Thirty-one
4 instead of thirty-four?

5 MR. STURM: Fifty-one was the last
6 one.

7 CHIEF JUDGE SLEDGE: Was the last
8 one.

9 BY MR. STURM:

10 Q And, Mr. Coleman, what did you say
11 about 51?

12 A About satisfaction by channel?

13 Q Yes. What were the top five?

14 A The top five channels for
15 satisfaction, which was measured on a scale of
16 love it to hate it, were the two Howard Stern
17 stations; EWTN, the global Catholic station;
18 Sirius NFL Radio; and Sirius OutQ, the station
19 for gays and lesbians.

20 Q Now let's move to page 54.
21 There's a metric there called evangelism, and
22 can you explain, first of all, what that is?

1 Q -- of all the channels?

2 A Yes.

3 Q And are there --

4 A Actually tied with another talk
5 station, but yes.

6 Q And what is that?

7 A Sirius Left, the liberal talk
8 station.

9 Q There's a number that are tied
10 there for number nine.

11 A Correct.

12 JUDGE ROBERTS: Can I ask a
13 question, Mr. Coleman? From your standpoint
14 at Sirius, is the only thing that you're
15 concerned with is getting people to sign up
16 and, once they're signed up, you don't really
17 care what they listen to?

18 THE WITNESS: On the contrary,
19 it's three points. It's getting them to sign
20 up; it's getting them to be passionate about
21 what they do so that they stay signed up,
22 which lowers what others call churn; and

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1 getting them to tell their friends so that we
2 increase word of mouth. In fact, when they
3 get to Sirius, it's actually in our best
4 interest to spend a lot of time with us and
5 enjoy what they're listening to as much as
6 possible because that increases their levels
7 of passion, satisfaction, evangelism, and
8 those measures.

9 JUDGE ROBERTS: But this is a
10 difference between, a fundamental difference,
11 I think, between you and terrestrial radio
12 where, obviously, the terrestrial radio
13 stations are interested in people listening,
14 but they also have responsibilities to their
15 advertisers.

16 THE WITNESS: They're actually
17 only -- and I spent years in terrestrial
18 radio, and I know this well.

19 JUDGE ROBERTS: Which is why I'm
20 asking you this question.

21 THE WITNESS: When we were in
22 terrestrial radio, our exclusive goal was to

1 because they're more invested in our product.

2 JUDGE ROBERTS: You have no
3 advertisers that you have to worry about?

4 THE WITNESS: We do to a far
5 lesser extent. The publically-announced
6 number is that we expect that advertising
7 revenue will be ten percent of our total
8 revenue. So 90 percent primarily comes from
9 the subscribers. So whereas in terrestrial
10 radio, you could make a compromise very easily
11 and much to the frustration of people like
12 myself that were responsible for content, you
13 could make a compromise to do something for
14 the advertiser in the face of the listener.
15 At Sirius, you simply can't make that
16 compromise. The listener has to come first.
17 They're 90 percent of our business plan.

18 JUDGE ROBERTS: Thank you.

19 BY MR. STURM:

20 Q You do have advertising on most of
21 the stations you're responsible for, correct?

22 A We do.

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1 deliver an audience to advertisers, so we
2 chose a demographic that we could deliver a
3 significant segment of that pie to and deliver
4 to them. So listenership was only a means to
5 that end. Here, listenership is one measure
6 of a variety that we look for, but we are
7 beholden to individuals that have taken the
8 fairly brave leap of paying for radio in the
9 first time in their life, quite possibly
10 purchasing a radio and installing it in their
11 car or home. I climbed on my mother's roof
12 out in Grade Falls to put the antenna there so
13 that she could listen to our stations. So we
14 feel a tremendous responsibility to those,
15 especially on my stations where it's much more
16 likely that those stations are interactive,
17 that listeners will be calling in. And we
18 found out that the level of people calling in
19 to a Sirius radio station is much higher than
20 to a terrestrial radio station, and their
21 level of smarts and preparedness is also much
22 higher. And I believe, personally, that is

1 Q And those are the only stations?
2 Well, I guess also the sports station. Those
3 are the ones on which advertising appears?

4 A Correct.

5 Q But it is relatively small in
6 terms of the overall economics of Sirius?

7 A Correct.

8 Q Now, there's a final metric here
9 in the listener study, which is --

10 JUDGE WISNIEWSKI: Before we get
11 to the final one --

12 MR. STURM: Yes, your Honor.

13 JUDGE WISNIEWSKI: Mr. Coleman, I
14 appear to have missed something here. Can you
15 tell me what group of questions this euphemism
16 of evangelism is intended to, what that group
17 of questions is and the types of answers that
18 are elicited that would lead to this
19 particular euphemism that we've seen you place
20 so much confidence in?

21 THE WITNESS: The question is we
22 asked -- yes, this was our listener study.

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1 And the question that we asked, we did in two
2 ways. The results that you're seeing in this
3 chart is purely the result of us asking people
4 on a scale to say is this content, and it
5 might have been a full channel, it might have
6 been an individual show, it might have been an
7 attribute. Like on one of our stations, we
8 were interested about whether or not people
9 liked psychics. And they were asked on a
10 scale whether this is something that they talk
11 to others about on a scale of, you know, never
12 to a lot.

13 BY MR. STURM:

14 Q The last metric here, starting on
15 page 58, is willingness to cancel by channel.

16 A Yes.

17 Q And what is, it may be self
18 evident, but what is that metric?

19 A You're asking me to describe the
20 concept of willingness to cancel?

21 Q And why you're asking about it.

22 A We were trying to get some sense,

1 get some idea of the methodology of this study
2 survey. Preliminary to asking whatever
3 question was asked here about willingness to
4 cancel, was there a question asked about
5 whether you listen to that particular station?

6 THE WITNESS: We asked whether you
7 listen. Forgive me, I'm doing this from
8 memory. We asked whether you listen, how
9 satisfied you are on a level of love it to
10 hate it, how likely you are to tell your
11 friends, and whether or not you would cancel
12 if it was taken away to some levels or
13 degrees: I'd cancel; I wouldn't cancel but I'd
14 be mighty upset; etcetera.

15 JUDGE WISNIEWSKI: So some of
16 these may have a small listenership but a
17 passionate listenership?

18 THE WITNESS: Which in my area is
19 the ball game. We're looking to target
20 demographics with niches that are unserved in
21 other areas that are differentiated for us
22 that will have that level of passion because

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1 again, of passion, and the stations that
2 people say they are likely to cancel as a
3 result of it being taken away are the stations
4 that people obviously feel more of an
5 allegiance to. It's definitely, in my mind,
6 a measure of passion, not a measure of actual
7 behavior. In terrestrial radio, if someone
8 was angry at you, the first thing that they
9 would say is, "We will boycott your
10 advertisers." In satellite radio, their idea
11 of hitting you below the belt, if they are
12 angry with you, is, "We shall cancel our
13 subscription." So whether they would actually
14 do it when they really think about all that's
15 involved in canceling the subscription and all
16 the things that they listen to and whether,
17 even if some of them go away, would they still
18 want to give up all the others that they get
19 as part of their package. Behavior is a
20 separate thing, but we were looking for the
21 passion.

22 JUDGE WISNIEWSKI: I'm trying to

1 they're the best customers. They last a long
2 time, they pay on time, and they tell all
3 their friends.

4 JUDGE WISNIEWSKI: Thank you.

5 MR. STURM: On page 59, and, your
6 Honor, we will be having a survey person come
7 in on Monday who can explain all the
8 methodology and answer any questions about
9 that, to the extent this witness doesn't know.

10 JUDGE WISNIEWSKI: Maybe that
11 person should have come first.

12 MR. STURM: Maybe so. Sorry, your
13 Honor.

14 MR. JOSEPH: Actually, your Honor,
15 just to respond to the Chief Judge, I believe
16 that particular witness, Ms. Heye, was
17 scheduled after. But, of course, this was an
18 exhibit that was brought out on cross
19 examination; it was not one that we were just
20 talking to this witness about.

21 JUDGE WISNIEWSKI: Then I will
22 partially take back my apology.

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1 MR. STURM: I'm totally confused
 2 now, so I'll just ask a question.
 3 CHIEF JUDGE SLEDGE: If Mr. Joseph
 4 doesn't want the credit, we won't give it to
 5 him.
 6 BY MR. STURM:
 7 Q Willingness to cancel. The
 8 results are on page 59?
 9 A Correct.
 10 Q And of the top 20 stations on the
 11 willingness to cancel metric, how many of them
 12 are music and how many are everything else?
 13 A Of the top 20, three of the top 20
 14 are music, 17 are non-music.
 15 Q And how far down the list do you
 16 have to go to get to a music station?
 17 A The first music station is ranked
 18 7th, then the second is ranked 9th, and the
 19 third is ranked 19th.
 20 Q So the eight of the top ten are
 21 non-music?
 22 A Correct.

1 Q In what respect?
 2 A I don't know the exact numbers off
 3 the top of my head, but since that time was
 4 Howard Stern's debut, the addition of Nascar
 5 on Sirius, and a couple of other catalysts,
 6 and our subscriber base has grown quite
 7 substantially in the last year and a half.
 8 Q Has it more than doubled since
 9 that time?
 10 A I believe so, yes.
 11 Q Okay. So would something from
 12 August 2005 still represent a valid conclusion
 13 about the views of the Sirius audience?
 14 A If we were asking the same
 15 question today, we would do another survey.
 16 CHIEF JUDGE SLEDGE: If we were
 17 asking the same question today, we would be
 18 doing another survey.
 19 THE WITNESS: I'm sorry. If we
 20 were trying to, we asked a question and, in
 21 order to answer the question in 2005, we did
 22 this survey to help inform our answer. If we

1 Q And 17 out of the 20 are non-
 2 music?
 3 A Correct.
 4 Q Right at the beginning, we had
 5 some questions about Exhibit 33, which is this
 6 news channel evaluation.
 7 A Yes.
 8 Q Do you remember that?
 9 A I do.
 10 CHIEF JUDGE SLEDGE: Which exhibit
 11 is that?
 12 MR. STURM: SoundExchange Exhibit
 13 33, your Honor.
 14 CHIEF JUDGE SLEDGE: Thank you.
 15 BY MR. STURM:
 16 Q This study was taken some time in
 17 August 2005?
 18 A Yes.
 19 Q Okay. Has the Sirius subscriber
 20 base changed very substantially since that
 21 time?
 22 A It has, yes.

1 were in the same situation today where we were
 2 curious about some dynamic, we wouldn't use
 3 the old data; we would do a new survey.
 4 JUDGE WISNIEWSKI: So is the gist
 5 of that testimony, Mr. Sturm, to support the
 6 Judge's ruling on not making this a protected
 7 portion.
 8 MR. STURM: Your Honor, I thought
 9 about that, and I came to the conclusion that
 10 just because we didn't think it was reliable
 11 that didn't mean that these partners wouldn't
 12 try to use it.
 13 CHIEF JUDGE SLEDGE: Any further
 14 cross?
 15 MR. DeSANCTIS: Yes, Your Honor.
 16 RE-CROSS EXAMINATION
 17 BY MR. DeSANCTIS:
 18 Q Mr. Coleman, take a look at page
 19 22 of what's been marked as SoundExchange
 20 Exhibit 35, which is the customer satisfaction
 21 monitor, August 28th, 2006.
 22 A Let's see. Which page, I'm sorry?

1 Q Page 22.
 2 A Yes.
 3 Q You said you were very proud of a
 4 trend of increasing talk, increasing hours
 5 listening to talk and entertainment channels.
 6 Correct?
 7 A Correct.
 8 Q Okay.
 9 A Yes, the talking sports is the
 10 one.
 11 Q Right. If you look -- looking at
 12 fourth quarter `04, to first quarter `05, to
 13 fourth quarter `05, music increases every
 14 time. Right?
 15 A Correct.
 16 Q Looking at fourth quarter `04, to
 17 first quarter `05, to fourth quarter `05,
 18 news, talk, sports decreases in the first one,
 19 and then remains flat in the second one.
 20 Correct?
 21 A Correct.
 22 Q And, by the way, we're talking --

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1 this is not comparing music to talk and
 2 entertainment. Right? This is comparing music
 3 to talk, news, and sports.
 4 A Correct.
 5 Q Essentially, everything else.
 6 A Correct.
 7 Q Okay. Now between fourth quarter
 8 `05 and second quarter `06 is when Howard
 9 Stern first appeared on the air. Correct?
 10 A Correct, among other things that
 11 we added.
 12 Q And that was the first time that
 13 music went down relative to talk, news, and
 14 sports. Correct?
 15 A Correct.
 16 Q Now let me turn your attention to
 17 page 23. We've got -- in the first column is
 18 second quarter `06 results to time spent
 19 listening. We see total, music, news, talk,
 20 and sports. These are the same numbers that
 21 correspond to what we were just looking at for
 22 the second quarter of 2006 totals on page 22.

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1 Correct?
 2 A Correct.
 3 Q And we have a breakout as we move
 4 to the right for subscription tenure. This is
 5 something we talked about the last time I was
 6 up here. Correct?
 7 A Correct.
 8 Q So going back to January to April
 9 2006, do you see that column?
 10 A I do, yes.
 11 Q Okay. That's when Howard Stern
 12 first came on the air?
 13 A Yes.
 14 Q Music in that quarter was 23
 15 hours. Correct?
 16 A Yes.
 17 Q And since then - actually --
 18 A Sorry, your total hours listening
 19 of 23 hours.
 20 Q You're absolutely right. Total is
 21 23. The music is 11 hours. Correct?
 22 A Correct.

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1 Q And since then, for people who
 2 first subscribed to Sirius in April and May
 3 `06, it's jumped up to 23. Correct?
 4 A That's what -- back when I was in
 5 terrestrial radio we used to do this with the
 6 Arbitron ratings all the time. That's what
 7 you call the tiny sample size. You are
 8 correct, the number jumped from 11 to 23
 9 hours, but notice that that's based on 101
 10 people out of the total survey, as opposed to
 11 the many hundreds before.
 12 Q Right.
 13 A So I just look at it in context.
 14 Q Okay. And to provide a little
 15 more context, when you were on redirect just
 16 now, you said yes, the January to April `06
 17 numbers, the sample numbers are higher of new
 18 subscribers because that's when Howard Stern
 19 joined. And since then, it's been going down.
 20 Correct?
 21 A Well, it hasn't necessarily been
 22 going down, but that was a peak for us.

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1 Q Going down relative to that time
 2 when Howard Stern first joined.
 3 A Within the survey, yes.
 4 Q Yes. Okay. So moving forward in
 5 time, June `06, this is people who have
 6 started -- who began their subscription in
 7 June `06, and were asked in late June `06 what
 8 they listen to, and music is up again.
 9 Correct?
 10 A Correct.
 11 Q Okay. At the same time, news,
 12 talk and sports hit its peak for those who
 13 joined in January to April `06. It was 12
 14 hours and 6 minutes. Correct?
 15 A Correct.
 16 Q And at the same time that music
 17 has been going up ever since Howard Stern
 18 joined Sirius, talk, news, and sports has been
 19 going down relative to how it began in January
 20 to April `06. Correct?
 21 A Yes. Remember, you're not
 22 actually looking at a trend there. You're

1 signed up for --
 2 CHIEF JUDGE SLEDGE: I see the
 3 difference.
 4 THE WITNESS: Thank you.
 5 BY MR. DeSANCTIS:
 6 Q And to follow-up with what you
 7 just said, so looking at talk, news, sports,
 8 in June `06, the people who joined Sirius back
 9 in January to April `06, so the first part of
 10 `06 when Howard Stern joined.
 11 A Right.
 12 Q They listened to 12 hours and 6
 13 minutes of talk, news, and sports.
 14 A Correct.
 15 Q That would be in the prior -- in
 16 June.
 17 A In June.
 18 Q When they were surveyed.
 19 A Yes.
 20 Q Right.
 21 A Yes, you are absolutely correct.
 22 Q And in that same week in June when

1 looking at different discrete groups of
 2 people. So they're still talking about their
 3 listening at the same moment, relative to one
 4 another. So you aggregate that all together,
 5 and you get the numbers we were originally
 6 talking about. So please, just don't position
 7 it as a trend, position it as just different
 8 groups of people.
 9 CHIEF JUDGE SLEDGE: I thought you
 10 called it a trend.
 11 THE WITNESS: The trend was a
 12 different page we were looking at, Your Honor,
 13 if I understand correctly.
 14 CHIEF JUDGE SLEDGE: It's the same
 15 data.
 16 THE WITNESS: It was broken out in
 17 a different way. One set of data was broken
 18 out comparing the number, this survey to last
 19 survey, to the previous survey, to the
 20 previous survey. This page is looking at just
 21 the data from this survey, but has identified
 22 people in different ways, based on when they

1 they were surveyed, people who first joined
 2 Sirius later in April and May `06 --
 3 A Yes.
 4 Q -- they spent only 8 minutes
 5 listening to talk, news, and sports. Correct?
 6 A That group of people does, indeed,
 7 report that.
 8 Q Right.
 9 A I just want to make it clear --
 10 MR. STURM: Your Honor, I think he
 11 may have misspoke. I think he said 8 minutes.
 12 It's really --
 13 MR. DeSANCTIS: Eight hours and 36
 14 minutes, I apologize.
 15 THE WITNESS: I just want to make
 16 it clear, because I'm here to sort of talk
 17 about how this actually gets used in our
 18 decision making, and our business model.
 19 These are not numbers that I would make a
 20 decision based on, because of small sample
 21 size, and trying to look at it in context of
 22 everything else. So you're correct to point

1 out the data points. I just want you to know
2 that these are not decision points for me.

3 BY MR. DeSANCTIS:

4 Q And you don't have any additional
5 data passed this June 6 survey, do you?

6 A We have not done -- which survey
7 was this? I'm sorry. This was the customer
8 satisfaction?

9 Q This was the customer satisfaction
10 monitor.

11 A This is the most recent customer
12 satisfaction monitor that we've done.

13 Q And you have no other more recent
14 surveys measuring this information that we've
15 been looking at at page 23, do you?

16 A This was done in June `06, this
17 study was done in July `06, but they were done
18 basically at the same time. So, correct.

19 Q And there's no more recent than
20 this?

21 A Correct.

22 Q Okay. I'm sorry. Just for the

1 JUDGE ROBERTS: I hope that you're
2 able to make that available to us.

3 THE WITNESS: Not my decision.

4 BY MR. DeSANCTIS:

5 Q Let me turn your attention to page
6 17 of Exhibit 35. You were asked by Mr. Sturm
7 on redirect to compare the draw numbers in
8 second quarter `06 for music and talk. Do you
9 remember that?

10 A Remind me specifically, please.

11 Q This is the third and fourth lines
12 of numbers.

13 A Yes.

14 Q But you admitted earlier that you
15 have no idea whether the 35 figure for
16 commercial-free music down at the bottom
17 should be added to the music number of 24 up
18 at the top. Remember that? You said you
19 don't know.

20 A I think - and to clarify - I
21 believe it was separate, so you had asked if
22 they were cumulative, and I said I did not

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1 record, you pointed to something and said this
2 was July `06. What were you pointing to?

3 A Oh, I was clarifying in my own
4 mind when we did the listener survey versus
5 the customer satisfaction survey. They're the
6 two exhibits.

7 Q What has been marked SoundExchange
8 35, you're saying was taken in June `06?

9 A Actually, let's just be sure, and
10 absolutely correct. SoundExchange Exhibit 35
11 was conducted in June/July of 2006.
12 SoundExchange 34, what I called the listener
13 study, was conducted in June 2006, so they
14 were essentially twins.

15 Q And there's no more recent data.

16 A No.

17 JUDGE ROBERTS: Mr. Coleman, are
18 you about to get some recent data?

19 THE WITNESS: We have another
20 listener survey scheduled for - I don't know
21 that it's fully approved yet, but we're
22 expecting to do it in the coming month or two.

1 believe that they are cumulative, so they
2 can't be added together.

3 Q I think your answer was, "I don't
4 know", before.

5 A I recall saying, and am happy to
6 say now, that I do not believe that you can
7 add those two numbers together, because
8 they're separate net nets, or whatever the
9 research experts call them.

10 Q You were asked by the Judges
11 whether Sirius cares about listenership, or
12 just draw. Remember that?

13 A Correct.

14 Q The question was, once the
15 subscriber has signed up, why do you care what
16 they listen to. Correct?

17 A I do remember.

18 Q But you do care what they listen
19 to very much. Right? Because it goes to
20 retention, doesn't it? In order to get the
21 subscriber numbers you want, it's a mix of
22 draw, which is getting them in the first

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1 place, and keeping them there, which is
 2 retention. Right?
 3 A Correct. Although, I count
 4 listenership as less of a retention measure,
 5 than Evangelism and satisfaction.
 6 Q Okay.
 7 A You know, listenership is a beauty
 8 contest. It's a measure of mass appeal,
 9 nature of something. In fact, in terrestrial
 10 radio when we would look at these numbers,
 11 it's what we called the 12 plus. It was every
 12 one that they asked. As far as taking action,
 13 we would never look at an overall beauty
 14 contest, we'd dig down to demographics, or
 15 specific audience behavior so that we could
 16 figure out what actually to do. So we include
 17 listenership in the study, because we call it
 18 a beauty contest. But once you dig into the
 19 level of passion with those listeners, then
 20 you start really seeing some things.
 21 Q Okay. Well, let's look at those
 22 things, then. Let me direct your attention to

1 that. Who Radio is fine, but I liked Rolling
 2 Stones Radio better.
 3 BY MR. DeSANCTIS:
 4 Q This is the page showing
 5 satisfaction by channel. Correct?
 6 A Speaking of the Rolling Stones,
 7 yes.
 8 Q And after page 55, a few pages
 9 later, is the Evangelism channel.
 10 A Yes.
 11 Q Or chart?
 12 A Yes.
 13 Q Okay. Now, presumably, in order
 14 to Evangelize about a channel, given your
 15 response to the bench's question, I've
 16 listened to it. Right?
 17 A Up to a point, yes. Some people
 18 may Evangelize -- you know, a great example is
 19 our Radio Classics Channel, which is a channel
 20 that plays --
 21 JUDGE WISNIEWSKI: Some people may
 22 -- THE WITNESS: Some people may like

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1 page 51, which is something you looked at on
 2 redirect. This is satisfaction by channel.
 3 A This is in exhibit?
 4 Q I'm sorry, same exhibit.
 5 A 34, satisfaction --
 6 Q Yes, I'm sorry. Exhibit 34.
 7 A And, I'm sorry, the page was 51?
 8 Q Yes.
 9 A Okay.
 10 CHIEF JUDGE SLEDGE: You switched
 11 to another exhibit.
 12 MR. DeSANCTIS: I'm sorry, Judge.
 13 Exhibit 34.
 14 CHIEF JUDGE SLEDGE: Okay.
 15 JUDGE ROBERTS: Mr. Coleman, what
 16 happened to Rolling Stones Radio?
 17 (Laughter.)
 18 THE WITNESS: I think one of my
 19 colleagues is testing, Steve Blatter, he can
 20 tell you in much more detail. Did you enjoy
 21 that or are you happy to see it gone?
 22 JUDGE ROBERTS: I did. I enjoyed

1 the idea that we have it, and so they may be
 2 talking to a friend about Sirius and say yes,
 3 I really like Sirius. You know, they even
 4 have those old Lone Ranger shows, and they
 5 might never, or extremely rarely actually
 6 listen to it, but it's part of why they're
 7 excited about Sirius.
 8 JUDGE WISNIEWSKI: So then are you
 9 suggesting that quite the opposite from the
 10 answer that you intimated to my questions,
 11 that such a person might be counted here?
 12 THE WITNESS: I'm sorry. Could
 13 you clarify?
 14 JUDGE WISNIEWSKI: Yes. If they
 15 said, no, I didn't listen to this, but I did
 16 talk to somebody about it, would they be
 17 counted here?
 18 THE WITNESS: No. I think that's
 19 a failure of our methodology.
 20 JUDGE WISNIEWSKI: Oh, okay.
 21 THE WITNESS: That is Evangelism
 22 that doesn't require listening, that we're not

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1 capturing yet. And this research is
2 developed, and it's suggested by us as we go
3 through time. We're such a new company, and
4 we're still figuring out the questions to ask
5 as we go along, so it's a different set of
6 people.

7 JUDGE WISNIEWSKI: What's a
8 different set of people?

9 THE WITNESS: Oh, people who might
10 not have listened to a station, but still are
11 excited that it is part of the service.

12 JUDGE WISNIEWSKI: And they're not
13 reflected here.

14 THE WITNESS: Correct.

15 JUDGE WISNIEWSKI: So why did we
16 bring them up?

17 THE WITNESS: You had -- I'm
18 sorry. You had asked - I forget exactly what
19 you had asked, but I wanted to clarify that
20 there are some stations that do not require
21 listenership in order to effectively drive
22 passion.

1 have listened to.

2 Q May never have listened to.

3 A They are not included.

4 Q Okay. Now you testified that two
5 of the top five for satisfaction, two of the
6 top five for Evangelism are the Catholic
7 channel.

8 A WTN Catholic Channel, yes.

9 Q Right? And Sirius OutQ, which is
10 the gay and lesbian channel?

11 A Correct.

12 Q Right? Let's go back to page 38
13 of this same exhibit. This ranks the channels
14 by those most listened to. Correct?

15 A Correct.

16 Q We've talked about this earlier.
17 And the top 20 are on page 38?

18 A Correct.

19 Q And the next 20 are on page 39?

20 A Correct.

21 Q We have to keep going here, 40,
22 41, 42, are you on page 42?

1 BY MR. DeSANCTIS:

2 Q So for the respondents on page 51
3 --

4 JUDGE WISNIEWSKI: That has
5 nothing to do with this survey.

6 THE WITNESS: Correct.

7 JUDGE WISNIEWSKI: Okay. Now
8 we're on the same page.

9 THE WITNESS: Great.

10 BY MR. DeSANCTIS:

11 Q Okay. So for purposes of
12 Evangelism and satisfaction, the numbers
13 reflected in the survey are a pool of people
14 who both Evangelize about it, and are
15 satisfied with it, and listen to it.

16 A And have listened to it at some
17 point, yes.

18 Q So the people who Evangelize and
19 tell people you've got to sign up for
20 satellite radio because of something I've
21 never heard of, they're not included here.

22 A Because of something I may never

1 A Yes.

2 Q Okay. Sirius OutQ is here, fourth
3 from the bottom, 4 percent of people, 4
4 percent of people sampled listened to Sirius
5 OutQ the week of this survey?

6 A Correct.

7 Q Right? And if we keep going, we
8 see Cosmo Radio, which you discussed in your
9 testimony at 3 percent. And, finally, we get
10 to EWTN Catholic Global Network, which is 1
11 percent. Correct?

12 A Correct.

13 Q Okay. So let's go back to the
14 Evangelism chart, 55. One percent of your
15 subscribers listen to the Catholic channel.

16 A Correct.

17 Q And 20 percent of that 1 percent
18 said that they told someone else about it.
19 Right?

20 A Correct.

21 Q And I think the numbers were
22 Sirius OutQ was 4 percent.

1 A Correct.

2 Q So 4 percent of your listeners
3 listen to Sirius OutQ, and 22 percent of that
4 4 percent told someone about Sirius OutQ.

5 A Correct.

6 Q And it's your testimony today that
7 that's more important to you than monitoring
8 who's listening to what, and what your most
9 listened to channels are.

10 A I think absolutely it is. It's
11 another chance to illustrate the point that we
12 are a value proposition of 130 radio stations
13 at this point. Our mission is to drive
14 subscribers, and as we were talking about
15 earlier, we don't need them to listen to all
16 130. And it allows us to do these niche
17 plays, that allow us to tap into groups that
18 haven't been tapped into before; therefore,
19 are differentiating with exclusive content,
20 therefore, they'll subscribe to Sirius for it.
21 That they will tell all of their friends
22 about, so we have 130 stations to play with.

1 influences, as we're talking about here with
2 this research, where Howard Stern may have
3 excited them enough to subscribe to Sirius.
4 Howard Stern may have horrified them, but they
5 might have then done some research on Sirius,
6 and said wow, there's a Martha Stewart
7 station, I never would have found about it
8 otherwise. That may not have been enough, in
9 itself, but then a friend of their's told them
10 about something, and then they looked oh,
11 well, I also like this other variety of
12 things. And at some point they tip over to
13 the point. And, again, when I pointed out
14 earlier, that we're trying to tip them against
15 the larger, easier to understand negatives of
16 paying for radio, and having to purchase a
17 radio, or install a radio in your car, or
18 activate something. So I wish there was a
19 simple way to understand why people subscribe.
20 It would make our jobs a lot easier. We just
21 have sort of senses.

22 BY MR. DeSANCTIS:

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1 And, absolutely, as I mentioned before when I
2 said this is the ball game, if we can find
3 some of those, differentiate from terrestrial
4 radio because we don't have to compete in the
5 beauty contest, and we can find these small
6 niches, super serve them, and have them be our
7 champions, that is absolutely valuable to us.
8 And that's why it's a mix of all of those
9 measures.

10 JUDGE ROBERTS: And to find out
11 whether that happened, though, you need to
12 know who of your new subscribers that have
13 come to you came for that reason. Correct?

14 THE WITNESS: I would love it.
15 And this is my opinion, I would love it, if
16 there was a clear and fast way to measure the
17 why of people subscribing. We've sort of been
18 able to poke at it by asking some questions.
19 We've experimented, I think, with different
20 questions over time, but it's a really
21 difficult thing to figure out, because it, to
22 a customer, seems to be just as much a mix of

1 Q Let me direct your attention to
2 page 59 of the exhibit we've been looking at,
3 which is 34. You were asked about this on
4 redirect by your counsel. This is the
5 willingness to cancel.

6 A Yes.

7 Q And you were asked to count up
8 which of the top 20 are music channels, and
9 you said three.

10 A Correct.

11 Q The rest were non-music channels.
12 Correct?

13 A Correct.

14 Q Isn't this -- this is precisely
15 the apples to orange grove that, or very
16 similar to the apples to orange grove that you
17 testified to about the Fox survey, because you
18 have 69 music channels. Right? You have 10
19 Rock channels, multiple rock channels.

20 A Yes. Substantially more than 10,
21 but yes.

22 Q More than 10 rock channels,

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1 multiple classical channels, multiple Hip Hop
 2 channels, multiple country channels. Right?
 3 A Correct.
 4 Q So if you cancel any one, a
 5 listener likely may just go to one of the
 6 other many rock channels, or if you cancel one
 7 country channel, a listener can go to one of
 8 the other many country channels. Correct? If
 9 I came to Sirius for the Catholic channel,
 10 because I was a dedicated Catholic and you
 11 cancelled it, there are no other Catholic
 12 channels for me to go to, are there?
 13 A Well, at this point we programmed
 14 two Catholic channels, but I understand what
 15 you're saying.
 16 JUDGE WISNIEWSKI: Yes, but that's
 17 the only one where you actually pray the
 18 Rosary live.
 19 (Laughter.)
 20 MR. DeSANCTIS: I'm sorry?
 21 JUDGE WISNIEWSKI: You had to be
 22 there.

1 question for clarification; is THE EWTN
 2 channel that you have, is that the same
 3 program that they use on TV?
 4 THE WITNESS: It is, and that's
 5 different than the Catholic channel we've been
 6 talking about with the Archdiocese of New
 7 York, which was included in this survey.
 8 JUDGE WISNIEWSKI: Thank you.
 9 CHIEF JUDGE SLEDGE: Any further
 10 direct?
 11 MR. STURM: No, Your Honor.
 12 CHIEF JUDGE SLEDGE: Any questions
 13 from the bench? Thank you, sir.
 14 THE WITNESS: Thank you.
 15 CHIEF JUDGE SLEDGE: Mr. Joseph?
 16 MR. JOSEPH: Your Honor, I'd like
 17 to introduce my colleague, Jennifer Elgin, who
 18 I introduced, I believe, also at the opening,
 19 who will be calling our next witness.
 20 MS. ELGIN: Your Honors, we call
 21 Steve Cohen to the stand.
 22 CHIEF JUDGE SLEDGE: Mr. Cohen,

1 BY MR. DeSANCTIS:
 2 Q And if I came for the OutQ
 3 channel, and that was cancelled, there would
 4 be no other gay or lesbian channels that I
 5 could tune into. Correct?
 6 A That is correct.
 7 Q And the satisfaction and
 8 Evangelism questions don't ask about music as
 9 a whole, do they? They just ask about the
 10 specific music channels. Correct?
 11 A Correct. The charts that we've
 12 been looking at, yes.
 13 Q Same with the willingness to --
 14 I'm sorry. Your answer was correct?
 15 A Yes.
 16 Q And your answer is the same with
 17 respect to the willingness to cancel question.
 18 Correct?
 19 A That is correct.
 20 MR. DeSANCTIS: That's all I have,
 21 Your Honor.
 22 JUDGE WISNIEWSKI: Just a quick

1 please raise your right hand.
 2 WHEREUPON,
 3 STEVE COHEN
 4 was called as a witness and, after having been
 5 first duly sworn, was examined and testified
 6 as follows:
 7 CHIEF JUDGE SLEDGE: Thank you.
 8 Please be seated.
 9 THE WITNESS: Thank you.
 10 DIRECT EXAMINATION
 11 BY MS. ELGIN:
 12 Q Mr. Cohen, would you please state
 13 your full name for the record.
 14 A Steve Cohen.
 15 Q And where are you currently
 16 employed?
 17 A Sirius Satellite Radio.
 18 Q How long have you been with
 19 Sirius?
 20 A I just began my fourth year with
 21 the company.
 22 Q So what month and year did you

original assignment was to develop a full-time channel to support those broadcasts. In September 2004, I became Vice President, Sports, and added responsibility for all of Sirius' other sports programming, including our full-time NBA channel, our college sports broadcasts, our various ESPN channels, and the sports talk channels that we have developed. I was also personally involved in meetings with NASCAR that ultimately resulted in Sirius gaining the exclusive right to carry live broadcasts of NASCAR races next season. My team and I are presently in the process of developing a dedicated NASCAR channel, which is currently in preview mode and will launch in January 2007.

Summary of Testimony

4. Major sports programming is critical to Sirius in attracting and retaining subscribers. The exclusive availability of major sports programming on Sirius is a fundamental point of differentiation between both Sirius and terrestrial radio and Sirius and XM. Based on my nearly 20 years in the industry, the dedication of sports fans to their team and their sport is virtually unrivaled. NFL and college sports fans love their team, and NASCAR fans love their driver; this devotion drives purchasing decisions. As such, exclusive access to both play-by-play coverage of premiere sporting events nationwide, as well as related call-in shows and other programming, is a major attraction to Sirius and is a unique opportunity that sports fans are willing to pay for. This conclusion is confirmed by Sirius research, which I regularly consult and rely upon in my work. For these reasons, I believe that sports programming is critical in attracting subscribers to Sirius.

Overall Description of Sirius Sports Programming

5. Ten channels on Sirius satellite radio are devoted to sports. These channels are as follows:

<u>Channel</u>	<u>Description</u>
120	ESPN Radio
121	ESPNEWS
122	Sports Byline USA
123	Sirius Sports Action
124	Sirius NFL Radio
125	Sports Play-by-Play 1
127	NBA Radio on Sirius
128	NASCAR (beginning January 2007)
181	ESPN Deportes (Spanish language ESPN)
186	Canadian Hardcore Sports

A copy of the web page for some of these Sirius sports channels is SIR Ex. 26. In addition to these full-time, dedicated sports channels, we preempt the regular programming on other channels to present live sports play-by-play coverage, particularly during March Madness and the fall football season.

Pass Through Programming

6. The three ESPN channels are programmed on a "pass through" basis. In other words, Sirius takes the audio feed that it receives from the ESPN studios and passes it through to subscribers through the Sirius system. While programming these channels therefore does not

involve creative work by my staff, the availability of these channels is important because ESPN is the best known brand in sports broadcasting. Sports fans expect to be able to listen to ESPN talk shows (e.g., Mike & Mike in the Morning, the Dan Patrick Show, Pardon the Interruption with Tony Kornheiser and Michael Wilbon), ESPN News and other well-known ESPN programming. The presence of ESPN is also consistent with our strategy of having the best known brands in sports available to our subscribers.

Exclusive Programming

7. While the ESPN programming is important, in my view the far more significant sports programming is that which can be heard only on Sirius. Since 2004, we have had an exclusive relationship with the NFL, the dominant sports league in the United States. We have also broadcasted NBA and NHL games for many years. In 2007, we will begin our exclusive relationship with NASCAR. Neither terrestrial radio nor XM can compete with Sirius when it comes to sports. As such, sports is a dominant factor in attracting paying subscribers to Sirius and keeping them.

The NFL

8. Sirius has exclusive satellite radio broadcast rights for the NFL through the 2010 season. Sirius broadcasts every NFL game, typically (except for the Tennessee Titans) with a separate feed for each team. Thus, if the Redskins are playing the Giants, we will have a feed available for Redskins fans (with Sonny Jurgenson, Sam Huff and Larry Michael) and a separate feed available for Giants fans. While local team games and a few national games may be available in some markets on terrestrial radio, Sirius is the only source where fans located anywhere in the country can listen to their favorite team play live on the radio. Moreover, unlike terrestrial radio, if a fan is driving, he or she can continue to listen to a game from beginning to

end without having to change channels or losing the signal due to distance. Thus, Sirius' game coverage is significantly better than terrestrial radio (when it is even available) and the exclusive relationship with the NFL in my view is one of the two biggest advantages (along with Howard Stern) that we have over competitors.

9. It is important to note that our NFL coverage is not limited to broadcasting of games. When we reached our agreement with the NFL, it was our intent to have a full time, year round NFL channel. When I joined Sirius from WFAN, my principal responsibility was to create that channel by hiring talent and producing shows that would draw fans on a year round basis. We have developed, and continue to develop, numerous talk and call-in shows for NFL fans. These include NFL Rewind, Late Hits, The Red Zone, Moving the Chains, and Taking it to House. We have shows hosted by well known current players such as Ronde and Tiki Barber and Keyshawn Johnson, and former players such as Jerry Rice. These shows originate from our studios in New York and from remote locations. We also cover non-game events such as the draft, the scouting combine, and training camps, and air shows devoted to fantasy football, an increasingly popular hobby among football fans. Because we have a channel totally dedicated to the NFL, we can provide far more NFL coverage than any other radio station or network.

10. The importance of the NFL to Sirius is reflected in our advertising, where the NFL logo and shield frequently appear on our advertising and the first page of our website. The importance of the NFL is also reflected in our Customer Satisfaction Monitor and Listener Study, where the Sirius NFL Radio channel scores in the top five in satisfaction, evangelism and willingness to cancel if the channel were removed from our lineup. A substantial number of respondents also mention sports in general, and the NFL in particular, as reasons for deciding to subscribe to Sirius. These results are even more impressive when one considers the fact that the

most recent surveys were taken during the off season. In my view, these results vindicate our strategy of developing an entire channel around the NFL.

NBA/NHL Programming

11. Sirius is also a satellite radio broadcast partner of the NBA and the NHL. Sirius broadcasts up to 40 NHL games a week including all of the playoffs and the Stanley Cup finals. During the season, Sirius also has a live NHL call-in show every weekday. As with the NFL, Sirius also has an NBA channel. Sirius is scheduled to broadcast over 1,000 NBA games in the upcoming season.

NASCAR Programming

12. Most recently, my team and I have been focused on the launch of our new NASCAR channel. After vigorous negotiations with the sanctioning body, Sirius will be the exclusive home of NASCAR during the 2007 through 2011 seasons and will broadcast every NASCAR Nextel Cup race from flag to flag, with pre- and post-race analysis. As with Sirius NFL Radio, live coverage of events will form the backbone for a dedicated channel of related programming. We have already signed Tony Stewart, one of the most popular and controversial Nextel Cup drivers, to host a live two-hour weekly program exclusively on Sirius. We believe that, when the channel is launched in January and racing begins in February with the Daytona 500, the NASCAR channel will be an important addition to the Sirius sports lineup.

Other Sports Programming

13. College sports are also important to Sirius listeners. Sirius is the official satellite radio partner of numerous major universities, including Alabama, Auburn, Colorado, Florida, Kentucky, Louisville, LSU, Ole Miss, Navy, Nebraska, Notre Dame, Ohio State, Oklahoma, Texas, UCLA, USC, and West Virginia. In addition to play-by-play coverage of college football and basketball, Sirius hosts an exclusive college football coaches' show and a college scoreboard show. We will broadcast approximately 375 college football games this year, and will end the season by broadcasting many of the biggest bowl games. Sirius is also the exclusive satellite broadcast partner of the Men's NCAA College Basketball Tournament, one of the most popular sporting events of the year.

14. While the NFL, the NBA, the NHL, NASCAR and college football and basketball are all among the most popular sports, Sirius also broadcasts sports that have a smaller but equally dedicated fan base. For example, we broadcast the Championships at Wimbledon, we have shows that cover horse racing, English Premier League Soccer, scuba diving and poker. We have recently announced a deal to broadcast UEFA Champions league soccer from Europe. This depth of programming is not available anywhere else on radio.

Conclusions

15. The sports programming that I have discussed above reflects an enormous commitment of money, bandwidth and creative resources on the part of Sirius. In my view, and as corroborated by the research data, this investment is justified because our sports programming is both highly desired by subscribers and more comprehensive than the sports programming available from other terrestrial and satellite radio..

Before the
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APPEARANCES: (CONT.)
On Behalf of Music Choice
PAUL M. FAKLER, ESQ
Moses & Singer LLP
406 Lexington Avenue
New York, New York 10174-1299
(212) 554-7800
pfakler@mosessinger.com

In the matter of:)
)
Adjustment of Rates and Terms)
for Preexisting Subscriptions) Docket No.
Services,) 2006-1
and) CRB DSTR
Satellite Digital Audio Radio)
Services)
)

Room LM-408
Library of Congress
First and Independence
Avenue, S.E.
Washington, D.C. 20540
Thursday,
June 7, 2007

The above-entitled matter came on for hearing,
pursuant to notice, at 9:30 a.m.

BEFORE:
THE HONORABLE JAMES SLEDGE, Chief Judge
THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES
On Behalf of SoundExchange
DAVID A. HANDZO, ESQ
MICHAEL B. DeSANCTIS, ESQ
JARED O. FREEDMAN, ESQ
THOMAS J. PERRELLI, ESQ
MARK D. SCHNEIDER, ESQ
Jenner & Block
601 Thirteenth Street, N.W.
Suite 1200 South
Washington, D.C. 20005
(202) 639-6060
dhandzo@jenner.com
On Behalf of XM Satellite Radio Inc.
BRUCE RICH, ESQ
JONATHAN BLOOM, ESQ
TODD LARSON, ESQ
BRUCE S. MEYER, ESQ
RALPH MILLER, ESQ
Weil Gotshal & Manges
567 5th Avenue
New York, New York 10016
(212) 310-8238
On Behalf of Sirius Satellite Radio Inc.
BRUCE G. JOSEPH, ESQ
KARYN K. ABLIN, ESQ
MATT J. ASTLE, ESQ
JENNIFER L. ELGIN, ESQ
THOMAS W. KIRBY, ESQ
MICHAEL L. STURM, ESQ
JOHN WYSS, ESQ
Wiley Rein
1776 K Street, N.W.
Washington, D.C. 20006
(202) 719-7528
bjoseph@wileyrein.com

WITNESS	DIR	CROSS	REDIR	RECCROSS
Mel Karmazin				
By Mr. Wyss			29	
Terrence Smith				
By Mr. Kirby	36		130	
By Mr. DeSanctis		90		
Doug Wilsterman				
By Mr. Sturm	143			
Jeremy Coleman				
By Mr. Sturm	197		285	
By Mr. DeSanctis	226		305	
Steve Cohen				
By Ms. Elgin	333			
EXHIBIT NO.	DESCRIPTION	MARK	RECD	
24	Sirius contract with NBA			withdrawn
26	Sirius contract with NBA with 2 Amendments	6	8	
27	Sirius contract with 112 (Stern)	9	10	
28	5/1/07 Sirius Earnings Guidance	14	15	
29	12/08/04 email Ryan to Karmazin	23	26	
30	Satellite Orbit	90		
31	Satellite Update Report	103	108	
32	Martha Stewart Agreement	227	230	
33	Fox News Study	243	244	
34	June 2006 Sirius Satellite Radio Listener Study	251	253	
35	August 2006 Customer Satisfaction Survey		262	
Sirius				
32	Written testimony of T. Smith	39	40	
33	August 2005 Sirius News Channel Evaluation	144	144	
34	June 2006 Sirius Satellite Radio Listener Study	199	199	

1 multiple classical channels, multiple Hip Hop
 2 channels, multiple country channels. Right?
 3 A Correct.
 4 Q So if you cancel any one, a
 5 listener likely may just go to one of the
 6 other many rock channels, or if you cancel one
 7 country channel, a listener can go to one of
 8 the other many country channels. Correct? If
 9 I came to Sirius for the Catholic channel,
 10 because I was a dedicated Catholic and you
 11 cancelled it, there are no other Catholic
 12 channels for me to go to, are there?
 13 A Well, at this point we programmed
 14 two Catholic channels, but I understand what
 15 you're saying.
 16 JUDGE WISNIEWSKI: Yes, but that's
 17 the only one where you actually pray the
 18 Rosary live.
 19 (Laughter.)
 20 MR. DeSANCTIS: I'm sorry?
 21 JUDGE WISNIEWSKI: You had to be
 22 there.

1 question for clarification; is THE EWTN
 2 channel that you have, is that the same
 3 program that they use on TV?
 4 THE WITNESS: It is, and that's
 5 different than the Catholic channel we've been
 6 talking about with the Archdiocese of New
 7 York, which was included in this survey.
 8 JUDGE WISNIEWSKI: Thank you.
 9 CHIEF JUDGE SLEDGE: Any further
 10 direct?
 11 MR. STURM: No, Your Honor.
 12 CHIEF JUDGE SLEDGE: Any questions
 13 from the bench? Thank you, sir.
 14 THE WITNESS: Thank you.
 15 CHIEF JUDGE SLEDGE: Mr. Joseph?
 16 MR. JOSEPH: Your Honor, I'd like
 17 to introduce my colleague, Jennifer Elgin, who
 18 I introduced, I believe, also at the opening,
 19 who will be calling our next witness.

20 MS. ELGIN: Your Honors, we call
 21 Steve Cohen to the stand.
 22 CHIEF JUDGE SLEDGE: Mr. Cohen,

1 BY MR. DeSANCTIS:
 2 Q And if I came for THE OutQ
 3 channel, and that was cancelled, there would
 4 be no other gay or lesbian channels that I
 5 could tune into. Correct?
 6 A That is correct.
 7 Q And the satisfaction and
 8 Evangelism questions don't ask about music as
 9 a whole, do they? They just ask about the
 10 specific music channels. Correct?
 11 A Correct. The charts that we've
 12 been looking at, yes.
 13 Q Same with the willingness to --
 14 I'm sorry. Your answer was correct?
 15 A Yes.
 16 Q And your answer is the same with
 17 respect to the willingness to cancel question.
 18 Correct?
 19 A That is correct.
 20 MR. DeSANCTIS: That's all I have,
 21 Your Honor.
 22 JUDGE WISNIEWSKI: Just a quick

1 please raise your right hand.
 2 WHEREUPON,
 3 STEVE COHEN
 4 was called as a witness and, after having been
 5 first duly sworn, was examined and testified
 6 as follows:
 7 CHIEF JUDGE SLEDGE: Thank you.
 8 Please be seated.
 9 THE WITNESS: Thank you.
 10 DIRECT EXAMINATION

11 BY MS. ELGIN:
 12 Q Mr. Cohen, would you please state
 13 your full name for the record.
 14 A Steve Cohen.
 15 Q And where are you currently
 16 employed?
 17 A Sirius Satellite Radio.
 18 Q How long have you been with
 19 Sirius?
 20 A I just began my fourth year with
 21 the company.
 22 Q So what month and year did you

1 start?
 2 A May of 2004.
 3 Q And when you joined Sirius in May
 4 of 2004, what was your title at that time?
 5 A Director of NFL Programming.
 6 Q What were your responsibilities as
 7 the Director of NFL Programming?
 8 A To build out the NFL platform,
 9 create a 24/7 NFL talk station, and make sure
 10 that all of the games that we had acquired the
 11 rights for were broadcasted properly on our
 12 satellite radio service.
 13 Q What is your current position with
 14 Sirius?
 15 A I am currently the Vice President
 16 of Sports Programming.
 17 Q And what are your responsibilities
 18 as the Vice President of Sports Programming?
 19 A I'm in charge of all of our sports
 20 channels, all of our sports properties, our
 21 universities, our professional sports leagues,
 22 building talk programming to support our play-

1 radio stations.
 2 A Well, this was the first All
 3 Sports radio station, so we introduced the
 4 format to the listeners of the tri-state area,
 5 New York, New Jersey and Connecticut. And it
 6 was the first time that anything like this had
 7 been done, in terms of taking a radio station
 8 and programming just sports on it.
 9 MS. ELGIN: I would like to hand
 10 out Mr. Cohen's written direct testimony.
 11 JUDGE WISNIEWSKI: Wasn't there a
 12 station that had --
 13 THE WITNESS: They have some of
 14 it. Well, WEEI followed us. WRKO up in
 15 Boston, they did some programming. WWWE out
 16 in Cleveland, Pete Franklin was afternoon
 17 drive host there. He actually was our first
 18 afternoon drive host, so he did some
 19 programming out in Cleveland.
 20 BY MS. ELGIN:
 21 Q Do you have your written direct
 22 testimony before you?

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1 by-play leagues, and to bring in new
 2 subscribers through our sports programming,
 3 and build out content that will lure potential
 4 subscribers to our service because of our
 5 programming.
 6 Q How long have you been involved in
 7 sports radio?
 8 A I began in 1987 after graduating
 9 from the University of Arizona, so I'm coming
 10 up on my 20th anniversary.
 11 Q What did you do when you graduated
 12 from the University of Arizona?
 13 A I was hired by WFAN Radio, which
 14 was about to become the first All Sports radio
 15 station in this country, straight out of
 16 college, and we began on the air in July of
 17 1987. I was hired as a person who would run
 18 the audio board for talk shows, and also edit
 19 sound, and create programming for WFAN.
 20 Q What was different about WFAN?
 21 A As opposed to Sirius?
 22 Q As opposed to other terrestrial

1 A I do.
 2 Q Could you please give the Court a
 3 brief summary of the purpose of your direct
 4 testimony?
 5 A The brief purpose of my direct
 6 testimony?
 7 Q Yes.
 8 Q Well, basically, in terms of my
 9 testimony, it is to talk about Sirius
 10 Satellite Radio, what I do there in terms of
 11 building out programming, and all of our
 12 sports content. And, of course, my job is to
 13 create programming to bring in subscribers,
 14 not only to bring in subscribers, to retain
 15 subscribers, as well.
 16 Q What is Sirius' strategy with
 17 respect to sports programming?
 18 A Well, what we've been able to do,
 19 and our strategy, for that matter, is we've
 20 created programming that's not available
 21 anywhere else in terms of professional sports
 22 leagues, universities, talk platforms. We've

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1 created things like Sirius NFL Radio, which is
 2 a radio station dedicated just to THE National
 3 Football League. It's something you can't do
 4 on terrestrial radio. We recently created
 5 Sirius NASCAR Radio, a 24/7 platform to
 6 discuss NASCAR, and to air NASCAR events.
 7 Again, to dedicate a radio station to one
 8 sport is something that you can't do in
 9 terrestrial radio. So, basically, that's a
 10 huge part of my job. And in terms of
 11 acquiring subscribers, to give them something
 12 that they're not able to get anywhere else on
 13 the radio, and that's what we've been able to
 14 do, whether it be through our deals with the
 15 National Football League, where you could hear
 16 every game, home and away broadcasts, in most
 17 instances. NASCAR, which we dedicate 11
 18 channels to, for every Nextel Cup Race, and
 19 with out pit-to-driver communication laid over
 20 the broadcast of the race, is something that's
 21 never been done before. And we introduced
 22 that to our fans beginning with this year's

1 Play-by-Play channels. We now have three or
 2 four Play-by-Play channels which we use for
 3 all of our Play-by-Play, including our pit-to-
 4 driver communication channels.

5 Q I assume that -- you state that
 6 you added additional channels. How do you
 7 handle game days where you need multiple
 8 channels?

9 A Not easily, but we have pre-
 10 emptio channels, and what we do on those pre-
 11 emptio channels is we air our sports feeds on
 12 channels like ABC News, ESPN News, CNN,
 13 basically, our commercial channels we go ahead
 14 and pre-empt, if we have the pre-emptio
 15 rights through our agreements with those
 16 channels to air our sports broadcasts.

17 Q How many channels might you pre-
 18 empt on a very big sports day?

19 A Up to about 20 channels, and our -
 20 - coming this fall, it'll be the first time we
 21 have the NFL and NASCAR together, so we're
 22 looking at about 28 channels of Play-by-Play

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1 Daytona 500.

2 Q Looking at paragraph 5 of your
 3 written direct testimony, have you got that?
 4 You state there that Sirius has 10 channels
 5 dedicated to sports. Is that an accurate
 6 number today?

7 A It's an accurate number, a couple
 8 of the channels have changed that you're
 9 looking at in the testimony, which I believe
 10 was given in October of last year. Sports
 11 Byline is no longer with us, it's been
 12 replaced by Sports Play-by-Play Channel. And
 13 we did launch the Sirius NASCAR Radio this
 14 past January. And the channel, Canadian
 15 Hardcore Sports, while it was totally
 16 available in the U.S., it's now available -
 17 it's a Canadian channel. It's now available
 18 on the newer radios that have been sold in the
 19 United States.

20 Q Are there any other changes to the
 21 channel lineup?

22 A Yes. We have play -- we've added

1 in September when we have a NASCAR event early
 2 afternoon on a Sunday.

3 Q And that's out of how many total
 4 Sirius channels?

5 A Over 130.

6 Q What kinds of channels do you pre-
 7 empt --

8 JUDGE ROBERTS: A quick question.
 9 Mr. Cohen, when you pre-empt channels, is
 10 there a range in the channels in which you
 11 pre-empt? I'm partially asking this because
 12 on NFL Sunday I have trouble, sometimes,
 13 finding a particular game.

14 THE WITNESS: Yes.

15 JUDGE ROBERTS: And I never seem
 16 to have to worry about some of the lower
 17 channels.

18 THE WITNESS: Unfortunately, that
 19 is something that we need to do a better job
 20 of, because we're not able to channelize,
 21 which means to take a block of channels and
 22 put them all together so you can just go one-

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1 by-one in succession. So, to answer your
2 question, anywhere from Channel 103 to 186 --

3 JUDGE ROBERTS: So it's all in the
4 triple digit channels.

5 THE WITNESS: It is.

6 JUDGE ROBERTS: I don't have to
7 worry about on down below 100.

8 THE WITNESS: That is correct. I
9 believe once you get below - yes. I think 103
10 is the first channel we use for pre-emption.

11 JUDGE ROBERTS: Okay. Thank you.

12 BY MS. ELGIN:

13 Q Below 103, are those music
14 channels?

15 A Once you get -- Howard Stern is at
16 100. Once you get below Howard Stern's
17 channel, they are music channels.

18 Q Why don't you pre-empt music
19 channels?

20 A Our music channels are commercial-
21 free, and we can't put -- we do not put
22 commercial programming on our commercial-free

1 A We had 10 broadcasts of Super Bowl
2 XLI in seven different languages. And, of
3 course, the three English-speaking languages
4 were the home and away broadcasts, and the
5 national feed produced by Westwood One.

6 Q What were the seven different
7 languages?

8 A I may get a couple wrong, but we
9 had French, Italian, Spanish, Mandarin
10 Chinese, Danish which, of course, is very
11 popular, but it was very interesting, and we
12 got great feedback. Oh, I'm sorry, Japanese,
13 as well. And we would have added as many as
14 the NFL could provide to us, because we just
15 thought it was great programming, and it
16 served so many diverse cultures for the
17 biggest sporting event of the year.

18 CHIEF JUDGE SLEDGE: But all of
19 your listeners were in the continental United
20 States.

21 THE WITNESS: And Canada.

22 CHIEF JUDGE SLEDGE: We hadn't

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1 channels.

2 Q Why is that?

3 A Well, we are 100 percent
4 commercial-free when it comes to our music
5 channels, and if you then take those channels
6 and put commercials on them, they wouldn't be
7 commercial-free channels any longer.

8 Q Under what circumstances would you
9 need 28 channels for sport programming?

10 A This September when we have the
11 NFL, let's say they have ten 1:00 games, which
12 is something that happens quite frequently,
13 you're looking at 20 channels right there for
14 home and away broadcasts, and then you add on
15 11 NASCAR channels for, let's call it a 1:30
16 race at Pocono. And now, all of a sudden, I'm
17 looking at over 30 channels, which is always
18 a very interesting scenario, and something
19 that we're working on right now to figure out
20 how we're going to pull that off.

21 Q For the Super Bowl, for example,
22 how many channels were used for that?

1 heard that before. Canada?

2 THE WITNESS: Yes, sir.

3 CHIEF JUDGE SLEDGE: All right.

4 BY MS. ELGIN:

5 Q Does Sirius operate a separate
6 satellite service for Canada?

7 A Yes, Sirius Canada. It's a
8 separate service.

9 Q You've mentioned several times the
10 deal with the NFL, which is covered in
11 paragraphs 8-10 of your written direct
12 testimony. Did you play a part in negotiating
13 that deal with the NFL?

14 A I did not.

15 Q Why is that?

16 A I was employed by WFAN when that
17 contract was being negotiated. And after they
18 landed the rights to the National Football
19 League, they called and asked if I would be
20 interested in coming and working for Sirius to
21 put together their NFL package.

22 Q Why is that NFL deal so important

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1 to Sirius?

2 A Well, it's huge. First off, it's
3 the number one sport in the United States.
4 And, of course, baseball fans can argue that,
5 but they wouldn't win. But all you have to do
6 is look at the numbers, and the NFL has been
7 so important to us in our growth. And when I
8 had arrived, we launched the NFL channel in
9 August, and we -- it was very noticeable the
10 subscribers that were signing up for the NFL
11 service. And it's a sport and a channel, our
12 NFL channel, that really goes year-round, and
13 is so popular that you can't get through on
14 the phone lines, and it's just -- what the NFL
15 has done for us is, we've been able to put
16 something out there that you can't get
17 anywhere else. The combination of home and
18 away radio broadcasts for just about every
19 team is 24/7, this NFL channel that we
20 launched which has been embraced by players
21 and coaches, and we've been able to create
22 programming there that you're not able to

1 much rather hear those radio broadcasters than
2 TV announcers like Troy Aikman and Darryl
3 Johnston who played for the Cowboys, and Phil
4 Simms, who played for the New York Giants. So
5 it's so important to have the radio broadcast
6 for the NFL just for that very reason.

7 Q Is Sirius the only place that you
8 can get coverage of every NFL game?

9 A No, it's not.

10 Q Where else can you get that?

11 A You can get radio broadcasts on
12 NFL.com. You have to buy that package on
13 NFL.com for the radio broadcast, and on
14 television, DirectTV offers the Sunday ticket
15 package, which are the network broadcasts of
16 the NFL games.

17 Q What makes your deal with the NFL
18 different from what you can get on Sunday
19 ticket or NFL.com?

20 A Well, first off, with Sunday
21 Ticket, those are the TV broadcasts, as
22 opposed to the radio broadcast. And they're

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1 find anywhere else. And it's just been
2 insanely popular with our subscribers, and
3 helping us get new subscribers. And that was
4 something that was confirmed through research
5 that we did late in 2004, that at that point
6 told us that the number one reason to
7 subscribe to Sirius was sports and the NFL.

8 Q You've mentioned that you can get
9 home and away game broadcasts. What does that
10 mean, exactly?

11 A Well, it's very -- first off, if
12 you look at the four major sports, the only
13 major sport that does not have hometown
14 television broadcasters is the National
15 Football League. All the TV broadcasts during
16 the regular season and the playoffs are done
17 by the networks by people who work hard, but
18 do not know the teams as well as the local
19 radio broadcasters. So it's so important for
20 a fan of say the Washington Redskins, to hear
21 Larry Michael, Sam Huff, and, of course, Sonny
22 Jurgenson. And, of course, Redskin fans would

1 just that, the TV broadcasts. And what we
2 offer, in addition, of course, we have the
3 home and away broadcasts, as I mentioned, for
4 just about every NFL team, the only exception
5 being the Tennessee Titans. We also have this
6 24/7 NFL Channel, which if you're an avid
7 football fan, once you listen to it, you won't
8 want to be without it, because whether it's
9 during the NFL draft, every pick and every
10 round, or being live at the NFL combines, or
11 going to the owner's meetings, or doing a
12 training camp tour this summer that will take
13 us to all 32 teams, it's coverage that has
14 never been done before on the radio, and our
15 fans are just crazy for it. And it's just
16 been a great way for us to get subscribers.
17 And, of course - I'm sorry, just to fully
18 answer your question. With NFL.com, it is
19 just that, it's just the broadcasts of the
20 radio broadcasts for each team, the home and
21 away broadcasts.

22 Q Are there any other advantages to

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1 having Sirius NFL coverage, as opposed to, for
2 example, on your television?

3 A Well, the other call it 24/7
4 coverage you can get on television is provided
5 by the NFL network, and they do a really good
6 job, but their programming is certainly
7 limited when compared to Sirius. We do a
8 minimum of 15 hours of live talk programming
9 each and every day, and that programming is
10 not as -- they don't do nearly as much as we
11 do. And it's not interactive. The other part
12 about Sirius NFL Radio is you can call in and
13 you can talk to experts, you can talk to
14 future Hall of Famers like Jerry Rice, and
15 Chris Carter, and talk to former coaches, and
16 GMs, and really pick the brains of the
17 experts. And that's something that I've
18 really tried to do at Sirius, is take it
19 notches above sports talk radio, and create
20 true expert radio. So, I mean, everybody has
21 opinions when it comes to sports talk, but
22 when you are able to pick the brains of true

1 because our fans - and it's something that I
2 tell our hosts as I hire them. I let them
3 know that, listen, you guys have to know your
4 stuff. You need to know who THE back-up left
5 tackle is on THE Philadelphia Eagles, because
6 our fans know. And you can't get through on
7 our caller lines when it comes to calling into
8 our NFL talk shows. They just absolutely love
9 it. They take ownership of it.

10 We just recently did a little bit
11 of a contest where we asked subscribers to
12 send in their pictures, and we posted them on
13 THE website. And THE traffic on THE NFL page
14 doubled because all THE fans were calling in
15 to see what these folks look like, so it was
16 a lot of fun. And THE thing about Sirius is,
17 our subscribers really take ownership of our
18 service, and it's something that I've never
19 seen before working in terrestrial radio.

20 Q I'm going to resist THE temptation
21 to ask you who THE backup left tackle for THE
22 Philadelphia Eagles is. Do you know?

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1 experts, then you create something special.

2 Q Are there any advantages to your
3 service when you're in the car?

4 A Yes. And especially in this part
5 of the country where you probably have to --
6 if you're driving from the northern part of
7 Virginia over to Baltimore and you want to
8 hear a Redskins game, you probably have to
9 change your tuner about three or four times
10 because of the low wattage stations that the
11 Redskins are currently on here in this part of
12 the country. With Sirius, you can drive from
13 New York to Alaska and never change the
14 channel. And that's a huge thing in terms of
15 being able to listen to your team anywhere in
16 the country and not have to change the
17 channel.

18 Q What sort of feedback do you get
19 from NFL fans on your service?

20 A We get incredible feedback, and
21 it's -- they absolutely love it. And,
22 frankly, we rely on that feedback greatly,

1 A Todd -- well, it depends. Todd
2 Harriman has been working at left tackle.
3 They moved him to guard, but they moved him
4 back and forth, and they get -- they're pretty
5 good at guard right now with Shaun Andrews on
6 THE right side and, of course, John Runyon at
7 right tackle. And you can move on -- well,
8 never mind. I apologize.

9 Q You also mentioned a recent deal,
10 I believe, with NASCAR. Is that correct?

11 A Yes.

12 Q Okay. Are NASCAR races available
13 on THE radio?

14 A They are. We broadcast every
15 Truck Race, Bush Race, and Nextel Cup Race.

16 Q And what kind of rights does
17 Sirius have that make it different from other
18 places you can find NASCAR coverage?

19 A Well, of course, you could hear
20 THE races on whether it's the MRN Radio
21 Network or PRN Radio Network, and those guys
22 do a great job, of course. And we run their

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1 broadcast, we do not produce the race
 2 broadcast. What we do do is, we produce a
 3 24/7 NASCAR channel that has been wildly
 4 successful since we launched it on January 1st
 5 of this year. In addition to that 24/7 talk
 6 channel, we also have 10 pit-to-driver
 7 communication channels. And what we've done
 8 there, and it's something that's never been
 9 done in radio; in the past, you were able to
 10 get driver channels on the internet or through
 11 XM when they had the rights to NASCAR, but
 12 what you would get is, you'd get the driver
 13 communication, but anyone who listens to a
 14 race, maybe 10 percent of the time you'll hear
 15 pit-to-driver communication, mostly the
 16 spotter saying you're clear and so on and so
 17 forth. But what we did was, we didn't want
 18 dead air on the channel, so we figured out a
 19 way to put the race broadcast on the pit-to-
 20 driver channel, but anytime the driver would
 21 speak, or the pit would speak to the driver,
 22 it would compress the broadcast so you'd hear

1 the process of voting for a driver channel.
 2 Q What other kind of feedback do you
 3 get from the NASCAR fans?
 4 A Well, the NASCAR fans, they love
 5 the channel. And that's something that --
 6 what I did over the past two years was
 7 really, really work on learning the sport of
 8 NASCAR, and picking the brains of the experts,
 9 and part of that is speaking to the fans. So
 10 I traveled around the country last year, and
 11 went to a bunch of races, and found out what
 12 the fans really wanted in a NASCAR Channel.
 13 And I've taken so many of their ideas and put
 14 it to use, and helped build out this channel.
 15 And the fans are just absolutely rabid. Last
 16 week - we got the caller totals last week,
 17 and the NASCAR Channel had more callers than
 18 any other channel on Sirius, over 45,000
 19 people called the NASCAR Channel last week.
 20 Q What other kinds of sports
 21 programming does Sirius carry?
 22 A We officially wrapped up our NFL

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1 it clearly. So, in other words, it would gate
 2 it, which is bringing down the broadcast so
 3 you could hear it perfectly. So if you're a
 4 Jeff Gordon fan, you never have to change the
 5 channel. You'll hear the race in its entirety
 6 clearly, and when Jeff and his crew
 7 communicate, you'll also hear that clearly,
 8 and that's been very well received, thus far.
 9 Q How do you choose the 10 drivers?
 10 A Well, they're based on the Nextel
 11 Cup standings and popularity of drivers, so
 12 that's pretty much how we choose them. And
 13 then we have a couple of other fellows. And
 14 the other thing that we do that has been
 15 really great is, we have a Fans Choice
 16 Channel. Every week fans get to go on line
 17 and vote for the driver that they would like
 18 to hear, who is not one of the nine drivers
 19 that we selected. And we've had up to 12,000
 20 unique visitors vote on a given week, which is
 21 really great. And it's been a lot of fun, and
 22 the fans have really enjoyed being involved in

1 coverage last night. Now that service is
 2 exclusive to XM. We have the NBA. We also,
 3 as you mentioned before, we have the NFL,
 4 NASCAR. We have over 100 universities, and
 5 their broadcasts for college basketball,
 6 college football, and we do some college
 7 baseball, as well. This past year we did a
 8 deal with the National Lacrosse League, that
 9 was very well received, and also did a show
 10 with K.C. Powell for the National Lacrosse
 11 League. We have an Arena Football League game
 12 of the week. We have Champions League Soccer,
 13 which was a lot of fun this year. The English
 14 Premier League Soccer, so we have a wide
 15 variety of sports on Sirius. And, again,
 16 you're talking about things that aren't found
 17 anywhere else on terrestrial radio. You're
 18 not hearing Champions League on terrestrial
 19 radio, and all the EPL games that we do,
 20 English Premier League games that we do. You
 21 do hear some AFL, absolutely, and National
 22 Lacrosse League, as well, but again, we also

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1 do horse racing, which I was proud to really
2 bring back to the radio, because I think it's
3 something that is great to listen to horse
4 racing on the radio. And I'm happy to say
5 we're going to be producing the Belmont Stakes
6 on Saturday, and looking forward to that.

7 Q Do you also carry the March
8 Madness Tournament?

9 A We do. And we became the first
10 broadcast entity to air every single game of
11 the men's basketball tournament three years
12 ago, and it was a lot of fun. We put it up on
13 four channels, so we never miss any of the
14 games. And that's something that we've really
15 prided ourselves on, is doing things that you
16 can't do anywhere else, whether it's airing
17 every single NFL game, airing every single
18 game from the men's basketball tournament,
19 airing every match from Wimbledon, and so it's
20 been a lot of fun. And the men's basketball
21 tournament, especially for those of us who
22 have been driven crazy by the network

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1 switching out of our games to be able to play
2 director with your radio has been a great joy.

3 Q How many live sporting events does
4 Sirius cover each year?

5 A Last year we had between - this
6 past year between three and four thousand
7 games aired on Sirius.

8 Q And why is Sirius willing to pay
9 pretty substantial license fees to entities
10 such as the NFL and NASCAR for these kinds of
11 rights that you've been describing?

12 A Because they bring in subscribers,
13 and they bring in lots of subscribers. And,
14 obviously, it's something that draws fans.
15 When you look at NASCAR or the NFL, I mean,
16 these fans are so passionate about their
17 sport. You might even say that's all they
18 care about when it comes to sports, the NFL
19 fans, and the NASCAR fans. And they subscribe
20 for their favorite sports.

21 I hosted -- my first year with
22 Sirius, I also hosted a daily show, and I

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1 can't tell you how many people called me and
2 said I signed up just for the NFL. And, by
3 the way, I haven't changed the channel since
4 I got the service, which is kind of different.
5 I asked them to please change the channel and
6 explore the other things on Sirius, but these
7 fans are just -- again, it's something that
8 hadn't been done before, so when they first
9 heard it, it was something they were glued to.
10 And now we're having the same success with
11 NASCAR.

12 MS. ELGIN: We're done. Actually,
13 I'm going to move Sirius Exhibit 35, which is
14 the written direct testimony, and I have no
15 further questions.

16 CHIEF JUDGE SLEDGE: Any objection
17 to Exhibit 35?

18 MR. DeSANCTIS: No, Your Honor.

19 CHIEF JUDGE SLEDGE: Without
20 objection, it's admitted.

21 (Whereupon, Sirius
22 Exhibit No. 35 was

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1 admitted.)

2 CHIEF JUDGE SLEDGE: And that
3 concludes the direct.

4 MS. ELGIN: Yes.

5 CHIEF JUDGE SLEDGE: Why doesn't
6 the Tennessee football team have live local
7 broadcasters?

8 THE WITNESS: It's a painful
9 answer, but our deal is with the NFL, and the
10 NFL was unable to cut a deal with the
11 Tennessee Titans radio network, so it's --

12 CHIEF JUDGE SLEDGE: Well, that's
13 clearly against the reputation. I thought the
14 NFL told the teams what to do.

15 THE WITNESS: You would think so,
16 and it's unbelievable, we have so many Titan
17 fans. I mean, Jeff Fischer does a weekly
18 segment with us, and Keith Bulluck does a
19 weekly segment with us, and we go to their
20 training camp, and everything. But the one
21 thing that we do not have is Mike Keith's
22 play-by-play, and it's really unfortunate. It

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1 really is.

2 CHIEF JUDGE SLEDGE: And the good
3 old days of Pete Rozelle.

4 We'll recess until Monday at 9:30.

5 JUDGE ROBERTS: And just so
6 everyone knows going into next week,
7 SoundExchange has consumed nine hours at this
8 point, the Services have consumed 15 hours.

9 (Whereupon, the proceedings went
10 off the record at 5:12 p.m.)

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Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 In the matter of: °
 Adjustment of Rates and Terms ° Docket No.
 for Preexisting Subscriptions ° 2006-1
 Services, ° CRB DSTR
 and °
 Satellite Digital Audio Radio °
 Services °
 Room LM-408
 Library of Congress
 First and Independence
 Avenue, S.E.
 Washington, D.C. 20540
 Monday,
 June 11, 2007

The above-entitled matter came on
 for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES: (cont'd)

On Behalf of Music Choice:
 PAUL M. FAKLER, ESQ.
 of: Moses & Singer LLP
 406 Lexington Avenue
 New York, New York 10174-1299
 (212) 554-7800
 pfakler@mosessinger.com

APPEARANCES:

On Behalf of SoundExchange:
 DAVID A. HANDZO, ESQ.
 MICHAEL B. DeSANCTIS, ESQ.
 JARED O. FREEDMAN, ESQ.
 THOMAS J. PERRELLI, ESQ.
 MARK D. SCHNEIDER, ESQ.
 of: Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 (202) 639-6060
 dhandzo@jenner.com
 On Behalf of XM Satellite Radio Inc.:
 BRUCE RICH, ESQ.
 JONATHAN BLOOM, ESQ.
 TODD LARSON, ESQ.
 BRUCE S. MEYER, ESQ.
 of: Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 (212) 310-8238
 On Behalf of Sirius Satellite Radio
 Inc.:
 BRUCE G. JOSEPH, ESQ
 KARYN K. ABLIN, ESQ.
 MATT J. ASTLE, ESQ.
 JENNIFER L. ELGIN, ESQ.
 THOMAS W. KIRBY, ESQ.
 MICHAEL L. STURM, ESQ.
 of: Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 (202) 719-7528
 bjoseph@wileyrein.com

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1 P-R-O-C-E-E-D-I-N-G-S
 2 9:32 a.m.
 3 CHIEF JUDGE SLEDGE: Thank you,
 4 we'll come to order.
 5 MR. MILLER: Your Honor.
 6 CHIEF JUDGE SLEDGE: Yes, sir.
 7 MR. MILLER: I had a housekeeping
 8 issue. Can I raise that at this point,
 9 briefly?
 10 CHIEF JUDGE SLEDGE: All right,
 11 sir.
 12 MR. MILLER: This is Ralph Miller
 13 for XM. We have a witness tomorrow, Dr.
 14 Woodbury, who would like to use a PowerPoint
 15 to illustrate some calculations for his
 16 direct. We would propose to put the projector
 17 either right on this table or right in front
 18 of it. We would project where the visual aids
 19 have been with a screen that can be taken up
 20 and put down here and put a laptop here. We
 21 wanted to ask the Judges if that would be an
 22 acceptable procedure. We can set that up in

1 MR. MILLER: We certainly didn't
 2 want to do anything with the courtroom without
 3 your permission. Thank you, your Honor.
 4 CHIEF JUDGE SLEDGE: Mr. Miller,
 5 you're aware of this screen, aren't you?
 6 MR. MILLER: Yes, your Honor, but
 7 a screen like that would be the least
 8 convenient for the Court, since it's behind
 9 you. Thank you, your Honor.
 10 CHIEF JUDGE SLEDGE: Ms. Elgin?
 11 Good morning, Mr. Cohen, you've already been
 12 sworn. Please have a seat.
 13 Whereupon,
 14 STEVE COHEN
 15 was called as a witness and, having been
 16 previously duly sworn, was examined and
 17 testified further as follows:
 18 THE WITNESS: Thank you, your
 19 Honor.
 20 MS. ELGIN: Your Honor, we have no
 21 further questions on direct, so we pass the
 22 witness for cross.

1 the morning briefly. We don't believe it
 2 would interfere with anything.
 3 We've spoken to Mr. Handzo and
 4 agreed to provide the PowerPoint in advance
 5 and the representatives of Music Choice and
 6 they've raised no objection.
 7 CHIEF JUDGE SLEDGE: Well,
 8 whatever you want to do in setting it up. I
 9 doubt if the location you suggested is visible
 10 to us but --
 11 MR. MILLER: Well, we might -- the
 12 other alternative, your Honor, is we can put
 13 some monitors in front of you that require a
 14 little bit more wiring. We certainly don't
 15 mind doing that if we can get in in the
 16 morning and run that quickly, then you'd have
 17 a monitor. We also plan to have a handout
 18 with the pages.
 19 CHIEF JUDGE SLEDGE: That's
 20 probably sufficient but we try not to get
 21 involved in that and let you make that
 22 decision.

1 CHIEF JUDGE SLEDGE: Thank you,
 2 ma'am. Any questions, by XM?
 3 MR. RICH: No questions, your
 4 Honor.
 5 CHIEF JUDGE SLEDGE: Music Choice?
 6 MR. FAKLER: No, your Honor.
 7 CHIEF JUDGE SLEDGE: Thank you.
 8 Any cross by SoundExchange?
 9 MR. DeSANCTIS: Yes, sir.
 10 Good morning, Mr. Cohen.
 11 THE WITNESS: Good morning.
 12 CROSS EXAMINATION
 13 BY MR. DeSANCTIS:
 14 Q Just to refresh our directions,
 15 you are the Vice President of Sports
 16 Programming at Sirius, is that correct?
 17 A Yes, sir.
 18 Q That means you oversee all sports
 19 programming at Sirius?
 20 A That's correct.
 21 Q And before that position when you
 22 first joined Sirius in May 2004, you had the

1 position of Director of NFL Programming; is
 2 that correct?
 3 A Yes, sir.
 4 MR. DeSANCTIS: I'd like to show
 5 the witness what has been marked as
 6 SoundExchange Trial Exhibit 36.
 7 (SX Trial Exhibit 36 marked for
 8 identification.)
 9 (Witness proffered document.)
 10 BY MR. DeSANCTIS:
 11 Q Do you recognize this document,
 12 Mr. Cohen?
 13 A I do.
 14 Q What is it?
 15 A This is Sirius Satellite Radio's
 16 contract with the National Football League.
 17 Q And this is the contract that
 18 remains in existence today?
 19 A That is correct.
 20 MR. DeSANCTIS: Your Honors, at
 21 this time I'd like to move for the admission
 22 of SoundExchange Trial Exhibit Number 36.

1 and the details -- the rights that are
 2 available to Sirius regarding programming on
 3 its service as well as the compensation that
 4 was paid to the NFL for that -- those rights.
 5 CHIEF JUDGE SLEDGE: Any objection
 6 to the protective order?
 7 MR. DeSANCTIS: No objection, your
 8 Honor.
 9 CHIEF JUDGE SLEDGE: Without
 10 objection, the motion to apply the protective
 11 order is granted.
 12 BY MR. DeSANCTIS:
 13 Q Mr. Cohen, if I could direct your
 14 attention to the fifth page of Exhibit 36, I'm
 15 sorry, the sixth page which has the number in
 16 the lower right-hand corner, 40089, in the
 17 middle of this page, Mr. Cohen, is a series of
 18 numbers under the heading "Rights Fees". Do
 19 you see that?
 20 A I do.
 21 Q These are -- these are the fees,
 22 Mr. Cohen, aren't they, that Sirius pays to

1 CHIEF JUDGE SLEDGE: Any objection
 2 to Exhibit 36?
 3 MS. ELGIN: No objection.
 4 CHIEF JUDGE SLEDGE: Without
 5 objection, Exhibit 36 is admitted.
 6 (SX Trial Exhibit 36 marked for
 7 identification was received in
 8 evidence.)
 9 MR. DeSANCTIS: Thank you, your
 10 Honor.
 11 BY MR. DeSANCTIS:
 12 Q Mr. Cohen, could you please --
 13 MS. ELGIN: Your Honor, sorry.
 14 MR. DeSANCTIS: Yes, ma'am.
 15 MS. ELGIN: We do ask that this
 16 exhibit be received on a restricted record.
 17 It is a -- it would have substantial
 18 competitive harm if it is not received
 19 restricted and that all testimony about the
 20 document also be received in a restricted
 21 record. It is the contract that is currently
 22 in force. It goes through the 2011 NFL season

1 the NFL for the right to broadcast the NFL
 2 games?
 3 A As per this contract, yes, sir.
 4 Q Right. And it's a seven-year term
 5 in which the fees that Sirius pays increase
 6 every year; is that correct?
 7 A It -- in '04/'05, '05/'06, they
 8 stayed the same and then they increased in
 9 '06/'07, stayed the same as that year the
 10 following year and then escalate from there.
 11 Q So over the course of the term,
 12 the fees escalate 10-fold --
 13 MR. DeSANCTIS: Should we -- I
 14 apologize for stopping mid-sentence. Do you
 15 want to clear the courtroom?
 16 MS. ELGIN: Your Honor, I ask that
 17 the courtroom --
 18 CHIEF JUDGE SLEDGE: You haven't
 19 asked a question yet to apply this motion.
 20 I'm not granting it until you do.
 21 MR. DeSANCTIS: I apologize, your
 22 Honor. I was just wanting to stop myself

1 before I did so.
 2 CHIEF JUDGE SLEDGE: I want to
 3 hear your question first.
 4 BY MR. DeSANCTIS:
 5 Q The question, Mr. Cohen is, isn't
 6 it true that over the course of the term of
 7 the contract the fees that Sirius pays to the
 8 NFL increase 10-fold from five million in the
 9 first year to 50 million in the last year?
 10 CHIEF JUDGE SLEDGE: Motion to
 11 apply protective order is granted.
 12 (Recess at 9:39 a.m. for Closed
 13 Session)

1 Q Okay. And are you aware of the
 2 website NASCAR.com.
 3 A I am.
 4 Q And are you aware that they offer
 5 a national webcast service, something called
 6 TrackPass?
 7 A I am aware of that, TrackPass and
 8 it's very different from what we offer.
 9 Q You're aware that TrackPass
 10 webcasts communications between the driver and
 11 the pit crew?
 12 A I'm well aware of that, yes, sir.
 13 Q Let me direct your attention to
 14 your written direct testimony, which I believe
 15 you have in front of you.
 16 MR. DeSANCTIS: For the
 17 convenience of the Court, that's Sirius
 18 Exhibit 35 that was marked on Thursday.
 19 BY MR. DeSANCTIS:
 20 Q In your written direct testimony,
 21 Mr. Cohen, you state that, "Sports is a
 22 dominant factor in attracting subscribers to

1 BY MR. DeSANCTIS:
 2 Q Mr. Cohen, you explained on
 3 Thursday that the NASCAR races that are
 4 broadcast over Sirius are available elsewhere.
 5 A Yes, sir.
 6 Q On TV, on terrestrial radio.
 7 A Yes, sir.
 8 Q And if I recall your testimony
 9 correctly, what's exclusive about the races on
 10 Sirius, is that subscribers can hear
 11 communications between the driver and the pit
 12 crew; is that correct?
 13 A That would be one of the things.
 14 Also we created a 24/7 all NASCAR channel,
 15 Sirius NASCAR radio Channel 128. That is also
 16 something that we created and is exclusive to
 17 us.
 18 Q Right, but my question was about
 19 the races in particular.
 20 A The races that are produced -- we
 21 do not produce the races. They're produced by
 22 MRN and PRN. They are available elsewhere.

1 Sirius." Do you recall that?
 2 A I'm just looking for the word,
 3 "dominant", sir.
 4 Q Let me direct your attention to
 5 page 4. It's the last sentence in paragraph
 6 7. Do you recall that?
 7 A Yes, sir, I do recall it, yes,
 8 sir.
 9 Q And in your testimony on Thursday,
 10 Mr. Cohen, you testified that at least in 2004
 11 NFL was the number one reason why subscribers
 12 signed up for Sirius.
 13 A I testified that sports was and
 14 they sited NFL for the main reason within the
 15 question of it being sports.
 16 MR. DeSANCTIS: I'd like to show
 17 the witness, your Honor, what's already been
 18 marked and accepted into evidence as
 19 SoundExchange Trial Exhibit 35.
 20 (Witness proffered document.)
 21 THE WITNESS: Thank you.
 22 BY MR. DeSANCTIS:

1 Q You're familiar with this
 2 document, Mr. Cohen, correct?
 3 A I am.
 4 Q This is one of the customer
 5 satisfaction monitors that you reference in
 6 your testimony as something that you routinely
 7 review.
 8 A Yes, sir.
 9 Q Thank you. Let me direct your
 10 attention to page 17 of Exhibit 35. As it
 11 shows at the bottom of the page, Mr. Cohen,
 12 the question asked here of Sirius subscribers
 13 is, "Please tell me all the reasons you were
 14 interested in satellite radio". Do you see
 15 that?
 16 A Yes, sir.
 17 Q And to the right of that it
 18 explains that the top mentions are shown, do
 19 you see that?
 20 A Yes, sir.
 21 Q And at the top of the page, this
 22 is characterized by Sirius as showing the draw

1 numbers contained on this page be received on
 2 restricted record.
 3 CHIEF JUDGE SLEDGE: Any
 4 objection?
 5 MR. DeSANCTIS: No objection, your
 6 Honor.
 7 CHIEF JUDGE SLEDGE: Motion is
 8 granted.
 9 (Recess at 9:46 a.m. for Closed
 10 Session)

1 for initial purchases, do you see that, at the
 2 very top of the page, the heading?
 3 A Would you mind pointing that out?
 4 Q The very, very top of the page in
 5 the heading.
 6 A Yes.
 7 Q In the black bar on the top.
 8 A "Draw for Initial Purchase".
 9 Q "Draw for Initial Purchases",
 10 correct?
 11 A Yes, sir.
 12 Q Okay, let me -- on the far left of
 13 the exhibit is a list of different kinds of
 14 answers that subscribers gave to the question,
 15 correct?
 16 A Yes, sir.
 17 Q Let me direct your attention to
 18 the ninth line down, "NFL/Football coverage".
 19 MS. ELGIN: Your Honor, this
 20 exhibit has already been received into
 21 evidence as a restricted exhibit and so we ask
 22 that any questioning about the specific

1 CHIEF JUDGE SLEDGE: Any recross?
 2 MR. DeSANCTIS: No, your Honor.
 3 CHIEF JUDGE SLEDGE: Any questions
 4 from the Bench?
 5 JUDGE WISNIEWSKI: Mr. Cohen,
 6 you're the second programming specialist who
 7 has indicated that he doesn't really rely much
 8 on these survey numbers but rather relies more
 9 on antidotal evidence or a feel for what
 10 customers want. Is there some reason why
 11 Sirius has a function that collects this data
 12 then?
 13 THE WITNESS: Your Honor, our last
 14 major research study, we had something called
 15 verbatims, which subscribers really talked
 16 about what they liked and didn't like about
 17 our programming and I felt that was very
 18 useful in terms of understanding what our
 19 subscribers liked and disliked about our
 20 product.
 21 JUDGE WISNIEWSKI: I hear you say
 22 that but you haven't really answered my

1 question. Why is Sirius spending money on
2 doing this kind of survey or collecting this
3 kind of data? It doesn't sound like it's
4 money very well spent.

5 THE WITNESS: Well, there are some
6 folks who really love this stuff and love to
7 crunch the numbers and go through the numbers
8 and maybe program that way and use that for
9 marketing and promotion and things of that
10 nature. I'm really someone who would much
11 rather listen to what the listeners have to
12 say in a broader form and use that to best
13 program out channels.

14 JUDGE WISNIEWSKI: Thank you.
15 That's all. I'll let him follow up.

16 JUDGE ROBERTS: Just a couple of
17 questions for you, Mr. Cohen. You had said
18 last Thursday that the top 100 channels, I
19 believe or at least through Channel 99 are
20 reserved for non-commercial programming; is
21 that correct?

22 THE WITNESS: That is correct. I

1 for low channel numbers. They consider those
2 to be more likely to be listened to or watched
3 by the average consumer and that a bad channel
4 number is -- or a high channel number is a bad
5 thing. Why is Sirius deliberately putting
6 such valuable programming in the higher
7 channel numbers? Why won't you just say,
8 "Well, let's make Channel 10 a -- the NASCAR
9 channel"?

10 THE WITNESS: Well, your Honor,
11 based on that, I would agree with you. I
12 would move the sports channels to 1, 2, 3, and
13 4 and so on and so forth, but those decisions
14 were made prior to me joining the company and
15 I know with the lower channels they like to
16 use the various numbers to correlate to some
17 of the things they do with music. For
18 instance, Channel 7 is the '70s. Channel 8 is
19 the '80s. Channel 6 is pretty much the '60s
20 and so on and so forth. So those decisions
21 were made prior to me joining the company, but
22 I do agree with your assessment.

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1 believe -- your Honor, I believe Howard at 100
2 is the first talk channel. Anything below
3 that is not talk channel.

4 JUDGE ROBERTS: And then channels,
5 perhaps 100 --

6 CHIEF JUDGE SLEDGE: I'm sorry,
7 that didn't answer your question. I thought
8 you asked about commercial versus non-
9 commercial.

10 JUDGE ROBERTS: I understood your
11 answer to say up to but not including Channel
12 100 is non-commercial.

13 THE WITNESS: Yes, your Honor.

14 JUDGE ROBERTS: Okay, and then, of
15 course, sports programming is in the last 35
16 channels that Sirius offers, yes?

17 THE WITNESS: Yes, your Honor.

18 JUDGE ROBERTS: If sports
19 programming is so important, why is it on the
20 -- in that commercial band? What I'm trying
21 to figure out is, I know that certainly in
22 television broadcasting, broadcasters fight

1 JUDGE ROBERTS: Do you know if you
2 have any witnesses that you're presenting that
3 will speak to why it is such that the lower
4 channels are devoted to the music but the
5 higher channels to presumably this more
6 valuable programming?

7 THE WITNESS: I didn't -- your
8 Honor, I know other folks like Steve Blatter
9 will be here today, who runs our Music
10 Programming Department. I'm not sure if he
11 was with the company, I don't believe so, when
12 those decisions were first made.

13 JUDGE ROBERTS: Thank you.

14 CHIEF JUDGE SLEDGE: I don't
15 understand that last answer. Why is it
16 significant that a decision was made years ago
17 as to what you're doing now and in the future?

18 THE WITNESS: I agree with --
19 things can certainly change now if we felt,
20 you know, that we needed to make that change.
21 Your Honor, I've never been in a meeting where
22 it was discussed that we should move the

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1 sports channels to single digit channels. So
 2 in meetings that I've been present in, it's
 3 never come up that this has been an issue.
 4 What I can tell you that has come up is the
 5 fact that we would like to be able to
 6 channelize our sports channels and that means
 7 put them in succession, especially when we
 8 have preemptions so it's easier for the
 9 listener to find games.

10 JUDGE ROBERTS: I know you're the
 11 Director of Sports Programming, Mr. Cohen, but
 12 do you know when Howard Stern negotiated his
 13 deal, was he promised a particular channel?

14 THE WITNESS: I'm not aware of
 15 that, your Honor. If he was promised a
 16 channel or channels during the negotiation, I
 17 wasn't part of the negotiation.

18 JUDGE ROBERTS: Well, I hope that
 19 there's somebody that is able to answer that
 20 question.

21 CHIEF JUDGE SLEDGE: Any follow-up
 22 questions from counsel?

1 please be seated.

2 MR. KIRBY: Good morning, Mr.

3 Blatter.

4 THE WITNESS: Good morning.

5 DIRECT EXAMINATION

6 BY MR. KIRBY:

7 Q What is your full name?

8 A My name is Steven Gary Blatter.

9 Q And where are you employed, Mr.

10 Blatter?

11 A I'm employed at Sirius Satellite
 12 Radio.

13 Q And what is your position there?

14 A I am the Senior Vice President of
 15 Music Programming.

16 Q What did you do professionally
 17 before you came to Sirius?

18 A Immediately prior to Sirius, I was
 19 the Chief Strategist for a media consulting
 20 company called Sabo Media.

21 Q All right, and before that?

22 A Prior to that, I spent all of my

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1 MS. ELGIN: No.

2 MR. DeSANCTIS: No, your Honor.

3 CHIEF JUDGE SLEDGE: Thank you,
 4 sir.

5 THE WITNESS: Thank you.

6 (The witness was excused.)

7 JUDGE ROBERTS: Mr. DeSanctis,
 8 have you rethought your desire to make a
 9 statement?

10 MR. DeSANCTIS: I think everything
 11 is sufficiently covered, thank you, your
 12 Honor.

13 MR. JOSEPH: Your Honor, Mr. Kirby
 14 will call our next witness.

15 MR. KIRBY: Your Honor, I would
 16 call Mr. Steven Blatter.
 17 Whereupon,

18 STEVEN BLATTER
 19 was called as a witness and, having been first
 20 duly sworn, was examined and testified as
 21 follows:

22 CHIEF JUDGE SLEDGE: Thank you,

1 career as a programmer in terrestrial radio.

2 Q Okay, did you specialize in any
 3 particular format?

4 A Unlike most radio programmers that
 5 I've come in contact in my 20 years, I
 6 actually -- who typically specialize in one
 7 format, I've actually had the opportunity to
 8 program in a number of formats particularly
 9 country music and rock music.

10 Q When did you join Sirius?

11 A I joined Sirius just about four
 12 years ago.

13 Q Okay. And what are your
 14 responsibilities as the Senior Vice President
 15 of Music Programming?

16 A I'm responsible for the music and
 17 non-music content, including approximately 150
 18 on air host plus all the interstitial pre-
 19 produced elements you might hear in between
 20 the songs as well as the overall packaging
 21 each of our 64 commercial-free music channels.

22 Q You mentioned you have 150 music

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Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 CLOSED SESSION
 In the matter of: °
 Adjustment of Rates and Terms ° Docket No.
 for Preexisting Subscriptions ° 2006-1
 Services, ° CRB DSTRA
 and °
 Satellite Digital Audio Radio °
 Services °
 Room LM-408
 Library of Congress
 First and Independence
 Avenue, S.E.
 Washington, D.C. 20540
 Monday,
 June 11, 2007

The above-entitled matter came on
 for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES: (cont'd)
 On Behalf of Music Choice:
 PAUL M. FAKLER, ESQ.
 of: Moses & Singer LLP
 406 Lexington Avenue
 New York, New York 10174-1299
 (212) 554-7800
 pfakler@mosessinger.com

APPEARANCES:

On Behalf of SoundExchange:
 DAVID A. HANDZO, ESQ.
 MICHAEL B. DeSANCTIS, ESQ.
 JARED O. FREEDMAN, ESQ.
 THOMAS J. PERRELLI, ESQ.
 MARK D. SCHNEIDER, ESQ.
 of: Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 (202) 639-6060
 dhandzo@jenner.com
 On Behalf of XM Satellite Radio Inc.:
 BRUCE RICH, ESQ.
 JONATHAN BLOOM, ESQ.
 TODD LARSON, ESQ.
 BRUCE S. MEYER, ESQ.
 of: Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 (212) 310-8238
 On Behalf of Sirius Satellite Radio
 Inc.:
 BRUCE G. JOSEPH, ESQ
 KARYN K. ABLIN, ESQ.
 MATT J. ASTLE, ESQ.
 JENNIFER L. ELGIN, ESQ.
 THOMAS W. KIRBY, ESQ.
 MICHAEL L. STURM, ESQ.
 of: Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 (202) 719-7528
 b joseph@wileyrein.com

I-N-D-E-X
 WITNESS DIRECT CROSS REDIRECT RECROSS
 Steve Cohen
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1 P-R-O-C-E-E-D-I-N-G-S
 2 9:39 a.m.
 3 Ms. ELGIN: Your Honor, I also
 4 have an objection to foundation. Mr. Cohen is
 5 a programming expert and his direct testimony
 6 was limited to the programming rights that
 7 Sirius has with the NFL. It has not extended
 8 to any of the fee amounts that are paid.
 9 CHIEF JUDGE SLEDGE: Mr.
 10 DeSanctis.
 11 MR. DeSANCTIS: He's identified
 12 the exhibit and professed familiarity with it
 13 and it's now in evidence.
 14 CHIEF JUDGE SLEDGE: The objection
 15 is sustained with that response.
 16 MR. DeSANCTIS: No further
 17 questions.
 18 CHIEF JUDGE SLEDGE: Any redirect?
 19 MR. DeSANCTIS: I'm sorry, I had
 20 no more questions on that exhibit and
 21 therefore, the restricted period, as far as
 22 I'm concerned is over.

1 CROSS EXAMINATION (Continued)
 2 BY MR. DeSANCTIS:
 3 Q The second column of numbers is
 4 answers for second quarter -- the second
 5 column of numbers from the left is the answers
 6 for the second quarter of 2006, correct?
 7 A They are, sir, yes.
 8 Q And when asked please tell me all
 9 the reasons you were interested in satellite
 10 radio, this exhibit shows, does it not, that
 11 four percent said they gave NFL or football
 12 coverage as a reason?
 13 A Sir, this --
 14 Q The question is, is that what this
 15 shows?
 16 A It shows for second quarter of `06
 17 that was the reason and I believe one of the
 18 reasons for that is because that was pretty
 19 much the dead period in the National Football
 20 League which is a reason why I don't think
 21 these numbers are accurate, or accurately
 22 reflect out subscriber base and their feelings

1 JUDGE ROBERTS: Before we leave
 2 that, Mr. Cohen, do you know why there is such
 3 an increase over the term of the contract?
 4 THE WITNESS: Your Honor, I
 5 wouldn't know why. I did not negotiate it.
 6 I'm just familiar really with the program
 7 aspects of the contract.
 8 JUDGE ROBERTS: Thank you.
 9 (End of Closed Session at 9:40
 10 a.m.)
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1 towards our product.
 2 Q Let's look to the column
 3 immediately to the left of that. That's
 4 fourth quarter `05, correct?
 5 A That is correct.
 6 Q Constituting the majority of the
 7 regular season of football, correct?
 8 A That is correct.
 9 Q And in that period, five percent
 10 of respondents cited the NFL and football
 11 coverage as a reason for being interested in
 12 satellite radio, correct?
 13 A According to this document, yes,
 14 sir.
 15 Q And again, this is about interest
 16 in satellite radio, not listenership, correct,
 17 not number of hours people listened?
 18 A Well, these are the Csat, so these
 19 are customer satisfaction, yeah.
 20 Q Right, I just trying to clarify.
 21 This is not measuring the number of hours that
 22 people listened in the second quarter of `06,

1 correct?

2 A I believe that is to be correct.

3 Q Okay. Let me direct your

4 attention four lines further down. Line 13 is

5 sports programming, do you see that?

6 A I do.

7 Q And for that the number of

8 respondents that cited sports programming as

9 the reason they were interested in satellite

10 radio in the second quarter of 2006 is five

11 percent; is that correct?

12 A According to this document, it is

13 correct.

14 Q Okay. And you testified earlier

15 that this document shows the top mentions

16 given by the subscribers who were surveyed,

17 correct?

18 A The Csat study, can you please

19 rephrase the question or --

20 Q I'll rephrase it. You testified

21 earlier when you were looking at the

22 instructions on the bottom of the page that

1 A That is correct.

2 Q And you have no data like this

3 showing the interest or the draw related to

4 NASCAR programming, do you?

5 A We haven't done a study in '07 yet

6 that would give us those types of numbers.

7 Q And you have no other studies

8 showing that kind of data about NASCAR,

9 correct?

10 A We have -- I mean, in terms of

11 research and things that we've recently done,

12 for instance, as I testified to on Thursday,

13 last -- two weeks ago, we had more phone calls

14 to our NASCAR channel than any other channel

15 at Sirius. I think that's reflective of the

16 popularity of NASCAR on Sirius.

17 Q Just to be clear, you have no

18 further survey data other than this survey,

19 correct?

20 A In terms of Csats for '06, this is

21 all I'm aware of and nothing more recent than

22 this in terms of Csats that I would be aware

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1 what's shown here are the top reasons

2 mentioned by subscribers when asked what

3 interested them in satellite radio, correct?

4 Isn't that what's indicated at the bottom of

5 the page, Mr. Cohen?

6 A Yes, it is, sir, yes, it is.

7 Q Okay. And the MBA is not on this

8 list of top mentions, is it?

9 A I do not see the MBA on this page.

10 Q And the NHL is not listed on this

11 as a top reason given by Sirius subscribers?

12 A Of course, I don't see NHL or NBA

13 or horse racing or anything else but I could

14 assume that that could have been part of the

15 overall sports sub-net or sports programming.

16 Q But it's not separately listed as

17 a top mention, correct?

18 A That is correct.

19 Q And NASCAR is not listed, correct?

20 A That is correct, we did not air

21 NASCAR programming when this study was taken.

22 Q Right, that began in January 2007.

1 of, sir.

2 Q Let me direct your attention,

3 next, Mr. Cohen, to page 30 of the same

4 exhibits, SoundExchange Exhibit 35.

5 A Uh-huh.

6 Q Here the question that's recited

7 down at the bottom of that page is, "What do

8 you like most about Sirius Satellite Radio?

9 If you were to recommend Sirius, what would

10 you say", do you see that?

11 A I do.

12 Q And again, the top mentions are

13 shown here.

14 A Yes, sir.

15 Q Let me direct your attention about

16 12 lines down. In the chart one of the

17 responses is, "Offers NFL games". Do you see

18 that, Mr. Cohen?

19 A I do.

20 Q And in the second quarter 2006,

21 four percent of respondents cited offering NFL

22 games as what they like most about Sirius

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1 Satellite Radio.
 2 A I do see that and I would again
 3 point out that there were no football games on
 4 the air at the time of this survey, so to ask
 5 that question at that time, it's probably not
 6 something that's fresh in their minds.
 7 Q But this doesn't ask what they
 8 listened to in the second quarter '06, right?
 9 It just happens to be asking in the second
 10 quarter '06, "What do you like best about
 11 Sirius Satellite Radio", correct?
 12 A Yes, sir, but again, I'd say if
 13 you ask somebody what they like best, they'd
 14 refer to what they listened to most recently.
 15 Q Okay. Do you have any -- you
 16 don't have any data for that, do you?
 17 A Well, I don't have data but I've
 18 been in this business for over 20 years and
 19 most of the research that I do is -- has
 20 nothing to do with numbers, it has to do with
 21 speaking to people and asking what they like
 22 and what they don't like. And I use that to

1 NASCAR.com and TrakPass, do you recall that
 2 question?
 3 A I do, I do.
 4 Q And you mentioned that TrakPass is
 5 different from what Sirius does.
 6 A It is.
 7 Q Can you please explain how
 8 TrakPass is different from what Sirius does?
 9 A Yes. Trakpass -- you can get
 10 driver feeds on Trakpass but the problem with
 11 listening to driver feeds on Trakpass is 80
 12 percent of the time there's nothing on the air
 13 because drivers and crew people don't
 14 communicate as often as the listener would
 15 like. The reason it's so different from what
 16 we do is we put our driver feeds and pick
 17 communication. We layer it over the race
 18 call, so you're not missing any action. So if
 19 you were listening to Jeff Gordon's channel on
 20 TrakPass, you wouldn't hear any of the race.
 21 You'd just hear Jeff communicate to his crew
 22 and vice versa.

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1 help influence some of my decisions and to
 2 learn from our listeners in terms of what they
 3 would like and would not like about the
 4 channel that I'm programming.
 5 Q Let me direct your attention about
 6 10 more lines down. There's an entry for
 7 "Good/Like Sports", do you see that?
 8 A Yes, sir, I do.
 9 Q And again, in the second quarter
 10 2006, three percent of respondents gave that
 11 response. Is that correct?
 12 A I see that, yes, sir.
 13 MR. DeSANCTIS: No further
 14 questions, your Honor.
 15 CHIEF JUDGE SLEDGE: Any redirect,
 16 Ms. Elgin?
 17 MS. ELGIN: Yes, your Honor. Good
 18 morning, Mr. Cohen.
 19 THE WITNESS: Good morning.
 20 REDIRECT EXAMINATION
 21 BY MS. ELGIN:
 22 Q Mr. DeSanctis asked you about

1 If you listen to Jeff Gordon's
 2 channel on Sirius, you would hear that same
 3 communication, only you would also hear the
 4 race broadcast. You'd know exactly where he
 5 was on the track and where we were in terms of
 6 the race. So from that standpoint, it's very
 7 different.
 8 Q Mr. Cohen, Mr. DeSanctis also
 9 asked you a number of questions about this
 10 second quarter '06 customer satisfaction
 11 monitor. Do you have that in front of you?
 12 A I do.
 13 Q Can you turn, first, to page 17 of
 14 that document?
 15 A Yes.
 16 Q And he asked you a number of
 17 questions about the numbers on this page and
 18 how they related to sports programming
 19 relating to initial purchase intent; do you
 20 recall that?
 21 A I do.
 22 Q You first you discussed why do you

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1 think that this is not relevant information as
2 far as the most recent customer satisfaction
3 survey goes?

4 A Well, as I stated before, in the
5 second quarter of '06 when this was taken, we
6 were basically in our dead period for sports,
7 not just NFL. The NBA and NHL finals had
8 pretty much just finished and we really don't
9 have very much play-by-play at that time other
10 than the arena football league and some other
11 sports that are not one of the several
12 professional major sports. So with no NFL
13 there and we, of course, don't have major
14 league baseball, I thought it was a very poor
15 time to take a survey in terms of what people
16 felt about our sports programming.

17 Q And if you turn to page --

18 CHIEF JUDGE SLEDGE: I'm curious
19 about that answer. Had the NBA finals changed
20 in time?

21 THE WITNESS: They usually wrap up
22 second, third week of June, the NBA finals.

1 during that period?

2 A The NBA, I'm not sure. The NBA
3 finals and NHL finals might have both finished
4 by June 21st. I'd have to revert back. This
5 year the NHL finals have finished and we've --
6 you know, we're not at the June 21st date yet.
7 And the NBA finals, Game 2 was last night and
8 I believe they're scheduled to finish June
9 21st of this year --

10 Q Now going back --

11 A -- if they go seven games, I'm
12 sorry.

13 Q Going back to page 17, Mr.
14 DeSanctis was asking you some questions about
15 this last column where it says, "May '04 or
16 earlier". Do you see that?

17 A Yes.

18 Q Which subscribers would that
19 include?

20 A Just repeat the question.

21 Q Sure the May '04 or earlier column

22 --

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1 CHIEF JUDGE SLEDGE: Isn't that in
2 the second quarter?

3 THE WITNESS: Yeah, they wrap up
4 about the second, third week, so this study,
5 I believe was done June into July.

6 CHIEF JUDGE SLEDGE: So this study
7 was done while the NBA finals were going on.

8 THE WITNESS: Your Honor, it
9 probably began when the NBA finals were going
10 on, but it's my opinion that the average NBA
11 fan once they're team is out of it, they don't
12 pay as much attention to the NBA finals as --
13 and the same with the NHL and I also believe
14 that, you know, television ratings support
15 that unfortunately.

16 BY MS. ELGIN:

17 Q Mr. Cohen, I direct your attention
18 to page 4 of this document. And at the bottom
19 of the second box, it gives the dates of the
20 survey. What dates were the survey conducted?

21 A June 21st through July 6th.

22 Q And what sports were going on

1 A Yes.

2 Q -- which subscribers would that
3 include?

4 MR. DeSANCTIS: Objection, there
5 were no questions asked about that column,
6 your Honors, only the first two columns.

7 CHIEF JUDGE SLEDGE: Ms. Elgin?

8 MS. ELGIN: Yeah, Mr. DeSanctis
9 was asking questions about Mr. Cohen's
10 testimony regarding the '04 statistics, so
11 this is relevant to his cross examination.

12 CHIEF JUDGE SLEDGE: What is your
13 question?

14 MS. ELGIN: I wanted to ask which
15 subscribers were included in the May '04 or
16 earlier.

17 CHIEF JUDGE SLEDGE: Overruled.

18 THE WITNESS: Could you repeat the
19 question, which subscribers were included in
20 the May '04 or earlier --

21 BY MS. ELGIN:

22 Q -- Column, yes.

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1 A I would say this -- subscribers
2 that had already signed up for Sirius at that
3 time, obviously not subscribers from '05 and
4 '06.

5 Q Would that include subscribers
6 prior to the NFL deal?

7 A That is correct. Our first
8 preseason game aired in August, so the NFL
9 deal was executed in December and, of course,
10 we didn't start airing games. We launched our
11 channel, the NFL channel, in games August of
12 '04.

13 Q Turning to page 30 of this
14 document, this is the "Most appealing aspect
15 of Sirius" page.

16 A Yes.

17 Q Looking at the bottom of this
18 page, it says "top mentions channel", do you
19 see that?

20 A "Top mentions channel".

21 Q At the very bottom of that page.

22 A Yes.

1 they subscribe to Sirius?

2 A The statistics --

3 CHIEF JUDGE SLEDGE: I'm sorry,
4 Ms. Elgin, from his answer, he indicates he
5 doesn't know how to answer that question. He
6 said he doesn't pay attention to those things.

7 MS. ELGIN: Fair enough, your
8 Honor. No further questions.

9 (End of Closed Session at 10:03
10 a.m.)

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1 Q So how do you understand these
2 numbers to relate to customers' interest in
3 Sirius?

4 A You know, to be honest with you, I
5 don't spend an awful lot of time on these
6 numbers, okay. The research that I care about
7 is the research that I get from our listeners
8 directly and through people that -- you know,
9 I travel around the country, whether it's
10 NASCAR tracks, football stadiums, talking to
11 fans, doing -- we were just down at Sand Bass
12 Gallery in Charlotte speaking to tons of fans
13 who subscribe to our service. So I don't
14 really get caught up in terms of numbers and
15 what -- you know, I feel people feel that our
16 sports products, our channels and how we're
17 programming things. So I just wanted to make
18 that clear, instead of, you know, being bogged
19 down by numbers.

20 Q As to my question, would the
21 statistics on this page show everybody who
22 mentioned sports as one of the reasons that

1 BY MR. STURM:

2 Q Ms. Heye, page 11 of Exhibit 20
3 refers to subscriber demographics, correct?

4 A Yes.

5 Q And is the current split between
6 males and females in the Sirius subscriber
7 database set out on this page of the exhibit?

8 A Yes.

9 Q Okay. And where is that?

10 A This is in the upper left box with
11 second quarter '06 showing 81 percent male, 19
12 percent female.

13 Q And is that generally consistent
14 with the other research that was conducted in
15 this time period for Sirius?

16 A Yes, it is -- was.

17 Q Next, to page 15, please.

18 JUDGE WISNIEWSKI: Can I stop you
19 right there? If this was sampling without
20 replacement, then is 50 percent actually an
21 accurate picture of what the demographics were
22 at that point in time?

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**RESTRICTED VERSION: CONTAINS PROTECTED MATERIALS SUBJECT TO
PROTECTIVE ORDER IN DOCKET NO. 2006-1 CRB DSTRA**

**Before the
LIBRARY OF CONGRESS
Copyright Royalty Board**

In the Matter of)
)
Digital Performance Right in Sound) Docket No. 2006-1 CRB DSTRA
Recordings and Ephemeral Recordings)
for a New Subscription Service)

**DIRECT TESTIMONY OF ERIC LOGAN
(ON BEHALF OF XM SATELLITE RADIO INC.)**

1. My name is Eric Logan. I am currently employed by XM Satellite Radio Inc. (“XM”) as Executive Vice President of Programming, a position I have held since August 2004. In this capacity, I am responsible for programming and strategy for all of the more than 170 channels on the XM radio service.

2. My testimony primarily will discuss XM’s program offerings, and explain how and why XM programs its channels to provide a diverse, unique and compelling program service that will convince consumers to become and remain XM subscribers. To summarize several of my key points:

-- The fundamental value proposition of XM is built on (1) aggregating onto a single platform a diverse variety of programming that will appeal to almost every interest; (2) exclusive programming such as sports and talk; (3) brand-name news and talk programming; (4) XM’s unique approach to music programming; and (5) XM’s decision to forego advertising revenue on its music channels.

-- Presenting a diverse line-up of programming to potential and current XM subscribers, including news, sports, talk, comedy, and commercial-free music channels, promotes subscriber acquisition and retention, and grows subscriber satisfaction.

-- The non-music channels on XM include exclusive content such as Major League Baseball, Oprah & Friends, National Hockey League (which will be exclusive to XM starting next season) and NCAA college football and basketball from select conferences. These channels also include high-brand recognition content like Fox News, ESPN and CNN, and also play a major role in promoting subscriber acquisition.

-- XM doesn't just "play music" on its music channels. XM creates its music channels with a special character and personality created by expert music programmers and on-air talent. XM also produces exclusive music programming that adds value for XM subscribers, the performers and recording labels.

-- XM's approach to music programming in turn creates powerful promotional value to musical artists and recording labels. Both established and up-and-coming musicians get valuable exposure from the different avenues in which XM presents their music. This power of XM to promote sales has been acknowledged by the artists and recording labels themselves.

Radio Industry Experience Prior to Joining XM

3. I have twenty years of experience working at radio stations and radio station groups, starting in entry level jobs, to turning around a station in the third largest media market in the United States, to working as a senior executive for major AM/FM radio conglomerates. I have held jobs in almost every area in the radio business – sales, tech, on-air, programming and management.

4. I started my radio career in the late 1980's at country stations in Oklahoma City. Starting in 1994, I went on to hold programming positions in Seattle and in San Francisco. In Seattle in July 1994, I relaunched the station formerly known as KXRX-FM with a new, "Young Country" music format, and changed its call letters to KYCW-FM. The station quickly overtook the second-rated competitor. As program director of KYCY-FM in San Francisco in 1995, I diversified the station beyond its country format. Additions to the programming included broadcasts of Oakland Raiders football games. The station's ratings and popularity jumped to overtake our closest competitor in the country format, and ultimately to force that competitor to change its format.

5. The positions in Seattle and San Francisco led to a job based in Tampa, Florida, where I programmed a cluster of CBS-owned stations in 1997-98. In Tampa, I also renegotiated our deal to broadcast NFL football games. This in turn led to my first corporate position, where I had the responsibility of overseeing country music programming on CBS stations across the country, including stations in Houston, Chicago and Kansas City. In 2002, I became Manager of Operations at WUSN-FM, known as "U.S. 99," in Chicago. Responding to the changes to our society brought about by 9/11, I relaunched WUSN-FM as "America's Country Station," combining new country music with other popular music that connected listeners with a new, stronger sense of pride and patriotism. These changes brought WUSN literally from "worst to first" in the Chicago market broadcast ratings in record time.

6. The last several stations I programmed were owned by Infinity/CBS Broadcasting Corporation, one of the largest owners and operators of radio stations in the United States. In 2003, Infinity/CBS promoted me to Vice President of Programming and moved me to New York, where my duties included responsibility for the day to day operations of all of Infinity's

RESTRICTED - Subject to Protective Order in Docket No. 2006-1 CRB DSTRA

New York City stations. I then went to Citadel Broadcasting for a year, where as President of Programming I was responsible for more than 150 radio stations in over 40 markets.

7. In July 2004, when I was approached to join XM Satellite Radio, I had already been immersed in programming of commercial radio stations for a decade.

8. Beginning November 7, 2006, I will be returning as a member of the Board of Directors of the Country Music Association.

Programming Role and Staff at XM

9. In my capacity as XM's Executive Vice President of Programming, I am responsible for every piece of audio (and accompanying data) broadcast on XM. In the broadest sense, I am responsible for the strategic creative management of XM's bandwidth. Bandwidth -- the finite portion of the broadcast spectrum allocated to XM under its FCC license -- is XM's principal commodity. Not all channels use bandwidth equally. Talk channels can be broadcast using less bandwidth, such that, generally speaking, [two talk channels can fit in the bandwidth of one music channel.] Even among the music channels, certain types of music are more sonically demanding than others and so require greater bandwidth. I decide how much of the bandwidth is allocated to certain types of programming, and how to re-allocate bandwidth to maximize the XM subscriber's listening experience and create a service they will be willing to pay for. When XM first launched with 100 channels, there were 29 news/talk/sports channels, compared to 52 now (including comedy and kids programming). There were 65 channels dedicated to music and programmed by XM, compared to 69 now.

10. My programming staff includes five Senior Vice Presidents and Vice Presidents, for news/sports/talk, original programming and content, program operations, and music. XM's Chief Creative Officer is Lee Abrams, who for decades has been well known as one of

America's leading FM radio consultants. Department and program directors work under each of the Senior Vice Presidents. Each music channel has a program director. There are [288] people employed in the programming division of XM, [135] of whom are dedicated to music programming.

11. XM's nationwide service affects both our content strategies and, we believe, our listenership. During certain parts of the day, subscribers predominantly listen to XM in the car. For that reason, XM has an extended "drive time" programming focus from 6 a.m. to 12 p.m. Eastern, and from 3 p.m. to 9 p.m. According to Arbitron ratings, XM achieves a Time Spent Listening share that tracks from five to nine hours higher per week than AM/FM radio.

XM's Extensive Channel Selection

12. Because of our more than 170-channel platform, XM is able to provide content with mass-market appeal as well as niche programming that will appeal to a smaller, but potentially more dedicated, fan base. Our ability to acquire, deliver and program content on XM is limited by bandwidth and budget. Therefore, my job is essentially a balancing act to find the most effective way to deploy these resources across our channel line-up, and to build an offering that will promote the acquisition and retention of subscribers. Exhibit 1 shows XM's current channel line-up.

13. The left side of the guide highlights our commercial-free music channels, grouped by genre. Our formats feature a spectrum of musical genres as well as mass appeal formats that have been abandoned by terrestrial radio. As shown on Exhibit 1, XM's music channels are grouped under broad genres - - "Decades," Country, Pop & Hits, Christian, Rock, Hip-Hop & Urban, Jazz & Blues, Lifestyle, Dance, Latin, World, and Classical. Each genre features programs or even entire channels that are dedicated to mainstream and/or hit-based music, but

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even these most popular genres have “niche” channels, and play music and performing artists that rarely find their way to the terrestrial airwaves at all. By design, XM uses its broadcast capacity to play everything from the top hits to, for example, Celtic and American Indian music programs.

14. Our “Decades” format devotes a channel to each decade from the music of the big band era in the ‘40s to pop hits of the ‘90s. The “Decades” channels for the 1940’s (Channel 4), 1950’s (Channel 5) and 1960’s (Channel 6) almost exclusively play pre-1972 sound recordings. Our seven “Country” channels include a mix of classic country, country superstars, folk, bluegrass and traditional country. Willie Nelson makes his radio home on “Willie’s Place” [our single most popular music channel –] where our on-air personalities hang out in a make-believe country honky tonk saloon and play classic country songs that receive virtually no airplay on terrestrial radio. Willie’s Place also plays mostly sound recordings made before 1972. Other channels that prominently or predominantly feature pre-1972 recordings are Soul Street, Frank’s Place, Top Tracks, Bluegrass Junction, The Village, Real Jazz, and Deep Tracks.

15. Our “Pop & Hits” category has a channel selection expansive enough to include traditional top 40, along with soundtracks, show tunes, and international hits. The XM Christian music channels likewise encompass styles from pop to Southern gospel, and play a deep catalog of well-known and lesser-known songs. Fourteen rock channels give our program directors the space and freedom to play any and every rock artist from the last 50 years, and go far beyond the best-known cuts that receive airplay on commercial FM stations.

16. XM’s “Hip-Hop & Urban” channels provide a home to brand new music, old school, and a channel of classics hosted by Snoop Dogg. Likewise, our jazz and blues channels play modern, contemporary and traditional jazz and blues, with a channel reserved for American

Standards, "Frank's Place," named for Frank Sinatra with approval and input from the Sinatra family. "Lifestyles" channels have eclectic and new age sounds. XM has five channels of dance music, four Latin music channels, and three channels of World music. XM's three classical music channels include "XM Classics," with traditional classical music, "Vox," which features opera and vocal music, and "XM Pops," offering classical favorites in XM surround sound.

17. Our "Biggest Names in News" category includes well-known and valuable television brands, such as CNN, Fox News, CNBC, and the BBC. Some of the most compelling programming is part of our sports programming, including national coverage of all major league baseball and NHL games. Our "Especially for Women" programming includes "Take Five" and the recently-launched "Oprah & Friends" talk and lifestyles channel. XM's "All-Star Talk and Entertainment" programming includes famous on-air personalities such as Opie and Anthony, [whose program rates number one on XM for time spent listening each week.] "Sonic Theater" is an XM exclusive channel that presents short stories, serialized readings from well-loved books, plays recorded live on stage, and radio drama. We now have four "Superstar Comedy" channels. We have two kids and family channels that are not part of our "commercial free" music offering, but nevertheless do include music. XM Kids targets kids under 10 and presents a morning show with running characters, sketches and contests as well as radio theater, kids' concerts, science shows and other content throughout the day. We also carry Radio Disney aimed at "tweens" with a mix of top 40 music and other entertainment. Instant traffic and weather and regional programming round out the guide.

The Balance of Content Offerings on XM

18. XM regularly reassesses its channel line-up to keep pace with changing consumer and subscriber tastes and trends. Because we have limited bandwidth, a decision to add new

programming channels will in many cases come at the expense of existing channels. For example, when we added the “Oprah & Friends” talk channel, featuring Oprah Winfrey, we were forced to discontinue carriage of one talk channel. These decisions are complex and, unlike commercial radio, they are not based purely on Arbitron ratings. Rather, these decisions are based on the strategic value of the channel to the overall content offering, measured by other factors such as the channel’s ability to attract new subscribers and retain existing subscribers. In some cases, I consider it important to retain a channel with a relatively low but highly devoted listenership.

19. Like any other entertainment medium, we make creative content decisions based on a combination of research, experience and gut instinct. In my experience, it can be difficult to rely solely on listener research when deciding whether to launch a channel. For example, we launched our first comedy channels at the suggestion of some of our programming staff. Comedy had never been done before nationwide in radio, and therefore there was little experience to determine subscriber demand. XM’s comedy channels have turned out to be among our most popular offerings. Another example is our Southern Gospel channel, “enLighten.” It was popular on our internet streaming service, but we did not have a sense as to whether that popularity would translate once we moved it to our satellite radio platform. We decided to try it on the satellite service, and it has emerged as our most popular Christian channel.

20. What we have learned at XM is that we will be more likely to succeed using a combination of diversity, experimentation, passion and expertise for a particular genre, than programming by numbers. The best way for XM has been to build channels with their own particular focus and personality.

How XM Manages its Content Strategy to Attract and Retain Subscribers

21. XM views its channels in terms of their strategic contribution to the acquisition and retention of subscribers. Different types of XM programming may play distinct roles in acquisition or retention. Attached as Exhibit 2 is a chart that illustrates XM's content strategy.

22. It is far more costly to convince consumers to initially subscribe to XM, compared to the cost of retaining them once they have become a subscriber. Consumers need to be shown the value proposition in paying for something that they have traditionally received for free. And of course, different subscribers will perceive different value from across the broad mix of content on the XM channels.

23. The initial challenge in converting consumers to subscribers is to explain, in a way they can grasp quickly, why XM is different from broadcast radio. We emphasize the diversity of programming on XM – the mix of entertainment and information available on XM's non-music and music channels. Potential subscribers should be able to look at the program guide, see a variety of content and channels that appeal to their personal interests, and appreciate that they are unlikely ever to feel that “there's nothing on for me,” as consumers have experienced with broadcast radio. Many people become subscribers because of particular content that they are passionate about and that they can't get except by subscribing to XM. A second factor that can readily be understood by potential subscribers is that XM has 69 music channels that are commercial-free. Many XM subscribers listen in their cars, and would rather not spend their commuting and travel time enduring dozens of commercials per hour on AM/FM broadcast radio.

24. To retain subscribers, XM promotes depth, diversity and long-term value in the totality of our programming. Once consumers become subscribers, most initially will listen

almost exclusively to four or five stations at any given time. To retain these new subscribers, part of my job is to get them to discover more value in XM than they originally anticipated when they chose the service -- both on the channels they already listen to, and on channels that they have not yet experienced.

XM Programming Focused on Subscriber Acquisition

25. A major driver of subscriber acquisition is programming that a consumer only can get nationwide or in the car by subscribing to XM. Such “exclusive” programming also can distinguish XM from competitors in satellite and internet radio, as well as terrestrial radio. Most of XM’s exclusive content deals are targeted to promote acquisitions of particular subscriber segments, so XM often pays premium pricing for such programming.

XM’s Exclusive Sports Programming

26. Sports play-by-play programming is a primary acquisition tool. Our sports programming is focused primarily on attracting displaced fans nationwide who are unable to follow games of their favorite team because they do not live in the team’s market or because the games are not carried even in the local market. MLB schedules over 160 regular season games played by each of its 30 teams. With over 2400 regular season games available on XM, we saw a huge opportunity to attract millions of existing major league baseball fans to XM. After we launched MLB on XM, some 20% of new subscribers that we polled at the time cited MLB as the reason they became subscribers.

27. We also broadcast live 400 National Hockey League (“NHL”) hockey games. We provide basketball and football coverage of four Division One college sports conferences -- the ACC, Top 10, Big 10 and Big East. We broadcast 132 NASCAR races, PGA Tour golf tournaments, Mexican League soccer matches, and select National Basketball Association

games. We recently carried 2006 World Cup soccer coverage and play-by-play. We have a broadcast and marketing partnership with the U.S. Open, which in addition to giving us exclusive rights to broadcast the tennis matches, also gives us significant presence at the well-attended event. Exhibit 3 is a chart showing XM's sports programming strategy.

XM's Talk, News and Information Programming

28. In addition to the sports programming, exclusive talk programming is important to XM's acquisition strategy. XM's line-up includes familiar personalities from the world of broadcast radio, including public radio host Bob Edwards, and the Opie and Anthony show. As one indicator of the importance of such programming and its value to the potential acquisition of new subscribers, XM now licenses programs we produce back to terrestrial radio stations. In April 2006, I led a team that negotiated a deal whereby we licensed a portion of XM's Opie and Anthony show back to the CBS radio network, to run in 23 of the largest markets in America – a first for the satellite radio industry. This serves as a marketing tool to expose listeners to satellite radio, since we use the terrestrial radio portion of the show to promote XM and cross-promote the part of Opie and Anthony's show that remains exclusive to XM (as well as other XM content).

29. Similarly, XM produces "Bob Edwards Weekend," which is distributed by Public Radio International to 37 terrestrial public radio broadcast stations around the country. It features two hours of excerpts from The Bob Edwards Show, which is produced by and heard daily on XM.

30. The Oprah & Friends channel, illustrated on Exhibit 4, debuted in late September, featuring original programming on news, health, fitness, home design, spirituality, and lifestyles from Oprah Winfrey's Harpo Productions. The channel is promoted extensively on Oprah

Winfrey's television program and website, which introduces and promotes XM to Oprah's millions of fans.

31. Another strategy that aids in subscriber acquisition is to broadcast content from well-known television and radio networks with high brand recognition. This programming is not exclusively available through XM, but the brand recognition, the nature and quality of the programming, and the diversity of the programming add to the consumer proposition of value they will get as an XM subscriber. Much of this content is a simulcast of television audio, and allows XM subscribers to listen to this programming in their car. Examples of this type of programming include our channels featuring CNN, Fox News, Air America, Bloomberg Radio, CNBC, BBC World Service, Radio Disney, ESPN and C-SPAN Radio. Notably, Fox News and CNN are available on satellite radio but not terrestrial radio, and Fox News in particular is by contract exclusive to the satellite radio platform. As a result, this content is particularly valuable to us as an acquisition tool. [As one indicator of the value of this programming, the single most listened-to channel on XM for more than three years running is Fox News.] Exhibit 5 depicts our Talk, News, and Entertainment strategy.

32. Our "Take Five" channel focusing on women's lifestyle issues combines some of the most popular television talk programming (Good Morning America Radio, Ellen DeGeneres, and Tyra Banks) with XM-exclusive programming such as interview shows led by women journalists and talk personalities. This aspect of our programming strategy appeals to a large segment of our potential listenership, women between 25-54 years of age. Exhibit 6 illustrates our women's content strategy.

33. Our XMPR public radio channel includes broadcasts of the News Hour with Jim Lehrer and shows produced by Public Radio International, American Public Media and local

public radio stations, as well as exclusive XM-produced programming like The Bob Edwards Show. Much of XMPR's programming is highly regarded and recognized in the industry. The NewsHour has earned more than 80 awards for outstanding reporting, including many of journalism's highest honors. Bob Edwards has won the DuPont-Columbia Award for radio journalism, the George Foster Peabody Award for excellence in broadcasting, and the Edward R. Murrow Award for outstanding contributions to public radio. On October 17, 2006, ASCAP announced they were awarding the Deems Taylor Radio Broadcast Award to The Bob Edwards Show on XM for excellence in music coverage.

34. XM also carries Instant Traffic & Weather on a 24 hour basis. Through Instant Traffic & Weather, XM broadcasts local road and weather conditions for 21 major metropolitan markets, each over its own dedicated channel (channels 210-230), as well as national emergency information on dedicated channel 247. Unlike commercial radio's 30-second updates, XM traffic and weather channels are broadcast nationally and give full reports on commuting and weather conditions.

XM's Commercial-Free Music Programming

35. Much of XM's programming is designed to appeal to fans, and music fans are part of our target subscriber base. Consumers dissatisfied with the homogeneity of commercial FM radio can really only appreciate the sound of XM when they experience it. XM's special programming is available exclusively from XM music channels, as I will discuss in great detail below, and we believe that the music programming style of many XM channels is truly unique. The expertise and creativity that XM brings to its music programming are essential to distinguish XM from other music listening experiences.

36. 69 of the music channels XM offers are commercial-free. At launch, XM aired commercials on more than half of its music channels, but decided it was desirable for subscriber acquisition to make all XM-programmed music channels commercial-free.

XM Programming for Subscriber Retention

37. XM also focuses substantial effort on creating and acquiring programming as part of its retention strategy, to minimize cancellation of subscriptions (called “churn”). Subscribers want to receive continuing value from their XM subscription, and so exposing them to different content is key to demonstrating the XM value proposition on an ongoing basis.

38. One key strategy is to expand and promote the diversity of programming content available on XM, and to use announcements on one channel to cross-promote programming on other channels they also may enjoy. For example, we can encourage those who subscribed to XM for major league baseball games to try the “ESPN” or “Homeplate” sports talk channels, but they also might enjoy a Bob Dylan’s Theme Time Radio Hour program with songs all about baseball, or Bob Edwards interviews with personalities from the world of sports. Several of our artist-led music shows can be heard at different days and times on different channels, which helps introduce subscribers to new kinds of music. Given the diversity of programming available on XM, many subscribers will hear talk shows on subjects they never knew existed, and may try other talk channels as a result. We will expose them on our music channels to new genres and artists they have never heard on broadcast radio. We call this “the Joy of Discovery” on XM.

39. Some content available on other media platforms, and that is not exclusive to XM, also promotes subscriber retention. As noted above, most of XM’s news, and many of our public affairs talk, channels have content that also is available on broadcast radio, television, and even

on Sirius, and therefore are not completely exclusive to XM. These channels have high brand value that serves our acquisition strategy, but they also promote retention. Subscribers know they don't have to leave XM and search the AM or FM radio dial – XM has it all. We also have us an opportunity to cross-promote the programming on different channels within these broadcasts, and the high listenership for many of these channels creates important revenue opportunities to sell advertising time.

40. Music listeners dissatisfied with terrestrial radio will appreciate XM for a variety of reasons. In addition to the commercial-free aspect of 69 XM music channels, listeners frustrated by the limited formats of broadcast radio will enjoy the diversity of genres of music programming on XM channels. Those tired of narrow playlists on hit-driven radio stations will find breadth and depth in XM's programming. True music fans will appreciate the different ways that XM showcases music and musicians – the “art” of programming on XM. Exhibit 7 is a chart that describes the strategy behind some of the key components of the XM-created music programming. I discuss how we program music in more detail below.

XM's Artist-Led Programming

41. Another key strategy for our music channels is to create special original programming that keeps the channels sounding fresh. XM's artist-led shows give performers free rein to play whatever music they want to play, to share and talk about what inspires them as artists and as fans, to talk about their favorite places to perform, or just tell stories about their experiences recording and touring.

42. Examples of popular artist-led shows are Bob Dylan's “Theme Time Radio Hour,” where each week he plays songs on a different theme; Tom Petty's “Buried Treasure,” where he digs up vintage rock and roll tracks; Wynton Marsalis's program, “In the Swing Seat,”

where he talks about the style of particular jazz artists; Snoop Dogg's "Welcome to da Chuuch," programmed from his home with music and guests from the world of hip-hop and rap; and, Quincy Jones's multi-series programs on jazz, rhythm and blues, and soul music. "SongStories with Graham Nash" spotlights Nash interviewing many of music's most talented and successful songwriters about the stories behind their most classic songs, their overall creative process and the art of songwriting itself. Artists of different generations and styles drop by to "takeover" a channel station, and have complete freedom to talk about whatever they want, play what they want, and enjoy programming from XM's extensive music library. Exhibit 8 describes some of XM's long form specialty programming. Exhibit 9 is a series of articles concerning Bob Dylan's critically-acclaimed "Theme Time Radio Hour" show.

XM's Concert Series and Special Music Events

43. XM produces programming featuring performances by mainstream and up-and-coming musical artists. We created a series called "Artist Confidential," which is an hour-long program that spotlights one major musical artist or group with interviews and at least 20 minutes of live performances, both audio and video recorded before a small audience in XM's Performance Theater in our studios in Washington, D.C. or occasionally in our New York "Jazz at Lincoln Center" studios. These performances cover every genre of music, including an offshoot program called "Classical Confidential" that airs on our classical music channels. We have done more than 50 Artist Confidential and more than ten Classical Confidential programs, with artists as diverse as Paul McCartney, Bonnie Raitt, Cecilia Bartoli, Leonard Slatkin, Clint Black, Herbie Hancock and Odetta. Exhibit 10 is a listing of all the Artist Confidential performances. Exhibit 11 is a page from the XM website describing our Artist Confidential programs. Excerpts from these interviews and individual recorded Artist Confidential

performances may be programmed later on both music and non-music channels. This gives us the opportunity to both cross-promote the Artist Confidential series and to provide our subscribers with exclusive content that they can hear only on XM.

44. XM Kids' "Rumpus Room" concert series is an exclusive in-studio kids' concert series featuring the best Children's recording artists. Like an Artist Confidential for the under 10 set, it has featured artist such as Laurie Berkner, Dan Zanes, They Might Be Giants, and The Baha Men.

45. Our "Then ... Again ... Live" series invites classic rock artists into the studio with us. They recreate in live performance today, track for track, some of their most famous recordings, and give their personal takes on some of their landmark works – such as how they were recorded, what the band was like at the time, and what they might do differently today. Exhibit 12 is the page from our website describing the Then ... Again ... Live programs. We have also created a series called "Artist to Artist" where a young performer interviews an established artist who inspired him or her (such as the up-and-coming country performer Dierks Bentley interviewing country legend George Jones). Exhibit 13 is a page from our website describing XM's Artist to Artist programming. From time to time, artists drop in on one of our channels and program their own radio show. Out of this concept comes our "Offstage" series, where XM visits different artists at their home or home studio and allows them to host and program a one hour show that mines their personal collection of music. Exhibit 14 is the page from our website describing the Offstage programs.

46. All of these programs are created by XM, and some can be expensive to produce.

[Each Artist Confidential program, for example, requires more than 100 man hours of production

and set-up work per program.] Nevertheless, these XM-created music shows create ongoing value for the existing subscriber base, and play an important role in subscriber retention.

47. XM also broadcasts special concert events. In total, XM has broadcast more than 5,000 concert performances (in addition to our “Artists Confidential” series). Our “Mainstage” series includes concerts from established artists, often carried live (though at times recorded) from large multi-artist festivals such as Bonnaroo, Rock in Rio, Live 8, and Farm Aid. Exhibit 15 is a page from the XM website listing Mainstage concerts we have presented. In addition, we often feature small-venue concert recordings from emerging artists, particularly in our “SRO” series, which exposes new talent to XM’s music audience. These venues include the B.B. King Blues Club in New York City. Exhibit 16 is a page from the XM website listing SRO series performances we have presented.

48. XM is also the official satellite radio partner of the Grammy Awards. Only twelve of the Grammy Award categories are televised, which gives XM 120 categories of music performances and awards to broadcast. At Grammy time, XM dedicates a channel to Grammy-related programming, allowing us to broadcast exclusive pre-show coverage of Grammy Week events and specials highlighting the nominees in various music genres. We cross-promote the Grammy Awards channel across many XM channels, and play Grammy-nominated and award music on a variety of the XM music channels in virtually every Grammy category.

Music Programming and its Role in Creating the XM Music Experience

49. In a broad sense, recorded music is a commodity that gains enhanced value through the context in which XM showcases it and in which our subscribers experience it. Without a guide, you are walking into a vast library with no idea of where to start or where to go next. XM’s programmers and on-air talent provide that context, like having a music expert

spinning discs in your living room. Channels are developed with a particular personality or point of view, reflecting the thinking of the programmers and our on-air talent.

The Process of Music Programming on XM

50. All of the more than 2.5 million songs in the XM music library are available to programmers on the XM computer system. Program directors determine the criteria important to creating the character of their respective channels. These include types of music and musical artists (such as era-based music for our “Decades” channels), rotation of songs and artists, the theme of the channel, and the particular themes and flows for each program segment.

51. Music programmers add, delete, and order songs into a playlist. The programmers can control the transitions between the songs, determining the duration and nature of the transition (fade out, fade out/fade in, and so forth). Slots are determined for talk by our on-air personalities and promotional announcements for programming on that channel or on other XM channels. On many of XM’s channels, our on-air personalities are free to share their knowledge and enthusiasm for the music and the artists, personal anecdotes about the music and the musicians, and useful information such as concert calendars and record release dates.

The Art of Music Programming on XM

52. When hiring music channel program directors, I look for people with a deep knowledge of the genre of the channel they will be programming. My philosophy is that the technical and managerial aspects of programming are something that can be taught, but the art of selecting music cannot, and that is why I look to hire true music experts. Classical music experts like Robert Aubry Davis and Martin Goldsmith, jazz aficionados like Maxx Myrick, blues expert Bill Wax, American standards expert Jonathan Schwartz, or disk jockeys like George Taylor Morris, Earle Bailey, Mike Marrone, and Eddie Kilroy – to name but a few of our many

broadcast legends, each with more than 30 years of professional radio and music experience -- offer our audience thoughtful and unparalleled perspectives on music in the way that it is programmed and the personal stories and information they can tell their audience.

53. XM's program directors are guided by their understanding of music, not by industry data or consultants. They are music people, not sales people. Many of our program directors drive our listeners' tastes in music. In addition to Bill Wax, Mike Marrone, Maxx Myrick, and Robert Aubry Davis, these tastemakers include Jessie Scott (X Country), Billy Zero (XMU), Tobi (XMU), Bill Evans (XM Café), Seth Neiman (Hear Music), Ben Smith (Fine Tuning), Erik Range (Ethel), Ward Cleaver (XMLM), Lou Brutus (Fungus), Lisa Ivery (The City), Leo G. (RAW), Skyy (BPM), and Trinity (Watercolors).

54. XM programs a number of hit-based music channels that give subscribers both the familiar popular formats they would hear on terrestrial radio, and much more. Our "hit-driven" channels are not mere juke-boxes that play the hits. We program these channels to engage our listeners. For example, these channels may feature disk jockey discussion and expertise, entertainment news and interview excerpts. As another example, the top tunes in the nation that play on our "20 on 20" channel are determined by listener email votes, phone calls, letters, text messages and website comments that allow our subscribers to request songs for specific channels. By actively engaging the audience in creating the Top 20, we believe we are creating greater subscriber loyalty to XM.

55. The real power of XM music programming is showcased on channels that we specifically program to be unique audio "destinations" for our listeners. Listeners strongly connect with how the content is presented on these channels, and develop a passion for XM programming. On channels such as Deep Tracks, The Loft, XMU, X Country, The Move, and

our comedy channels, our programmers play music and material subscribers may never have heard before, or haven't heard in years. Programmers are free to choose from the XM library, which contains more than 2.5 million sound recordings and is constantly growing as we add both new and old music to our collection. Program directors regularly showcase new music, and are knowledgeable and sophisticated enough to know the new releases in their particular genres. This expertise and experience creates tremendous value to the XM subscriber, and gives XM its character.

56. Taking just one of these "destination" channels as an example, Deep Tracks regularly features sets that connect the music in ways that appeal to subscribers' intellect and aesthetic sense over and above the appeal of the song itself. Songs often are connected by theme as well as by the style, tempo or key. Every week, Earle Bailey takes the listener on a "Head Trip" playing hours of songs built around a particular word or phrase or theme in the song titles. The "Undercover" program features versions of well-known songs covered by other artists. Our "Fresh Tracks" show features new music releases by long-established and well-loved artists, some of whom get little airplay on today's hit-driven broadcast radio. We have a weekly show intended for headphone listening, with tracks where record producers experimented with stereo effects. We run the Grateful Dead hour, featuring live performances from among hundreds of available recorded concerts. Author and music enthusiast Bill Fitzhugh every week sends us a hand-mixed vinyl show, where he shows how recording artists picked up the musical riffs and themes from other records. Deep Tracks features the weekly hour-long shows by Bob Dylan and Tom Petty, recordings from the King Biscuit Flower Hour, Artist Confidential interviews and concerts, Then...Again...Live shows, and more. Deep Tracks admittedly is one of XM's more

adventurous channels, but this one channel illustrates the breadth, depth, and intensity of XM programming efforts and our programming philosophy.

57. When subscribers tune in one of the XM “destination” channels like the Decades channels, or Deep Tracks or Bluesville or Real Jazz (and many others), they get much more than a passive entertainment experience. Subscribers enter the minds of music experts who entertain, inform, stimulate, and surprise, in a way that appeals to music lovers as well as music listeners. Many of these channels recreate a certain location or time in words and music. Engaging the listener to pay attention and think about the music is another key to what makes XM special to our subscribers. In these respects, it is the thought, effort, expertise and expense that XM brings to these channels that makes subscribers (including by the way recording artists themselves) love listening to music on XM.

58. Not all XM music channels employ live personalities. The overall feeling or emotion XM is trying to convey will help determine whether to have live announcers. For example, The Loft channel often has interviews and stories surrounding the music as much as the music itself. By contrast, “Flight 26,” “Big Tracks,” and other hits-based channels require fewer DJs. Alternative rock channels like “Fred” and “Lucy” each have a distinct character, which is conveyed through prerecorded drop-in announcements that express the personality of the channel or tell stories rather than talk about the music itself. The alternative rock channel that focuses on newer music, “Ethel,” features disk jockeys, artist interviews, live performances, and specials such as artists who “take over” programming the channel.

59. Within the framework of the music channel themes, XM also creates “mini-series” programs that showcase music and artists in creative ways. The 60’s channel features a weekly show called “Sonic Sound Salutes,” which recreates the heyday of Top 40 radio. During

this show, XM's The 60's channel is transformed into one of the classic 1960's radio stations from around the country, with a mix of songs of the era with recordings that include original station jingles and on-air personalities. Recently, XM recreated Chicago's WLS and Kansas City's WHB. Exhibit 17 is a recent article from The Washington Post about these classic Top 40 station recreations. The ambitious "IT" special spanned the various Decades channels. Starting in Mid-August 2006 on The 40's channel and progressing on each successive Decades channel, XM played sequentially every record that reached the top 40 for each year up to 2006. The songs appeared on the appropriate music channels for each decade, with promotional announcements appearing on neighboring channels before the jump to a new decade. Showcasing this panorama of popular music took nine weeks to complete.

60. Several XM channels focus prominently on exposing music by new artists. For example, "XMU," "Hear Music," "XM Café," "The Verge," and "Fine Tuning" each include in their format substantial amounts of new music by less established artists that fit well in the genre or philosophy of those channels. "The Village" has just added "Songs to Hang on Stars," a program that showcases new contemporary folk artists. Many other channels include new music by less established artists, who benefit from the exposure on XM. Many XM channels also play music by artists that otherwise receive little or no airplay on commercial radio. Exhibit 18 is a listing of XM channels known for their exposure of new artists.

61. These are the kinds of compelling musical experiences that XM creates, and that listeners cannot hear anywhere else but XM. It is this programming expertise and creativity that makes XM music important to our subscribers.

The Promotional Aspects and Appeal of XM

62. Since the mid-1990's working in programming for radio stations through my work at XM today, a significant aspect of my job has been working directly with recording labels, artist management and artists. XM's Chief Creative Officer Lee Abrams has been working with record labels, managers and recording artists since the 1960's. XM is an important promotional vehicle for performing artists and record labels. By our design, XM's music channels provide a national platform to expose recording artists to audiences that appreciate new and different music. Musicians and their labels gain tremendous benefits from this exposure on XM, whether it be a new song from a well-known artist or a lesser-known musician who our subscribers discover on XM.

63. The variety and depth of our programming highlights XM's promotional value to a wide variety of musical artists. Terrestrial radio no longer provides an outlet for certain musical genres in many media markets. Three of the largest radio markets - - New York, Los Angeles, and San Francisco - - do not have a country station. Other disappearing formats include classical music, dance stations, oldies and "modern rock." Exhibit 19 lists formats carried on XM that are missing in major media markets. By contrast, XM's nationwide coverage includes three classical channels, five dance music channels, seven country music channels, fourteen rock channels, and a number of channels, such as certain Decades channels, that play music that used to be heard on AM/FM radio. Our Decades channels are becoming increasingly popular as local radio stations drop formats playing music from the 1960s - 1980s.

64. XM's national reach enables XM to promote music that local radio formats have left behind. When records in these genres succeed in radio markets that do not support that music format, we believe, and we have been told this by record labels and artists, that some

credit for that success is due to airplay on XM. A recent success story: in Los Angeles, after the last local country station changed formats, XM stepped in to sponsor a country music concert. With XM's support, the concert sold out 11,000 tickets.

65. Initially, record labels treated XM as they would a small local radio broadcaster. XM had to purchase hundreds of thousands of CDs to launch its service in 2001. Labels began providing XM with promotional copies of sound recordings, and occasionally brought artists by for in-studio interviews and, helped us with promotions. Yet, many record labels did not fully understand the real power of XM as a national music promotional platform. That power is more than just mere numbers, although the numbers themselves are impressive. [Willie's Place, The 70's and The 80's channels each have millions of listeners.] Exhibit 20 shows ratings for the second quarter of 2006, and compares weekly listenership on a few of XM's top music channels to other popular national print media and major market radio stations.

66. Artists and their managers, however, immediately grasped XM as a preferred media outlet for musicians to promote their work. When they heard XM, they "got it". They also are impressed with the critical mass audience we have achieved. Artists appreciate the transparency that exposure on XM provides. They speak directly to current and potential fans in extended, natural and personal formats where they can portray themselves and their music the way *they* think is best. They are interviewed by seasoned broadcasters and music experts who know and appreciate the artists' work. There are no commercial breaks or heavy-handed promotion for the channel done at their expense. For example, when Janet Jackson was in Washington in August 2006, as part of a 3-city tour, she granted newspapers and other media outlets short interviews at her hotel. The only DC-area media outlet she visited in person was XM. She spent two hours visiting the urban music channels at XM, and granted an exclusive

interview to XM. Attached as Exhibit 21 is a compact disc with audio clips (and written transcription of these clips) from just a few of the many artists who have talked on-air about XM as a direct conduit from musicians to their fans, unlike the homogenized experience of today's commercial FM radio.

67. The promotional power of XM is evident from the number and nature of the artists and labels that want to work with us. Our Artist Confidential series has featured legendary artists like Paul McCartney, Robert Plant of Led Zeppelin and Brian Wilson of the Beach Boys, and newer stars like Coldplay, Pink and the Dixie Chicks. Our Classical Confidential series has presented interviews and performances with conductor/pianist Leonard Slatkin, young violinist Joshua Bell, singers Cecilia Bartoli and Andrea Bocelli, and flautist James Galway. The XM Then...Again...Live series has featured full album performances of classic rock artists like the Allman Brothers Band, Jethro Tull, Christopher Cross, and Cheap Trick. Virtually all of these artists came to XM for the freedom to discuss, perform and promote their music in the way they want to be portrayed, and received no monetary compensation from XM. In addition to these Artist Confidential shows, XM has conducted and played literally thousands of interviews with artists.

68. Artists want to be part of the XM experience. Most guest celebrity DJs program their shows for free or for a modest stipend to cover their expenses. Many of XM's artist-led shows were born at the suggestion of the artists themselves, because they appreciated XM's approach to programming music and wanted to become part of it. For example, Tom Petty proposed the idea of his Buried Treasure show to XM. Quincy Jones came to XM with his ideas for multi-part special music programs. Willie Nelson proposed to XM the idea of changing the "Hank's Place" country channel to "Willie's Place." Hip-hop artists Snoop Dogg, Ludacris,

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Trick Daddy, and Chamillionaire came to XM with the ideas for their own personal programming. Blues legend B.B. King loved the Bluesville channel so much that we awarded him the honorary post of the “Mayor of Bluesville,” complete with the key to the “city.” Singer/songwriter Graham Nash created his “SongStories” show because of his appreciation for XM as a platform for musicians. Country star [Marty Stuart] heard Willie’s Place on XM in his car, and became so moved by XM’s programming approach to showcasing music that he called us up and has begun working with us on the concept for a show of his own. Other musicians who host shows on XM include folk artists Christine Lavin and John McEuen, and country legend and Hall of Famer Bill Anderson.

69. Bob Dylan was interested in working with XM on “Theme Time Radio Hour” because he was an avid XM subscriber who appreciated that XM played music he hadn’t heard in decades anywhere else. On August 28, XM played Bob Dylan’s newest recording, “Modern Times,” in its entirety before it hit the stores. After it hit the stores, many retail outlets (including Sony’s online retail website, Sony Connect) packaged the CD with a bonus CD containing an episode of his XM radio show. “Modern Times” entered the charts at number one, and we have been told that XM contributed to that success.

70. Jazz trumpeter and scholar Wynton Marsalis didn’t know much about XM when we first approached him to do a show on our Real Jazz channel. But once he heard XM, he was excited at the opportunity to create his “In the Swing Seat” show and to have broadcasts of concerts from Jazz at Lincoln Center, where he serves as Music Director.

71. One of the announcers on our X Country (Cross-Country) channel is a younger musician named Jack Ingram. His work on XM has helped him build his recording career, and to attract concert audiences all across America.

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72. XM also creates long-form specials of three-to-eight hours' duration chronicling the history of a recording artist. Interviews, archival material and the complete range of their music is featured in these programs. This "Complete" series has, in the past, covered artists such as The Eagles, Chicago, Les Paul, Shania Twain, Toby Keith, Bobby Darin and the Rolling Stones. Artists are excited to work with XM on these programs for the exposure it provides to our listeners.

73. We regularly receive telephone calls and correspondence from artists, managers and labels thanking us for playing their music. Many labels, artists and managers tell us that airplay on XM has increased sales of their recorded music, attesting to the value of XM. As one example, in October 2004, country star George Strait was about to release a greatest hits CD. XM created a program that interviewed him about his recordings, played all of his previous hits and premiered his new single. The program aired in 2005, just before the CD came out. George Strait's Label Head of Promotion told us that he had his single biggest one day sales ever when the new CD was released. Exhibit 22 includes emails from labels, artists and managers describing the promotional impact of XM.

74. To create some special programs, XM receives a waiver from the recording labels. As I understand it, XM's license to perform sound recordings ordinarily limits how many songs from an individual artist or album may be played consecutively or during a certain period of time. Many labels willingly give us these waivers for particular artists. [Some labels, such as Rhino Records (which has rights to many classic rock and soul recordings from the 1960's and 1970's from the Warner, Elektra and Atlantic Records catalog), have given blanket waivers for all artists for a period of time. One label, Concord Records, has given XM a permanent waiver

for its artists.] These waivers make possible programs like “Liner Notes,” in which a musical artist walks listeners through a one of their new albums.

75. One of the simplest ways that XM helps promote sales of music and artist awareness is also one of the most important. Obviously, people can’t buy music or learn about new artists without knowing what it’s called and who’s singing and playing. The screen on every XM radio displays the name of the artist and the title of the song that the subscriber hears. This is information that XM has to enter into its database, and transmit separately to the receivers. Terrestrial radio stations rarely give this information to their listeners, but we consistently have made this additional information easily available to our subscribers.

76. XM also has helped to create and release CDs of old and new music. Concord Records has collaborated with XM to create CD compilations. The first of these, “Blistering Licks,” was released in June 2006, and features giants of jazz such as John Coltrane, Miles Davis, Wes Montgomery and Art Tatum. In the fall of 2006, Starbucks began selling the first of a series of music compilations on CD with some of the best XM Artist Confidential performances. XM has also commercially released a Watercolors smooth jazz CD, and plans to release a blues CD soon.

77. XM’s promotional power is especially important for new artists, who appreciate the airplay and support we give them. It has become increasingly difficult for many musicians to get airplay on terrestrial commercial and college radio stations. Billy Zero, program director of XMU, receives hundreds of packages every week from musical artists and groups at various stages in their careers. He listens to each one personally, and has the freedom to choose which ones to air. Because of his taste and dedication, XM has given substantial early play to bands who went on to broader commercial success, and our track record has given XM greater

credibility with record labels. We support new music from artists like The Cardigans, who were popular years ago, but recently have had less access to airplay. Unsigned bands who have gotten record deals within a year of exposure on XM include Morningwood (recently featured on David Letterman's show), Stellastarr, Antigone Rising and Grammy award-winning rapper Rhymefest. Jennifer Nettles of the band Sugarland is one of XM's country music success stories. Within a year of exposure on XM, she had a record deal. Her duet with Bon Jovi has gone to the top of the Billboard Hot Country Songs chart. XM also participated in Bon Jovi's "Have A Nice Gig" challenge, where unsigned bands nationwide submitted their best single to XM Satellite Radio for the chance to be Bon Jovi's opening act. The band selected to open for Bon Jovi at the Meadowlands soon after was signed by a record label.

78. Last year, XM instituted the "XM Nation Awards." XM listeners are invited to vote online in a number of categories concerning the music and sports programming they hear on XM. Exhibit 23 consists of email from listeners who told us their music purchasing habits were influenced by XM.

79. For several years, certain XM channels have reported their playlist information to trade press, such as Billboard Magazine. Recently, thirteen XM channels began reporting their airplay statistics to Radio and Records ("R&R"), a leading industry publication that compiles national airplay charts. The XM channels which report to Billboard and/or R&R are 20 on 20, Flight 26, The Blend, Ethel, Squizz, Highway 16, The City, The Heat, Suite 62, Watercolors, BPM, The Message, and XM Café. Because of the influence of XM on these charts, it is difficult for a song to hit Number One on those charts in the United States without support from XM. These industry publications recognize the promotional power of XM, and confirm XM's status as an important promotional vehicle for musicians and record labels. By influencing

which songs make the industry charts, XM also helps generate airplay for those songs on terrestrial radio stations, which further promotes sales of music downloads and CDs.

Differences between XM and Other Types of Radio Services

80. There are many key differences between programming on XM and commercial terrestrial radio. As discussed above, XM provides subscribers with a wide variety of high-quality content with high production values. XM has more channels than the number of radio stations in a typical geographic market. XM carries more news, sports and talk programming than the typical radio market. XM's music channels are programmed by experts in their field based on the qualities of the music rather than the Billboard charts, and DJ'd by on-air personalities with decades of broadcast experience. Most are commercial-free. XM carries traffic and weather information for 21 markets that is instantly available on every XM car radio, and includes extended reports rather than just a brief "headline." XM has an emergency alert channel that, because they are sent by satellite, can provide critical information to subscribers even when weather knocks out local broadcasting, as we did during the massive hurricane season of 2005. XM programs channels in music formats that are rarely available in most markets. Even local broadcast stations having the same music format as a particular XM channel generally do not play the same depth and breadth of music. XM features more special programming than broadcast radio. As AM/FM stations continue to remove DJs from their programming line-up, XM keeps informed on-air talent who share their music expertise with the audience. Whereas AM/FM radio stations rarely back-announce the songs they play, XM transmits data that identifies the artist and song title for tracks played on XM channels. Simply stated, we offer the variety of content that subscribers want, and much more of it.

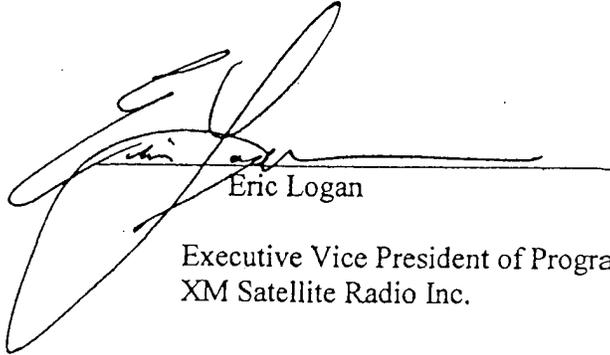
81. XM also differs from internet delivery of programming. My experience is that webcast services don't provide the same experience of a guided "musical journey" like XM does, and clearly they do not commit the people, technology resources, and budget that we do. For example, many of these services play songs, without logic or segue transitions between songs like a jukebox or an iPod Shuffle. The services also do not have a staff of experienced and knowledgeable on-air personalities, of the size and breadth of XM's, who can entertain, stimulate and inform the listener. These services do not feature the many types of special programming created by XM exclusively for our listeners. When they do provide special original programming to listeners, the content is generally offered on an interactive basis rather than as part of an overall program schedule or strategy. At present, internet webcasts also lack the mobility and portability of XM and therefore are not programmed to take into account automotive and portable device listening trends as we do.

82. While there are many other forms of audio entertainments available to consumers, XM provides a compelling offering that combines sports, talk and music content to create an "XM Experience" that consumers are willing to pay for on a monthly basis. On a daily basis, XM's dedicated programming staff uses its expertise to provide XM subscribers a service that provokes, surprises, educates, and informs them about music and the world.

Certification

I declare under penalty of perjury that the foregoing is true and correct.

Dated: Washington, DC
October 30, 2006



Eric Logan

Executive Vice President of Programming,
XM Satellite Radio Inc.

Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 In the matter of: °
 Adjustment of Rates and Terms*
 for Preexisting Subscriptions* Docket No.2006-1
 Services, °CRB DSTR A
 and °
 Satellite Digital Audio Radio*
 Services °
 VOLUME II

On Behalf of Music Choice:
 PAUL M. FAKLER, ESQ.
 Moses & Singer LLP
 406 Lexington Avenue
 New York, New York 10174-1299
 212/554-7800
 pflakler@mosessinger.com

Room LM-408
 Library of Congress
 First and Independence Avenue,
 S.E.
 Washington, D.C. 20540
 Monday,
 June 5, 2007

The above-entitled matter came on
 for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES:

On Behalf of SoundExchange:
 DAVID A. HANDZO, ESQ.
 MICHAEL B. DeSANCTIS, ESQ.
 JARED O. FREEDMAN, ESQ.
 THOMAS J. PERRELLI, ESQ.
 MARK D. SCHNEIDER, ESQ.
 Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 202/639-6060
 dhandzo@jenner.com
 On Behalf of XM Satellite Radio, Inc.:
 BRUCE RICH, ESQ.
 JONATHAN BLOOM, ESQ.
 TODD LARSON, ESQ.
 BENJAMIN MARKS, ESQ.
 BRUCE S. MEYER, ESQ.
 Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 212/310-8238
 On Behalf of Sirius Satellite Radio,
 Inc.:
 BRUCE G. JOSEPH, ESQ.
 KARYN K. ABLIN, ESQ.
 MATT J. ASTLE, ESQ.
 JENNIFER L. ELGIN, ESQ.
 THOMAS W. KIRBY, ESQ.
 MICHAEL L. STURM, ESQ.
 Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 202/719-7528
 bjoseph@wileyrein.com

I N D E X					
WITNESS	DIR	CRS	REDIR	RECRS	VOIR DIRE
GARY PARSONS	5	33	93	101	75
ERIC LOGAN	119	210	218	---	---
MARK VENDETTI	284	---	---	---	---
EXHIBIT	IDENTIFIED		RECEIVED		
SX 1	60		---		
SX 2	66		71		
SX 3	82		---		
SX 4	87		89		
SX 5	89		92		
SX 6	211		220		
SX 7	220		---		
SX 8	229		232		
SX 9	249		---		
SX 10	253		254		
SX 11	255		---		
SX 12	267		---		
SX 13	269		270		
SX 14	272		---		
SX 15	273		---		
SX 16	277		278		
XM 2	125		126		
XM 3	132		135		
XM 4	295		297		
XM 5	304		---		

1 you wanted to go back to?

2 MR. HANDZO: Your Honor, I just

3 had one last question on page six of Exhibit

4 1.

5 CHIEF JUDGE SLEDGE: What is the

6 question?

7 MR. HANDZO: The question was just

8 looking at the particular question that was

9 asked, which was recited at the bottom,

10 thinking back to the time that you initially

11 subscribed to XM Sirius Satellite Radio, what

12 was the main reason you chose this service?

13 And my question for Mr. Parsons

14 was whether he understood that to be a

15 question that asked people to decide to

16 explain why they chose XM versus Sirius as

17 opposed to asking why they subscribed to

18 satellite radio.

19 CHIEF JUDGE SLEDGE: All right.

20 We will not reopen for that question.

21 Thank you, sir.

22 THE WITNESS: Thank you, Your

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1 Honor.

2 MR. MEYER: Your Honor, with the

3 Court's permission, XM calls as its next

4 witness Eric Logan. I just need a moment to

5 fetch him.

6 CHIEF JUDGE SLEDGE: Okay.

7 MR. MEYER: I am Bruce Meyer from

8 the Law Firm of Weil Gotshal & Manges,

9 representing XM.

10 CHIEF JUDGE SLEDGE: Thank you.

11 (Witness sworn.)

12 MR. MEYER: If I may ask the

13 Panel's indulgence about one matter. I have

14 rather serious back problems. But usually

15 they only kick in when I'm standing for more

16 than five minutes or so. So if from time to

17 time while he is answering a question if I sit

18 like this, I hope that is okay.

19 CHIEF JUDGE SLEDGE: Please feel

20 free. Would it better if we bring a chair?

21 MR. MEYER: That's okay. No, I

22 prefer to do it this way if that is okay. But

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1 I didn't want the Panel to think I was showing

2 any disrespect or being overly casual.

3 CHIEF JUDGE SLEDGE: I hope we're

4 not that sensitive.

5 MR. MEYER: Thank you.

6 WHEREUPON,

7 ERIC LOGAN

8 was called as a witness by Counsel for XM

9 Satellite Radio I&C., having been first duly

10 sworn, assumed the witness stand, was examined

11 and testified as follows:

12 DIRECT EXAMINATION

13 BY MR. MEYER:

14 Q Please state your name for the

15 record.

16 A My name is Eric Logan.

17 Q And how are you currently

18 employed?

19 A I'm employed by XM Satellite Radio

20 as the Head of Programming.

21 Q What is your official title?

22 A Executive Vice President of

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1 Programming.

2 Q Okay. And in terms of your role

3 as Executive Vice President of Programming,

4 can you describe generally for us your

5 responsibilities?

6 A Sure. I oversee two distinct

7 parts of our business. I oversee the content

8 creation of our channels and oversee the

9 rights, if you will, of management of those

10 channels.

11 And I also oversee the bandwidth

12 management or the infrastructure that provides

13 our content given to our uplink. So I have

14 two distinct different roles as the Head of

15 Programming.

16 Q Now I'm going to touch briefly on

17 your employment history without going through

18 it in extreme detail. But I do have a

19 question I want to bring out the most

20 embarrassing aspect of it which is your first

21 job in radio. Can you describe that for us.

22 A Yes. My first job in radio was I

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1 was Chuck the Duck, a radio station mascot in
2 Oklahoma City.

3 Q And, in fact, you were so
4 effective in that role that you actually
5 received a promotion. Isn't that correct?

6 A That is correct. I was hired
7 subsequently by the station across the street
8 for a promotion to become Cody the Coyote.
9 Those were my first two jobs.

10 Q Okay.

11 CHIEF JUDGE SLEDGE: Mr. Logan,
12 for someone that features Howard Stern as a
13 primary program, I can't imagine how you would
14 be embarrassed by that history.

15 (Laughter.)

16 MR. MEYER: To be clear, of course
17 XM does not have Howard Stern.

18 CHIEF JUDGE SLEDGE: That's true.

19 MR. MEYER: But we do have Opie &
20 Anthony.

21 (Laughter.)

22 MR. MEYER: And I'm not sure any

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1 more which way that cuts.

2 BY MR. MEYER:

3 Q Okay now, Mr. Logan, with that
4 aside, can you just briefly tell us what your
5 experience was, particularly focusing on the
6 radio industry before you joined XM?

7 A Sure. As I stated, I started in
8 radio. I was an on-air personality for a few
9 years. But I quickly became a Program
10 Director for many radio stations across
11 America. I worked in markets such as Oklahoma
12 City, Seattle, San Francisco, Tampa, Chicago,
13 and New York City.

14 And upon moving from Chicago to
15 New York City, I became the Vice President of
16 Programming for Infinity Broadcasting at the
17 time, which rolled up into CBS Radio.

18 From there, I worked about a year
19 and a half, became the President of
20 Programming for Citadel Broadcasting where I
21 oversaw the day-to-day operations of about
22 160-plus radio stations across the country.

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1 And then about three years ago, I
2 got a call from Hugh Panero, our current CEO,
3 who asked me if I would like to come be the
4 Head of Programming for XM Satellite Radio.

5 Q And what part of the country do
6 you hail from?

7 A Oklahoma.

8 Q And you worked at radio stations
9 in Oklahoma?

10 A Yes, sir.

11 Q Now I'd just like to begin as we
12 did with Mr. Parsons, if I could have you look
13 at your direct written testimony in this case.
14 And the attachments thereto. Do you have
15 somebody assisting you with copies there? Do
16 you need a copy?

17 A Yes.

18 Q Now, Mr. Logan, what I placed
19 before you, is this a copy of your direct
20 written testimony in connection with this
21 proceeding?

22 A Yes, it is.

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1 Q Okay. And at the time did you
2 review all of this testimony and believe it to
3 be truthful?

4 A Yes, I did.

5 Q And then you signed it?

6 A Yes, I did.

7 Q Okay. And you also reviewed the
8 attachments to the direct testimony?

9 A Yes, I did.

10 Q Okay. I haven't actually put a
11 mark on it but we will do that.

12 MR. MEYER: I'd like to move it
13 into evidence. I believe it is XM Exhibit 2
14 with the Parson's Declaration and Exhibits
15 being Exhibit 1. But we will take back your
16 copies and mark them and give you back,
17 hopefully, the marked copies if that is okay.

18 CHIEF JUDGE SLEDGE: I'm not clear
19 on what you are proposing.

20 MR. MEYER: We don't have an
21 exhibit sticker on it. So I'm simply
22 proposing that at some point, if Your Honors

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1 wish, we will mark -- we will put stickers on
2 your copies so it is clear. Assuming it is
3 admitted. To say XM Exhibit 2.

4 CHIEF JUDGE SLEDGE: Exhibit 2?

5 MR. MEYER: Well, I know that Mr.
6 Rich with Mr. Parsons admitted Mr. Parson's
7 direct testimony and attachments as XM Exhibit
8 1. And, again, it may not have contained a
9 sticker marking it as such. So this, I
10 presume, would be Exhibit 2.

11 (Whereupon, the above-referred to
12 document was marked as XM Exhibit
13 No. 2 for identification.)

14 CHIEF JUDGE SLEDGE: Any objection
15 to the direct written statement of Eric Logan
16 being offered as XM Exhibit 2?

17 MR. HANDZO: No objection to the
18 admission of the testimony, Your Honor.

19 Just as a logistical matter, I
20 think what we did in the webcasting case was
21 we didn't -- the testimony got admitted but we
22 didn't actually mark it as an exhibit because

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1 we just have to kill more trees to put it in
2 exhibit binders. And the Court already has
3 that. So I was just going to propose that as
4 the way we proceed in this case as well.

5 CHIEF JUDGE SLEDGE: I have no
6 response to that.

7 MR. HANDZO: I guess we will work
8 it out among Counsel.

9 MR. MEYER: That is fine, Your
10 Honor.

11 CHIEF JUDGE SLEDGE: With no
12 objection, Exhibit 2 is admitted.

13 (Whereupon, the above-referred to
14 document was received into the
15 record as XM Exhibit No. 2.)

16 BY MR. MEYER:

17 Q Okay. Now, Mr. Logan, going back
18 to your responsibilities, are you responsible
19 for just music content on XM? Or other forms
20 of content as well?

21 A No, I'm responsible for all
22 content on our network for talk, music,

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1 information, and such.

2 Q And do you have a staff that works
3 for you in programming the content?

4 A Yes, I do.

5 Q Approximately how many people work
6 for you?

7 A It varies because there is a
8 constant turnover but approximately 380 to 390
9 people.

10 Q Okay. And as a general matter,
11 can you just explain to the Panel what is XM's
12 content strategy?

13 A Sure. Our goal is to leverage
14 this infrastructure that we created, this
15 national footprint we have, to create and
16 offer a content that is diverse enough that
17 people would pay us \$12.95 a month for it.

18 Our underpinning philosophy of
19 that is to try to attract enough people that
20 when they come to the service, there is
21 something for everyone. There is a rich
22 portfolio of talk, of music, of sports, of

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1 information, and services.

2 So we constantly challenge
3 ourselves to make sure that if somebody comes
4 to us through a variety of our paths, whether
5 or not it is our OEM or our automotive
6 segment, or they go to a Best Buy/Circuit City
7 and purchase one of our radios, that when they
8 get to the network they find not only what
9 they were looking for but for other things
10 that they didn't know they were looking for as
11 well.

12 Q Okay. And you mentioned, I
13 believe, in describing your responsibilities,
14 you mentioned something about managing the
15 bandwidth.

16 A Yes.

17 Q Is there a finite amount of
18 bandwidth that XM is allowed to use?

19 A Yes, there is.

20 Q And who decides -- who gives you
21 that allocation?

22 A Well, the FCC grants us the

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1 spectrum. And we utilize approximately about
2 what we call four megabits of the spectrum
3 that we can utilize to associate to each
4 individual channel. And the kilobits are
5 actually the technical mechanism that brings
6 to life the channels on the radios.

7 Q Okay. And did XM have to apply
8 for a license to the FCC?

9 A Yes, we did. We applied for a
10 license. We were granted and purchased the
11 license for I think approximately 90 million
12 dollars.

13 Q Okay. And let me direct your
14 attention to Exhibit 1 of your written
15 testimony. And can you just describe for us
16 what this is?

17 A Well, this is a depiction, a small
18 one, of our channel lineup that you would
19 expect to see on our website, you would see in
20 many of our retail establishments that we
21 entice people to come to our network. It
22 provides a look across all of our channels

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1 with short descriptions of some of the
2 content.

3 And we have broken it into very
4 manageable-type sections. Whether or not it
5 is sports, or music by genre, or news, or
6 traffic, or weather. So when you look at it,
7 it also has a variety of personalities that
8 are on here.

9 These personalities are people we
10 feel, from a marketing standpoint, speak to
11 the gross segments or the people that we are
12 trying to target to entice them to come to our
13 service and pay us a subscription a month.

14 Q Okay. Now this -- is this exhibit
15 accurate as of the date of your affidavit?

16 A As of the date of my affidavit,
17 that is correct.

18 Q Okay. And has the content changed
19 somewhat since the date of your direct written
20 testimony?

21 A Yes, it has.

22 Q Okay.

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1 MR. MEYER: And with the Panel's
2 permission, we have really just an updated
3 version of the same document that reflects the
4 content as it exists on the channel today.
5 And I'd like to mark that as an exhibit,
6 Exhibit 3.

7 MR. MEYER: I'd like to offer
8 that.

9 CHIEF JUDGE SLEDGE: This isn't
10 marked.

11 MR. MEYER: Again, I apologize,
12 Your Honor.

13 CHIEF JUDGE SLEDGE: It won't
14 suffice.

15 MR. MEYER: Okay.

16 CHIEF JUDGE SLEDGE: These have to
17 be marked.

18 MR. MEYER: Would it be okay if I
19 marked it with a -- do we have an exhibit
20 sticker? We're going to mark it with an
21 exhibit sticker, Your Honor.

22 CHIEF JUDGE SLEDGE: Mr. Meyer,

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1 that is clearly provided in our regulations.

2 MR. MEYER: I apologize, Your
3 Honor.

4 (Whereupon, the above-referred to
5 document was marked as XM Exhibit
6 No. 3 for identification.)

7 MR. MEYER: Thank you.

8 Todd, can you -- do you want to
9 talk to your assistant?

10 CHIEF JUDGE SLEDGE: Do we need to
11 take a recess for you to get your presentation
12 prepared?

13 MR. MEYER: Your Honor, I think it
14 will just take a few seconds.

15 CHIEF JUDGE SLEDGE: Is this going
16 to be the last one?

17 MR. MEYER: Yes, the last time
18 this will happen?

19 CHIEF JUDGE SLEDGE: Yes.

20 MR. MEYER: Yes, Your Honor. And
21 it is the last exhibit that I will be
22 introducing.

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1 Well, while we are waiting, may I
2 proceed with questions --
3 CHIEF JUDGE SLEDGE: Yes, sir.
4 MR. MEYER: -- so as not to waste
5 the time?
6 BY MR. MEYER:
7 Q Now, Mr. Logan, with respect to
8 the channels on XM currently, I think Mr.
9 Parsons mentioned this. How many channels are
10 there on XM currently?
11 A As of today, I think we have 177
12 today.
13 Q And how does that compare to the
14 number of channels that were on XM upon XM's
15 launch?
16 A Upon XM's launch, I think we had
17 101 or right about 100.
18 Q Okay. And has the mix of content
19 between music and non-music content changed
20 over that period of time to your knowledge?
21 A Yes, it has.
22 Q Okay. And can you describe how?

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1 A Yes, we've added approximately 77
2 or so channels of which I think we have added
3 somewhere in the neighborhood of, you know,
4 seven music channels in total. But we have
5 added upwards of 70-plus non-music channels
6 over the point of time from the launch of our
7 service through today.
8 Q So is it correct to say then that
9 as I believe Mr. Rich said in his opening,
10 that the content on XM is tending towards
11 greater non-music content?
12 A That would be true, yes.
13 Q Okay. All right. And now if we
14 could look at what I have marked as
15 SoundExchange Exhibit 3 -- and again with
16 apologies to the Panel, is this simply an
17 updated version of Exhibit 1 that was attached
18 to your report, sir?
19 A That is correct.
20 Q Okay.
21 MR. MEYER: And I would ask that
22 it be admitted.

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1 CHIEF JUDGE SLEDGE: Mr. Meyer, I
2 don't have an Exhibit 3. I have an Exhibit 2.
3 MR. MEYER: I apologize again,
4 sir.
5 PARTICIPANT: Excuse me, Your
6 Honor, it is my slip.
7 MR. MEYER: I apologize again and
8 renew my offer.
9 CHIEF JUDGE SLEDGE: Is there any
10 objection to XM Exhibit 3?
11 MR. HANDZO: No, Your Honor.
12 CHIEF JUDGE SLEDGE: Without
13 objection, it is admitted.
14 (Whereupon, the above-referred to
15 document was received into the
16 record as XM Exhibit No. 3.)
17 MR. MEYER: Thank you. And I
18 believe we have a board of this as well. If
19 my colleague, Mr. Thompson, is correct.
20 BY MR. MEYER:
21 Q Now, Mr. Logan, what I'd like to
22 do is just walk through this a little bit

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1 since we've obviously had a lot of testimony
2 about XM and about Sirius but very little
3 description of what is actually on the
4 services.
5 Obviously we are not going to go
6 through every one of these items. But I take
7 it on the left side that describes the music
8 channels. Is that correct?
9 A That is correct.
10 Q Okay. And I think you said how
11 many music channels are there?
12 A Currently on this line up we have
13 69 commercial-free music channels.
14 Q Okay. And there was some mention
15 made earlier in Mr. Parson's testimony about
16 some music channels that were programmed by
17 Clear Channel. Can you just explain to the
18 Panel what that is?
19 A Sure. Clear Channel has the
20 right, through an investment in our company,
21 to program approximately 400 kilobits of
22 bandwidth. We mutually agree upon formatic

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1 direction or where they are trying to appeal
2 to a marketplace.

3 We have a revenue share
4 arrangement with them so they program these
5 channels and through their bandwidth, they
6 have elected to program five music channels as
7 part of that. So in total, we have 74 music
8 channels but 69 of which are commercial free.

9 Q Okay. And the Clear Channel
10 channels, is that reflected on the chart here
11 in Exhibit 3?

12 A Yes, it is.

13 Q And where is that?

14 A To the far right-hand column, if
15 you look where it says regional, talk, the
16 news, and music, the four channels are
17 Nashville, KISS, Mix, Sunny, and WSIX.

18 Q Okay. All right. And I think
19 this is simple arithmetic but out of the 170
20 channels currently on XM, approximately how
21 many of them are non-music channels?

22 A Seventy-four less 77, so 103

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1 approximately.

2 Q Okay. All right. Now let's just
3 again walk through a few examples of the
4 content you have. Now you see on the far left
5 column, you have Decades channels. Can you
6 just explain briefly what those are?

7 A Sure. You know what we try to do
8 with all of our music programming is to create
9 something that is easy and an experience for
10 our subscribers to navigate and move around.

11 So one of the tactics by which we
12 have chosen to showcase some of the more
13 classic record or early recordings is cut them
14 by decades. And we just found it to be really
15 simple that from a marketing proposition, to
16 say that the 40s are on Channel 4, 50s on 5,
17 60s on 6, and we do that all the way until we
18 get to the 90s on 9.

19 So in that channel what you will
20 hear is music that is book marked basically
21 from January 1st, 1980, for example, all the
22 way through December 31st of 1989. And that

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1 channel will play music from that ten-year
2 era.

3 Q Okay. And we've heard that music
4 pre-1972 is not subject to the license in this
5 case. Can you point to which channels, if
6 any, predominantly play music recorded prior
7 to 1972?

8 A Well, in the Decades example,
9 clearly the 40s, 50s, 60s, some of the 70s do.
10 But as you continue through our network, for
11 example in our rock category, when you have a
12 channel like Top Tracks, it plays a lot of
13 music that is from the 60s.

14 So in total, and I don't have the
15 number off the top of my head, Your Honor, but
16 I will tell you we have somewhere between 10
17 to 12 different channels that play a
18 predominant mix of music that could be pre-
19 1972.

20 Q For example do you have a Frank
21 Sinatra channel?

22 A No, we do not.

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1 Q Okay.

2 A We have a channel called High
3 Standards, which is Channel 73, which used to
4 be called Frank's Place. But it is now called
5 High Standards. And that plays music
6 predominantly of one of the ones that I cited
7 pre-1972.

8 Q And, by the way, the Decade
9 channels, 40s, 50s, 60s, 70s, are those
10 popular channels?

11 A Very popular.

12 Q Now underneath the Decades
13 channels on the left, it says country. And I
14 noticed there are -- I think there are seven
15 country channels. Is that correct?

16 A Actually there are nine country
17 channels on the network, seven of which are
18 commercial free and two additional channels
19 that are programmed by Clear Channel.

20 Q Okay. And from the standpoint of
21 you as the Chief Programmer at XM, what is the
22 benefit or the attractiveness to consumers of

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1 having nine country channels?

2 A Well, country is a very big genre
3 of music. And generically we feel that the
4 experience should be where somebody wants to
5 specialize and understand things about classic
6 country music, we want to provide an
7 environment for that to be.

8 Conversely, there are people who
9 are just more interested in the current or
10 contemporary country music. And we want to
11 provide that, which we do, which is Channel
12 16.

13 And then there is a group of
14 people who are interested really in what is
15 referred to often in the country circles is
16 the Urban Cowboy era, which would have been
17 the late 70s through the 80s era. And we have
18 a channel that does that.

19 And then there is also a very
20 popular channel that we have called Cross
21 Country, which is a regional segment of
22 country music out of Texas that is called

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1 Americana by some standards. And some people
2 refer to it as Texas Country.

3 We took this genre from the launch
4 of our network and took a small regional
5 format to a national audience and provided an
6 opportunity for that music to be heard.

7 And also many of country artists
8 of today and songwriters have strong roots
9 into folk music. So one of our channels is to
10 showcase the breadth and depth of folk music,
11 another format or genre of music that is not
12 widely available anywhere in America in the
13 local markets and clearly on a national basis
14 we do that now.

15 Q Now are there major --

16 JUDGE ROBERTS: Excuse me, Mr.
17 Logan, some of the country music that you play
18 is that pre-1972?

19 THE WITNESS: Yes, sir, it is.

20 JUDGE ROBERTS: And, of course,
21 some of the classical recordings that you play
22 are pre-1972 as well as the rock and roll and

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1 the others you identified?

2 THE WITNESS: Yes, Your Honor.

3 JUDGE ROBERTS: What percentage of
4 all the music that XM plays in a given year is
5 pre-1972?

6 THE WITNESS: Your Honor, in a
7 given year, it's tough without me actually
8 doing an analysis. But of our -- we have a
9 service called Dillett, which is our database
10 of music that we actually draw from and our
11 programmers draw from.

12 And depending upon what week you
13 could look at in just spot checking, we play
14 somewhere between eight and 13 percent of that
15 catalogue would be music predominantly from
16 pre-1972.

17 JUDGE ROBERTS: That is in a given
18 week?

19 THE WITNESS: It's -- honestly,
20 that was when we looked at it in a couple of
21 days. And just grabbing some snapshot days.
22 We have not done a detailed analysis, Your

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1 Honor, of everything we play over the course
2 of the year.

3 JUDGE ROBERTS: You don't think
4 that that would be important to a proceeding
5 like this to know what that percentage was?

6 THE WITNESS: I think it would be,
7 Your Honor.

8 MR. MEYER: Your Honor, that may
9 be something we will address in rebuttal.

10 BY MR. MEYER:

11 Q But going back just to the
12 diversity of the country stations, are there
13 major markets -- I'm using country as an
14 example -- are there major markets in the
15 United States that don't have any country
16 channels?

17 A Yes, that is true.

18 Q Can you give some examples?

19 A New York City in one market in
20 America. They don't have any form of country
21 music in New York City. Los Angeles was
22 without a country radio station for a period

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1 of time. They just launched one. San
2 Francisco just launched one a few years ago.
3 But there was a point not too
4 recently where in the top five markets in
5 America, Chicago and Philadelphia, out of the
6 top five markets, were the only two markets
7 that had a major country outlet in that
8 market.

9 CHIEF JUDGE SLEDGE: Excuse me.

10 THE WITNESS: Yes, sir.

11 CHIEF JUDGE SLEDGE: Are you
12 referring to terrestrial radio?

13 THE WITNESS: Yes, sir, I am.

14 CHIEF JUDGE SLEDGE: That is
15 incredible. I've listened to country music
16 stations in those markets.

17 THE WITNESS: In New York City?

18 CHIEF JUDGE SLEDGE: Yes.

19 THE WITNESS: Okay.

20 BY MR. MEYER:

21 Q Is it your understanding that
22 currently there is or is not a country --

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1 predominantly country music station in New
2 York City?

3 A In New York City, there is a
4 potential that there could be a New Jersey
5 radio station. But there is no New York City-
6 licensed FM or AM to my knowledge today that
7 is playing country music.

8 Q As sad as that may be from some
9 people's perspectives, certainly is there
10 anywhere in the United States where a country
11 music fan could receive nine country music
12 channels?

13 A Not to my knowledge, no.

14 Q And similarly under Christian, you
15 have three Christian music channels. Is that
16 correct?

17 A Yes, sir.

18 Q And is that available anywhere
19 else in the country as far as you know?

20 A Yes, there are markets that do
21 play a blend of Christian pop and rock. But
22 specifically part of our Christian

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1 presentation, we have a channel that we are
2 very excited about that we actually feel that
3 we helped break on a national basis which is
4 Southern Gospel.

5 We are very proud to be one of the
6 first national media outlets to bring Southern
7 Gospel music to a national audience.

8 We actually tested this format
9 online with our streaming service. And upon
10 putting on the network, it was our number one-
11 rated Christian channel within a matter of
12 months.

13 Q Okay, and again, I'm not going to
14 go through all of this but focusing on the
15 rock channels, how many rock channels do you
16 currently have on XM?

17 A We have around 14.

18 Q Okay. And by way of comparison,
19 do you know how many rock channels there are
20 in New York City?

21 A In the New York City metro area,
22 they just received a new rock channel about

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1 two weeks ago. So to my knowledge, that makes
2 two.

3 Q Now leaving the music channels for
4 a moment and in the middle column we see the
5 sports package -- yes, please.

6 JUDGE WISNIEWSKI: How do you
7 define the New York City metropolitan area?

8 THE WITNESS: Well, it is a large
9 market. And programming in New York, like I
10 have, we look at stations that are --

11 JUDGE WISNIEWSKI: Let me cut to
12 the chase here.

13 THE WITNESS: Sure.

14 JUDGE WISNIEWSKI: Do you use the
15 standard statistical definition from the
16 Bureau of Census or is this just some notion
17 that you have of what constitutes that area?

18 THE WITNESS: No, Your Honor. We
19 use what is defined by the market from
20 Arbitron which uses a portion of the census
21 data.

22 BY MR. MEYER:

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1 Q Now with respect to the sports
2 content, can you just describe for the Panel -
3 - and, again, without going through every
4 channel but the major channels, the major
5 types of sports content that XM offers?

6 A There are two different types of
7 sports content. There is sports talk content
8 and sports play-by-play content. So let's
9 talk about sports talk content. On the sports
10 talk content side, we carry brands such as
11 ESPN Radio, Fox News, and also Hispanic brands
12 of sports like XM Deportivo, which is a
13 national Hispanic sports-focused channel. It
14 focuses on baseball and boxing and soccer.

15 We also have our own channel
16 called XM Sports Nation, which is our branded
17 sports talk show channel, which features
18 exclusive programming from Jimmie Johnson,
19 Dale Earnhardt, Jr., Mike Krzyzewski, a show
20 that we created with James Carville and Luke
21 Russert called 60/20 Sports among other shows.
22

Then there is the sports play-by-

1 the National Hockey League, which will be
2 moving to an exclusive partnership with us
3 starting next year. We carry IRL races, which
4 just featured the Indianapolis 500. And we
5 carry PGA Tour coverage of play-by-play for
6 golf. But that covers the majority of our
7 coverage.

8 Q Okay. Now I want to come back and
9 ask you about this issue of exclusivity that
10 has already been raised to some extent. But
11 just going through it, finishing up,
12 summarizing the content, you have Oprah &
13 Friends, Mr. Parsons spoke to that. Is that
14 an important part of your content on XM?

15 A Yes, it is.

16 Q Okay. Is it popular?

17 A Yes, it is.

18 Q Okay. And what do you get -- what
19 kind of content do you get as a result of your
20 deal with Oprah?

21 A Well, we get -- from Oprah,
22 herself, we get an exclusive radio show from

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1 play, which we broadcast somewhere in the
2 magnitude of over 5,000 live sporting events
3 each year. And our sports portfolio, it is
4 really driven by two key areas, baseball,
5 which we carry every team or every game
6 everywhere you go. And we have around 14
7 play-by-play channels of baseball.

8 In addition to that, we created a
9 baseball talk channel for the baseball heads
10 to listen 24 hours a day about talk. And we
11 have been increasing our coverage and
12 penetration in college sports.

13 We've just announced a deal with
14 the Southeastern Conference to migrate
15 Southeastern Conference from our competitor to
16 XM over the next two years. And, in fact,
17 today we just announced LSU joining us as
18 well.

19 So that makes five of the six
20 major conferences we carry. So from a sports
21 perspective, those are the two thrusts.

22 And in addition to that, we carry

1 her every week that only can be heard on XM
2 Satellite Radio. In addition to that, she is
3 effectively the Executive Producer that helps
4 guide and create the rest of the channel,
5 which is comprised of her friends.

6 And her friends are her panel of
7 experts, if you will, that have helped her in
8 her personal life, whether it is finance or
9 health or dietary or physical fitness and even
10 interior design.

11 So the channel, over the course of
12 the week, will have a variety of these shows
13 anchored by the friends. Oprah has a show.
14 And Oprah's best friend, Gayle King, has a
15 show, a daily show on the channel as well.

16 Q Okay. And just below Oprah and
17 Her Friends, we see the biggest names in the
18 news. And can you just hit the highlights for
19 us please in terms of the news content that
20 you have on XM?

21 A Sure. We hoped to create an
22 environment so that people, regardless of

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1 their political affiliation, would feel that
2 there was something for them, keeping with our
3 theme of the network. So we have a rich
4 portfolio of the biggest names in news,
5 whether it is CNN or Fox News or Headline
6 News.

7 We also carry CNBC and Bloomberg
8 for those who are interested in financial
9 news. And we also carry BBC for the
10 international view of what is happening around
11 the world.

12 We carry CSPAN exclusively now,
13 which is the coverage of what happens here
14 with our government as well. And we are very
15 proud to be creating our own brand of
16 nationally public radio, a national brand,
17 called XMPR, which is hosted by Bob Edwards
18 exclusively on our channel.

19 Q And you have on the upper right
20 All-Star Talk and Entertainment. And can you
21 describe what that is?

22 A In that category, we have a

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1 variety of talk, scope, and word content that
2 would range from classic radio shows, old-
3 time radio featuring the Green Horn or Chicken
4 Man or a variety of theme which is very
5 popular.

6 Also we have in there featured
7 conservative talk and liberal talk with Air
8 American or America Right. We have African-
9 American Talk, which is really focusing on the
10 African-American marketplace.

11 We have Family Talk, which is
12 Christian talk. And we also have Open Road,
13 which is a truckers' channel, which is a
14 channel that discusses what happens on the
15 road and people traveling and then challenges
16 that they face as well.

17 Q Now I noted there you had the
18 conservative talk station and the progressive
19 talk station right next to each other on the
20 dial. I hope that that is okay. And people
21 don't accidentally turn to one or the other and
22 get upset.

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1 Kids programming, could you
2 describe what that is? I know this -- I am
3 painfully aware of this from my kids who
4 insist on listening only to Channel 115, Radio
5 Disney. But just explain what kind of content
6 you have.

7 A Sure. Radio Disney and XM Kids is
8 part of our belief that kids programming, on
9 a national basis, is not deeply penetrated
10 enough. So we partner with Radio Disney.
11 They provide that feed for us, which is a safe
12 environment for some popular music of today.

13 Then we create our own brand of
14 children's entertainment called XM Kids, which
15 is really focused on children between the ages
16 of three and six, whereas Radio Disney is
17 focused on ages six and over.

18 XM Kids, we have a staff of
19 personalities, in fact our morning show is a
20 morning show that is actually a radio cartoon.
21 He has chipmunks who come in and skunks. And
22 they take out trash. And it is very

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1 interactive. And even at night, they help
2 kids with their homework. So it is a very
3 interactive kids channel.

4 Q Okay. Now I'm going to come back
5 to Opie & Anthony. But the instant traffic,
6 weather, and alerts, what type of content do
7 you have in that area?

8 A We offer 21 channels of discreet
9 information for particular cities. So, for
10 example, you could go to Channel 214 on your
11 XM radio anywhere in the country with our
12 service and you can get up-to-the-minute
13 information about the weather in Washington,
14 D.C. and also the traffic. And we do that for
15 21 cities.

16 In addition to that, we also have
17 a channel called 247, which is 24/7, which is
18 our emergency alert channel. And that is the
19 channel we use to track national emergencies,
20 whether they are forest fires or blizzards.
21 And last year, through the hurricane and even
22 with Katrina, 247 was the channel that we

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1 disseminated much of the information from
2 FEMA.
3 In addition, at times we expand
4 this category by another channel or two,
5 depending upon the needs. So when the Red
6 Cross approached us about Hurricane Katrina,
7 we actually put a channel dedicated to the Red
8 Cross.

9 They utilized our national
10 infrastructure to communicate with people on
11 the ground in Louisiana and the Gulf Coast
12 because the terrestrial repeaters were down
13 and the cell phone service was down. So we
14 utilize that in partnering with a lot of
15 variety of public service interests.

16 Q Okay. And then finally under the
17 comedy category, can you describe for those
18 who have not had the pleasure of hearing them,
19 Opie & Anthony, what they are. And their
20 importance to the network?

21 A Well, we offer five channels of
22 comedy. Again, that theme of something for

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1 everyone. We have comedy that is safe. And
2 then we have comedy that is over the top. And
3 Opie & Anthony would be in that category.

4 It is a show that is targeted
5 toward a male demographic. And it is very
6 aggressive, male lifestyle show.

7 Q Do you know, by the way, what the
8 demographic is of your listeners on XM?

9 A Yes, approximately -- without
10 having it in front of me, the average age of
11 our network is somewhere around the age of 46,
12 47. And it ranges depending upon what survey
13 we see. And the gender split is somewhere in
14 the range of 65, with 35 skewing toward the
15 male.

16 Q Okay. Now of all this content, do
17 you know which channel is the most popular in
18 terms of listenership?

19 A Yes, I do.

20 Q Which one?

21 A It is Opie & Anthony.

22 Q And prior to Opie & Anthony

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1 assuming that lofty title, do you know who the
2 predecessor was as the most popular channel?

3 A Yes, I do.

4 Q And what was that?

5 A Fox News.

6 Q All right. Now let me ask you
7 about exclusivity. Now which, if any, of this
8 content is exclusive. And if you need to
9 clarify in terms of degrees of exclusivity,
10 please do so.

11 A Well, let me define the degrees of
12 exclusivity. And then we can hone in on that
13 if I could.

14 Q Sure.

15 A Under the degrees of exclusivity,
16 because of our national service in that we
17 broadcast to the entire country, we have one
18 degree of exclusivity that is with no ability
19 for any consumer to get the content anywhere
20 else. In any form or fashion.

21 And a good example of that would
22 be Oprah Winfrey. The only way you can get

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1 Oprah & Friends radio show is by being a
2 subscriber to XM.

3 Then there is a segment of
4 exclusivity that is exclusive to XM and not on
5 Sirius but potentially could be on terrestrial
6 radio. And a good example of that could be
7 Air America or the, if you will, the liberal
8 talk network that we have.

9 Our competitor doesn't have it.
10 However, AM and FM does. So that is an
11 example of exclusivity vis-à-vis Sirius.

12 Then there is a level of
13 exclusivity that is exclusive only to
14 satellite radio as a category and not to
15 terrestrial radio. Fox News and CNN, which we
16 take the television feed for, is exclusive to
17 us and Sirius but not to AM and FM radio.

18 Q Now as a general matter, does XM
19 pay more for exclusive content than non-
20 exclusive content?

21 A Yes.

22 Q And why is that?

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1 A Well, the reason why is because we
2 feel that in order to bring people to the
3 network, we have to tap in to things that are
4 of mass appeal to them. Whether or not it is
5 major league baseball with the value
6 proposition of being able to get into your car
7 or get our service and get every game
8 everywhere you go, that is an exclusive
9 relationship that we would have that we would
10 pay a premium for.

11 Oprah Winfrey is an example of
12 Oprah Winfrey promoting on her show, on her TV
13 show and her magazines, I have this channel on
14 XM. But I really wish you could listen to my
15 channel. And motivate sales and attract
16 people to us.

17 Q Now, of course, perhaps it is
18 asking the obvious, people are used to
19 listening to regular terrestrial radio in
20 their cars, they pay nothing for that,
21 correct?

22 A Correct.

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1 Q And the subscription price for XM
2 is \$12.95?

3 A Today, correct.

4 Q Okay. And did it used to be
5 something --

6 JUDGE WISNIEWSKI: Is it your
7 proposition that advertising costs the
8 consumer nothing ultimately?

9 MR. MEYER: I'll defer to you as
10 the economist, Judge Wisniewski.

11 BY MR. MEYER:

12 Q But there is clearly no monthly
13 subscription fee for terrestrial radio,
14 correct?

15 A Yes, sir.

16 Q As there is for XM. And I think
17 you said -- did it use to be less than \$12.95?

18 A Yes, when we launched our service
19 initially, we were \$9.95. And a few years ago
20 we raised our fee from \$9.99 to \$12.99.

21 Q And we may get into more of this
22 with Mr. Cook but are there other options,

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1 family plans, and things that consumers can
2 use to pay less than \$12.95?

3 A Yes, there is.

4 Q Could you just describe that?

5 A Yes, in the broadest sense, you
6 can have a radio at \$12.95 in your car that
7 you purchased from one of our car partners.
8 Hopefully you fall in love with the service
9 and you see value in it.

10 And there is an opportunity for
11 you to get a second radio in your home or even
12 in your office. We offer you the ability to
13 get that for \$6.99. And you can purchase --
14 and if I'm not mistaken, I think up to four
15 additional radios under that one what we refer
16 to as a family plan.

17 Q Okay. Now with respect to
18 exclusivity and taking major league baseball
19 as an example, you say you have exclusive
20 rights to all major league baseball games? Do
21 I have that right?

22 A We have the exclusive satellite

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1 radio rights to major league baseball.

2 Q Now isn't it true that all
3 baseball games or virtually all baseball games
4 are, in fact, broadcast on terrestrial radio?

5 A That is correct.

6 Q So then in what sense can you say
7 that you have the exclusive rights to it?

8 A We have the exclusive rights for --
9 - an example of if you are a Chicago Cubs fan
10 in Baltimore, Maryland, we have the broadcast
11 rights to have the ability to broadcast the
12 Chicago Cubs game into all the markets in
13 America. We have the rights from all 30 teams
14 to do that.

15 So in a market for which the
16 exclusivity could be that you have the
17 Nationals or you have the Orioles, we would be
18 broadcasting into that market all the games at
19 the same time.

20 Q And you do that on a nationwide
21 basis?

22 A We do that on a nationwide basis.

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1 Q Now are there any features of the
2 major league baseball contract that reflect
3 the value of exclusivity?

4 A Yes, there is.

5 Q Okay. And without giving specific
6 numbers, can you describe that?

7 A Sure. In our agreement with major
8 league baseball, there is a provision that we
9 pay to baseball that is a premium for
10 exclusivity. We refer to it in our house as
11 a ratchet down provision.

12 And in the broadest sense, if we
13 were to not have exclusivity of major league
14 baseball, the way the agreement reads is that
15 our fee would be ratcheted down 70 percent.

16 MR. MEYER: Now I'm about to enter
17 into another area, Your Honor. I don't know
18 what your preference is, whether I should take
19 up the remaining five minutes or not.

20 CHIEF JUDGE SLEDGE: It is your
21 five minutes.

22 MR. MEYER: Okay. If I'm going to

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1 get charged with five minutes either way, then
2 I will continue to ask questions.

3 BY MR. MEYER:

4 Q Let me ask you about the music
5 programming, now is the music programming
6 exclusive in any way?

7 A There are aspects of our
8 programming that we have with shows like Bob
9 Dylan that are exclusive to us. And that
10 would be the degree of exclusivity that we
11 have.

12 Q Okay. But with respect to in
13 general, for example, the country stations or
14 the rock stations or the hip hop stations, is
15 there any exclusivity?

16 A No.

17 Q That's all content that a consumer
18 could hear theoretically on terrestrial radio,
19 right?

20 A That is correct.

21 Q Now what is the role of music
22 programming at XM? Or let me rephrase that.

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1 You mentioned that you have this
2 very large staff of people who work for you,
3 correct?

4 A Yes.

5 Q And some of those people, their
6 job is to program these music stations?

7 A Yes.

8 Q Okay. And could you just describe
9 generally the process by which they do that?

10 A Yes, generally what we have done
11 is we have a very experienced, highly
12 decorated staff of individuals who look at
13 this -- I referred to Dillett a moment ago --
14 but look at all the available music that could
15 be played.

16 Through their expertise and their
17 guidance, they say this is what I feel, as the
18 expert that I have hired or my team has hired,
19 to represent that particular genre. They have
20 full creative freedom to showcase it any way
21 they see fit.

22 We don't research our music so

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1 they do have the ability to change with the
2 times. A great example is the guy who
3 programs Willie's Place is the former
4 president of MCA Records out of Nashville. A
5 guy named Eddie Kilroy who produced many
6 records with Jerry Lee Lewis.

7 Not a radio veteran. Not a radio
8 programmer. But works with Willie Nelson
9 collectively and says this is the type of
10 presentation that we want to present in terms
11 of classic country music.

12 Jonathan Schwartz, who programs
13 our High Standards channel, has authored books
14 on American standards and authored books on
15 Frank Sinatra, presents a channel about
16 standards music or the Rat Pack from his point
17 of view. So he has full creativity to change
18 or contextualize or communicate or take calls
19 on the fly, if you will.

20 And basically from all of our
21 music channels, that is the same sort of
22 approach that our programmers have about how

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1 they can go after a channel.

2 Q And how does this programming
3 strategy differ from terrestrial radio?

4 A Greatly. In terrestrial radio,
5 you are constrained by their business model,
6 which is they have to aggregate a large amount
7 of audience so they can charge a premium for
8 that audience in terms of advertising because
9 that is their fundamental business
10 proposition.

11 We take a different approach
12 because have elected through our presentation
13 not to play commercials, to charge a
14 subscription as part of the experience, and
15 our Program Directors feel that it is
16 important to take people on these musical
17 journeys through the depth and breadth of folk
18 music. Or through the depth and breadth of
19 alternative. Or any of these genres that we
20 represent today.

21 There is no need for us to worry
22 about how many audience members we get into

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1 one general channel because we are not selling
2 advertising. So the theory that I used to
3 work from for 20 years of my life in broadcast
4 for terrestrial radio is aggregate, get big,
5 and play. And then sell.

6 And in this case, for us, it is
7 about how satisfied our subscribers are with
8 this channel versus this channel. So it is
9 almost the exact opposite as terrestrial radio
10 in that regard of how we program.

11 Q Okay. Based on your experience in
12 terrestrial radio, do programmers generally
13 have the ability to select any song they want
14 to play from the station's library?

15 A Well, they could. But corporate
16 programmers, like myself, would then call them
17 and say you are breaking format. And they
18 wouldn't. So there are a lot of very rigid
19 formatic directions. And typically a radio
20 station such as a -- using country again as
21 your example, a country radio station on
22 average would play somewhere between 300 to

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1 400 records for that particular radio station.

2 And they would rotate between those records.

3 Those records would be researched.

4 And tested in the marketplace so that that
5 particular market would say this is the music
6 that I want to hear in my market.

7 But what that really does for a
8 consumer is it limits the sort of choice that
9 they have the ability to hear. It limits the
10 ability, if there is a new record from a new
11 artist or if there is an older record with
12 other cuts on there, the consumer who listens
13 in terrestrial radio can't get the variety
14 from their favorite artists or even the
15 variety from the format that we offer on XM.

16 JUDGE WISNIEWSKI: I'm not sure I
17 understand the thrust of this line of
18 questioning.

19 MR. MEYER: Yes.

20 JUDGE WISNIEWSKI: It seems to me
21 that you had, at least from previous testimony
22 and other testimony, underscored your

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1 competition with terrestrial radio. It seems
2 to me here that Mr. Logan is saying that you
3 offer a differentiated product that would, in
4 fact, not be competitive with terrestrial
5 radio.

6 MR. MEYER: I don't think that is
7 what he is suggesting. Or what we mean to
8 suggest. Basically --

9 JUDGE WISNIEWSKI: Through your
10 questioning shed some light on where you are
11 going.

12 MR. MEYER: Okay.

13 BY MR. MEYER:

14 Q We have established terrestrial
15 radio is free, correct?

16 A Correct.

17 Q And why would consumers, based on
18 your knowledge and understanding, pay \$12.95
19 a month for radio which they are used to
20 getting for free?

21 A Well, that is a very tough
22 proposition. And one of the ways we get at it

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1 -- one of many ways we get at it is knowing
2 that in terrestrial radio, which is where a
3 majority of our subscribers are coming from
4 today, they are dissatisfied with the amount
5 of commercials and the lack of play list or
6 variety depth.

7 So we actually use that as an
8 advantage to try to, if you will, mine that
9 opportunity. And try to convince somebody,
10 who may like a genre of music, to come to us
11 for that particular reason.

12 Q And to go even more directly to
13 the question, is there a value added, value
14 that XM programmers add to the music which is
15 not present on terrestrial radio and which
16 consumers find attractive?

17 A Clearly. You can look at Bob
18 Dylan as a clear example of that. We have a
19 partnership with Bob Dylan who actively does
20 a weekly radio show such as we do with
21 Ludacris or we do with Snoop Dogg or we do
22 with Wynton Marsalis.

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1 Or even some of our original
2 programming that we have talked about that is
3 in my testimony as well in terms of how we
4 create radio specials and showcases for
5 artists who can't do things on terrestrial
6 radio because of the limited, structured
7 formats they have and the pressures of
8 commercials, 12, 13, 14 an hour that music
9 channels would have to play in most markets in
10 America.

11 Q And if you don't successfully
12 retain that consumer or persuade that consumer
13 that your satellite radio service is worth
14 \$12.95 a month, what do they do?

15 A They probably get it for free.

16 Q That is you have a word for that?

17 A Yes. We refer to it in terms of
18 retention. What we talk about is many times
19 within the walls of programming is what brings
20 somebody to satellite radio isn't necessarily
21 what always keeps them.

22 We see examples all the time of

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1 people who came and purchased it for baseball,
2 hockey, golf, any number of points of entry.
3 And they wind up staying for multiple reasons.
4 I've seen, as my testimony I think said at
5 certain points, that, you know, subscribers
6 have discovered genres of music and talk
7 aspect or entertainment aspects that they
8 never knew existed.

9 And a great success story for us
10 in terms of retention is the example of
11 comedy. When we have attracted people to our
12 network, XM Comedy Channel 150 is one of our
13 top-performing channels on our network.

14 But if we were to go out and sell
15 to a mass market in America, comedy on the
16 radio, it is a tough concept for somebody to
17 understand. But when you hear it, you
18 immediately get it. So comedy is a very good
19 example of something that somebody has
20 discovered and it has added value from a
21 retention standpoint.

22 Q Now what about sound quality? How

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1 does the sound quality of XM compare to FM or
2 AM radio?

3 A It is superior. And it is
4 something that we have marketed in the past.
5 And we continue to market the sound quality.
6 In fact, we do have a couple of channels that
7 broadcast in 5.1 surround sound, which are the
8 classical channels that we have and also, if
9 I'm not mistaken -- I'll have to double check
10 -- but it also Fine Tuning which is a very
11 eclectic variety of content.

12 So we have better sounding talk
13 channels than you would experience in AM
14 radio. And in most cases, better sounding
15 music channels than you would experience in
16 terrestrial radio.

17 Q And is that something, to your
18 knowledge, that consumers notice and
19 appreciate?

20 A Yes, it is.

21 Q Now let's talk about some of the -
22 - well, I just want to mention a couple of the

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1 other programmers that you have. Let's take
 2 jazz, for example. We haven't talked much --
 3 CHIEF JUDGE SLEDGE: Would this be
 4 a good time for you to break?
 5 MR. MEYER: Yes, Your Honor.
 6 CHIEF JUDGE SLEDGE: Okay.
 7 Mr. Logan, there are two questions
 8 on programming that are most important that
 9 you weren't asked. What is the length or
 10 depth of your play list on the opera station?
 11 THE WITNESS: Without checking,
 12 Your Honor, I don't know. But I'm sure it
 13 could be deep. Or, in this case, it might not
 14 be deep enough.
 15 CHIEF JUDGE SLEDGE: Well, that
 16 would be -- if it deep, that would be a vast
 17 departure from any I have ever heard before.
 18 THE WITNESS: I think it is Channel
 19 112. It's VOX.
 20 CHIEF JUDGE SLEDGE: Opera?
 21 THE WITNESS: It is VOX, yes.
 22 CHIEF JUDGE SLEDGE: They

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1 physically play ten songs over and over again.
 2 (Laughter.)
 3 THE WITNESS: I think we play more
 4 than that, Your Honor.
 5 CHIEF JUDGE SLEDGE: And where in
 6 your channels is your root music?
 7 THE WITNESS: Root music?
 8 CHIEF JUDGE SLEDGE: Yes, sir.
 9 THE WITNESS: I will have to get
 10 back to Your Honor on root music.
 11 CHIEF JUDGE SLEDGE: It appears to
 12 be a gross deficiency in your programming.
 13 Thank you. We will recess until
 14 one-thirty.
 15 MR. MEYER: Thank you, Your Honor.
 16 (Whereupon, the foregoing matter
 17 went off the record at 12:37 p.m.
 18 and reconvened at 1:31 p.m.)
 19 MR. MEYER: May I proceed, Your
 20 Honor?
 21 CHIEF JUDGE SLEDGE: Please.
 22 BY MR. MEYER:

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1 Q All right. Now, Mr. Logan, first
 2 of all, during the lunch break, have we --
 3 have we confirmed the amount of opera songs
 4 that are played on XM?
 5 A Yes, we have.
 6 Q And how many is that?
 7 A Our VOX channel plays 10,462 opera
 8 songs.
 9 CHIEF JUDGE SLEDGE: Is that the
 10 same thing as a playlist?
 11 THE WITNESS: That's the playlist.
 12 Yes, sir, it is.
 13 CHIEF JUDGE SLEDGE: Thank you.
 14 THE WITNESS: You're welcome, Your
 15 Honor.
 16 BY MR. MEYER:
 17 Q Now, Mr. Logan, I want to talk
 18 again about the value -- the ways in which XM
 19 adds value to music in its programming. And
 20 you refer in paragraph 49 of your direct
 21 written testimony to the fact that, according
 22 to you, recorded music is a commodity that

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1 adds enhanced value through the context in
 2 which XM showcases it and on which our
 3 subscribers experience it. So can you explain
 4 what you meant in that context by "music is a
 5 commodity"?
 6 A What I meant by the term
 7 "commodity" in that context is that music is
 8 predominantly widely available for free,
 9 mostly from AM and FM radio. As our business
 10 has continued to grow, more places and more
 11 outlets are offering music to get for free.
 12 AM/FM radios are in cars, they're in hotels,
 13 and you can turn it on and you can receive
 14 music.
 15 The experience that we often talk
 16 about, and I talk about it in my testimony and
 17 I've talked about today, is all the things
 18 that we do and the investments we make in the
 19 personalities, the staffs, the individual
 20 program directors that would take, you know,
 21 10,000 records for a VOX channel, which is our
 22 opera channel, and make that channel come to

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1 life and describe the meaning of a
2 performance, or whether or not it's George
3 Taylor Morris, who is one of the most
4 acclaimed interviewers who has done over 400
5 interviews for NEC and Westwood One, who will
6 play what we refer to as a deep track of
7 classic rock and talk about what was happening
8 at the time that record was being recorded.

9 So it's the vibrant, lively nature
10 that we bring to life with the context of this
11 commodity, as I called it in my testimony,
12 with music that makes this experience for our
13 subscribers part of the larger XM experience.
14 But that's how we get at the music experience
15 for our subscribers.

16 Q And can you give an example -- I
17 believe you mentioned on your classical
18 channels you have some programmers of some
19 note.

20 A Yes, we have a gentleman by the
21 name of Martin Goldsmith who programs XM
22 classics and who is acclaimed author himself

1 as an example, Your Honor, he is able to
2 provide insight and clarity for somebody who
3 is candidly a novice in classical music, like
4 myself. I can listen to XM classics and gain
5 an appreciation and education from one of
6 America's experts.

7 That's something that I can't do
8 just by listening to Beethoven's Fifth
9 Symphony. I don't understand the meaning or
10 what to listen for or the subtle differences.
11 And these are the type of ways that our
12 personalities, our programmers bring this
13 music to life.

14 Q And in terms of, again, ways in
15 which XM adds value, I think we mentioned
16 earlier the sound quality. Can you just
17 describe briefly what's involved in presenting
18 that superior sound quality that XM presents?

19 A Yes. When we discussed earlier
20 our bandwidth we have, or the finite amount of
21 kilobits we have in order to transmit our
22 audio channels, audio requires different

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1 in terms of writing for The Beatles and
2 classical performances.

3 He hosts many public radio shows
4 prior to joining XM, but he is one of
5 America's leading experts in the classical
6 arena and is often sought out by publications
7 to be cited and quoted, such as Jonathan
8 Schwartz, who, as we discussed earlier, does
9 it for our standards, and, in fact, is a
10 contributing editor and writer for articles in
11 Business Week publication, which appears every
12 week.

13 Q And in what way --

14 CHIEF JUDGE SLEDGE: Mr. Goldsmith
15 was just featured by the National Symphony
16 about two weeks ago in a concert.

17 THE WITNESS: Yes, sir. Yes, he
18 was, Your Honor.

19 BY MR. MEYER:

20 Q In what ways do they add value to
21 the music?

22 A Well, again, using Mr. Goldsmith

1 levels of intensity of bits to be
2 processed/put through. So in the simplest
3 term, you don't need a lot of kilobits to
4 replicate a voice or just merely spoken word
5 content. So you can run channels at a lower
6 bit rate from that perspective.

7 To broadcast something in a
8 classical sense, in order to have an
9 acceptable experience, you need to be able to
10 hear discretely the different sounds of the
11 movement, the ability for a crescendo to go up
12 and down as you listen to a piece of work.

13 The amount of bandwidth that is
14 needed to replicate that at the end user
15 requires more kilobits. And when you deal
16 with records that were recorded in mono, not
17 recorded in stereo, you don't need extra
18 kilobits per se to broadcast that channel in
19 stereo if predominantly the recordings were
20 made in mono.

21 So each individual sonic density,
22 if you will, of channels or the type of music

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1 they play really helps us dictate how many
 2 kilobits we need to allocate per channel.

3 Q Well, I guess what I'm asking is,
 4 what accounts for the higher sound quality of
 5 the music on XM? How do you accomplish that?

6 A There's a proprietary box that we
 7 use exclusively for XM. It's a company called
 8 Neural, and it uses a technology which is
 9 pretty commonplace called Perceptual Codec.
 10 And what it does is it takes a linear piece of
 11 audio, compresses it down, and hides the
 12 effective digital noise.

13 And these boxes -- we call them
 14 Neural Boxes -- are tuned for each channel to
 15 hide different aspects of the noise. These
 16 boxes now have gotten to the point where
 17 they're actually adaptative, meaning they can
 18 look ahead. So as we put songs into the
 19 playlists and have prerecorded content, it
 20 actually can anticipate or look ahead and see
 21 how the subtle -- in essence, in a generic
 22 sense, the bass and treble could change sort

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6/5/2007 HEARING - Parsons, Gary; Logan, Erik; Vendetti, Mark (2006-1)

1 of on the fly, and it's done through these
 2 boxes.

3 Q And, finally, another way in which
 4 XM adds value, there has been some reference
 5 to the term "ubiquitousness." Can you explain
 6 how you understand that and how adds value to
 7 a listener?

8 A Yes. I think that, you know, one
 9 of the things that clearly, you know, in order
 10 to have a national service, this ubiquitous
 11 coverage that we have really is the
 12 underpinning of our value proposition, that a
 13 consumer can travel from market to market and
 14 have this same breadth of depth of choice of
 15 music, sports, talk, comedy, and entertainment
 16 across the spectrum.

17 So often when I refer to the
 18 ubiquitous nature of our content what I'm
 19 talking about is our national footprint and
 20 the ability for a consumer to driver cross
 21 country and not lose our signal.

22 Q Now, are you familiar with data

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1 that shows that time spent listening to music
 2 is considerable?

3 A Yes, I am.

4 Q Okay. And in your view, does that
 5 necessarily mean that music is the reason why
 6 consumers choose to either subscribe to XM or
 7 continue to subscribe to XM?

8 A Well, time spent listening is not
 9 a measurement of how important a particular
 10 piece of content in terms of acquisition or
 11 why somebody comes to your service. We talked
 12 earlier about baseball.

13 So if you use baseball as an
 14 example -- and I think we discussed the Cubs.
 15 If you're a fan of the Chicago Cubs, the
 16 ability to listen to a Cubs game in your car
 17 as you drive around in the D.C. area is one
 18 that, you know, I would buy a radio for. So
 19 when you purchase that for the value
 20 proposition of the Cubs, you go through the
 21 effort of installing the radio, the antenna,
 22 and the cost of the subscription.

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1 However, with a broad portfolio
 2 content that we have, what happens is they
 3 discover -- so there is something else they
 4 need to do with their time while they're on
 5 the network. So what typically happens is
 6 they go on a discovery, and we encourage
 7 people to check out music channels or niche
 8 music or other talk or other sports.

9 So there really isn't a
 10 correlation from my view in terms of how long
 11 somebody would listen to something versus why
 12 they would subscribe for something.

13 Q Okay. Now, just a couple of other
 14 types of programming I want to cover. You
 15 have something called artist-led programming.
 16 Can you explain what that involves?

17 A Sure. Artist-led programming is
 18 really sort of the swim lane or the category
 19 by which we will reach out to many established
 20 artists -- Wynton Marsalis, Bob Dylan, Tom
 21 Petty -- of the sort -- we have a stable of
 22 these, if you will. And these artists and us

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1 work collaboratively to establish a program
2 that they would wish to showcase music that
3 either inspired them or a discussion or a
4 dialogue about a show.

5 The artist-led programs kind of
6 come in a variety of fashions. We have --
7 again, we talked about Dylan. We also have
8 Ludacris, and we have, you know, Winton. But
9 from time to time and very often we're
10 approached by up and coming performers as
11 well, or an individual member of a band or
12 even other established acts who don't want to
13 do a weekly show because of the time and
14 energy it requires.

15 We provide them an opportunity,
16 through a feature we call Off Stage, which
17 allows them to take over a channel of their
18 choice, if you will, and talk about and
19 discuss music that was important to them. So
20 we really have a wide berth, if you will, of
21 opportunity for musicians, in this case for
22 them to showcase their passion for what they

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1 do in a way that they could never do anywhere
2 else.

3 Q Let's take the Bob Dylan Show for
4 example. Can you describe for someone who
5 hasn't heard it what the Bob Dylan Show
6 consists of?

7 A Sure. Bob Dylan sits back and
8 comes together. The name of the show is The
9 Theme Time Hour with Bob Dylan. So Bob will
10 establish a theme, and Bob is a very unique
11 individual and has a unique view on many
12 things.

13 And he will sit back and say,
14 "This season we want to discuss" -- I'll give
15 you examples of last season -- coffee. So he
16 will spend an hour talking about his
17 interaction about coffee, music that has
18 coffee in it, and just dialogue about coffee
19 or questions that he puts on his website that
20 people interact to about it.

21 Around the launch of the baseball
22 season he did one about baseball. He's very

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1 passionate about baseball. And I think in my
2 testimony I discuss this, that he actually sat
3 down and recorded, you know, just live in his
4 studio when he was cutting his show, Take Me
5 Out to the Ballgame, in a very Bob Dylanesque
6 presentation, which was unique.

7 And then, it was -- it was
8 actually accepted by the National Baseball
9 Hall of Fame, and is actually in the Hall of
10 Fame now. So it's a very unique point of view
11 from Bob that you can only get on XM.

12 Q Now -- yes.

13 CHIEF JUDGE SLEDGE: Excuse me.
14 Who translates what he says in --

15 (Laughter.)

16 THE WITNESS: That's a great
17 question, Your Honor. Luckily, believe it or
18 not -- a true story -- Bob Dylan, his -- he
19 actually is more articulate today than he used
20 to be 10 or 15 years ago.

21 (Laughter.)

22 He actually listens to old

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1 interviews of himself and he doesn't even
2 remember or understand what he says. But it
3 is a fascinating show.

4 CHIEF JUDGE SLEDGE: I can't
5 imagine listening to Bob Dylan talk. I just -
6 -

7 (Laughter.)

8 BY MR. MEYER:

9 Q Well, notwithstanding Chief Judge
10 Sledge's reluctance, is it, in fact, a popular
11 show?

12 A It's a very popular show. Yes, it
13 is.

14 Q And you pay Bob Dylan a certain
15 amount of money to do this, correct?

16 A Yes, we do.

17 Q Now, this channel, it seems to me,
18 would be a good example. Bob Dylan plays
19 sound recordings, correct?

20 A Yes, he does.

21 Q And very often they are -- I've
22 heard his show. Very often they are obscure,

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1 old, old blues, folk, bluegrass songs.
 2 A Yes. I think -- you know, we have
 3 -- I have testified to the fact that we have
 4 somewhere over two and a half million sound
 5 recordings, you know, in that Dalet system
 6 that we discussed earlier. And one of the
 7 things we do, when artists come by, we have
 8 them, say, name a song -- I bet we can find it
 9 and we have it -- of our vast library for our
 10 programmers to play.

11 When Bob Dylan sends us his
 12 songsheet, we regularly don't have anything
 13 and we have no clue what he's talking about,
 14 and we have actually had to go find these
 15 music pieces to put in there. And it still
 16 happens. As we're doing his fall season now,
 17 he is sending us lists of songs, and I've got
 18 some of the most experienced people in music
 19 in my department and we all sit in a room and
 20 look at each other and go, "Nobody has ever
 21 heard of that song before." Sure enough, it
 22 exists, but we have to find it.

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1 Q All right. Now, but here's my
 2 point. If you just played those songs on a
 3 channel, do you think anyone would listen to
 4 it?

5 A Highly doubtful.

6 Q Okay. The fact that Bob Dylan has
 7 selected those songs and is commenting on
 8 those songs and presenting those songs as
 9 something that he presumably thinks influenced
 10 him or has value, does that add value to the
 11 sound recordings?

12 A That is the only reason why people
 13 would listen to that selection of content is
 14 because it's from Bob's point of view.

15 Q Okay. All right. Now, let's just
 16 briefly touch on a subject we haven't talked
 17 about, which is live music. Now, here we're
 18 not talking about playing sound recordings at
 19 all, right? We're not talking about playing
 20 prerecorded music, correct?

21 A Correct.

22 Q And does XM have a significant

1 amount of live music that they play?

2 A Yes. It's one of the things that
 3 we believe we can bring to our fans for
 4 retention and also hopefully attract people is
 5 to showcase what we feel is a lost art, which
 6 is live performance, live music, and the
 7 ability for people to hear their favorite
 8 musician perform in that setting.

9 Q Okay. And give us some examples
 10 of the different live music series that you
 11 have.

12 A Well, we have a series that is
 13 Live from B.B. King's, where we installed
 14 equipment at our expense and we record
 15 professionally performances from anybody who
 16 travels through B.B. King's in New York.

17 We have a -- we will collect live
 18 recordings of performances from a festival
 19 that -- it would be coming up called Bonaroo,
 20 which happens in Nashville, just outside of
 21 Nashville, and it's a very progressive rock,
 22 sort of underground ND fare.

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1 We often travel at our expense to
 2 Austin City Limits in Austin for South by
 3 Southwest, and we record multiple stages there
 4 and we'll take that and showcase that. So we
 5 broadcast last year, for example, two years
 6 ago -- excuse me -- Live Eight, which was the
 7 concert that benefitted Africa, and we
 8 dedicated a channel for every country.

9 We are a partner with Live Earth,
 10 which is coming up on July 7th. And every
 11 single performance that's going to happen in
 12 real time, from all around the world for this
 13 global event, will have its own channel. So
 14 it's a unique way that we can take our
 15 subscribers and have them experience live
 16 music in a multitude of fashions.

17 Q And you have artists who come into
 18 your studios and perform live?

19 A Yes. We have a series of original
 20 programming where we will have -- like, for
 21 example, we'll talk about Artists
 22 Confidential, where they will actually come in

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1 and sit down for an hour, and this is our
2 marque original programming show that is
3 hosted by one of our premier personalities,
4 George Taylor Morris, as we discussed.

5 And we will have artists such as
6 Phil Collins, Paul McCartney, classical
7 artists even, Chili Bartoli, Josh Groban,
8 we've had a variety of artists from all walks,
9 sit down, and we do a long form 60-minute
10 interview, and they perform live in front of
11 a live studio audience at our performance
12 theater here in D.C., or at a performance
13 theater in New York City.

14 We also have another recordings
15 facility in our building where artists can
16 come in for one of our regular features on the
17 channel called The Loft. And it's called Loft
18 Sessions. And they will come in with a
19 guitar, and it's a singer or songwriter, and
20 they will perform for us live in the studio.

21 So there are many, many
22 opportunities for us to showcase live music,

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1 and it is something that we feel very
2 passionate about.

3 Q Now, who pays for this live music?

4 A Predominantly, nobody pays for it.
5 I mean, the artists come to us, and we do it
6 and give them exposure and the ability to
7 promote their music. We had in the early days
8 of XM -- and when I say "early days" talking
9 about my tenure about three years ago, a
10 little over three years ago -- we had to pay
11 some artists, because we were still a very
12 small industry. We are today, but we were
13 even smaller then.

14 To get an artist to come by, they
15 wanted to be paid for it. But quickly many of
16 the artists have seen that as the company has
17 grown, and as the influence of exposure and
18 our penetration and over eight million
19 subscribers, they see a value to coming to us
20 and donating their time, giving the time, in
21 return for us broadcasting or promoting or
22 talking about whatever performance that they

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1 have.

2 Q Which leads conveniently to my
3 final subject area, which is the subject of
4 promotion versus substitution. Now, based on
5 your experience and your work as the head of
6 programming at XM, is it your belief that the
7 XM service overall causes people to buy fewer
8 CDs than they otherwise would?

9 A No, sir.

10 Q Okay. Is it your view that, in
11 fact, the XM service leads to people buying
12 more CDs?

13 A That is my experience.

14 Q Okay. And can you explain what
15 your basis is for saying that?

16 A With over, you know, again, as we
17 said, 100 people just specifically in the
18 music area who program or interact with the
19 major record companies, but probably more
20 importantly a lot of the independent labels
21 and smaller labels across the country, we see
22 e-mails, have dialogue with artists,

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1 musicians, record labels, who thank us for
2 playing music they cannot get aired in the
3 terrestrial market because of the
4 consolidation, the limited choice available in
5 AM and FM.

6 As a result of that exposure, they
7 see -- and they have told us that they have
8 seen an increase in people coming to the
9 concerts, and they have also seen an increase
10 in people purchasing their CDs.

11 I have also seen that from the
12 other end with our consumers who come and join
13 the network for a particular generic reason,
14 whether or not it was in their car or Oprah
15 Winfrey or baseball, and said, "Well, I was
16 playing around with my dial, and I discovered
17 this reggae channel, and I had no idea that
18 reggae was so popular. Thanks for introducing
19 me to it. My new favorite artist is X, so I
20 just bought his CD. Thank you."

21 And I have some examples I think
22 that I submitted in my testimony to that

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1 effect. But that's what we see on a very
2 frequent and regular basis.

3 Q Okay. Now, is that -- can you
4 just direct the Panel's attention to where in
5 your direct -- is that Exhibits 22 and 23?

6 A Yes, let me -- give me a moment,
7 sir. So under Exhibit 22, these are e-mails,
8 it looks, from members. The first e-mail is -
9 - I think this is from a label. I apologize,
10 I can't see who it is. You know, the quote
11 out of this, for example, "Also, just to let
12 you know the power of XM, since we do not get
13 a lot of smooth jazz airplay from those other
14 guys, I saw how XM was able to sell product,"
15 and it quotes the artist and number of units.

16 And as you thumb through this,
17 that's the theme that appears through here.
18 And this is the type of frequent communication
19 and dialogue we'll have with members of the
20 record community. And when I use the term
21 "record community" I'm referring to the
22 musicians themselves, the artists themselves,

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1 and also the labels and the managers.

2 Q Now, I'm not sure it has been
3 described yet, the XM satellite radio service
4 actually displays information on the front of
5 the panel, doesn't it?

6 A Correct.

7 Q Okay. And what information is
8 displayed?

9 A Well, with all of our programming,
10 not just specifically music, but with all of
11 our programming we do something that's called
12 PAD, and it stands for Program Associated
13 Data. And it's a labeling mechanism that we
14 have that allows our consumers to in real time
15 know exactly what they're hearing.

16 So in the music case, what it does
17 is always display the artist and title of what
18 song is currently on the air on that
19 particular channel. We see that that is a --
20 we see that that's something very valuable
21 that we provide our subscribers. And in my
22 experience prior to joining XM, when I was

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1 programming terrestrial radio stations and
2 running companies of such programming, one of
3 the complaints among many in terms of
4 commercialization and also type playlists has
5 been when something new does come on the air,
6 the talent never tell you who it is, and they
7 never identify it.

8 And through our technology and
9 through our infrastructure and our signal, we
10 have the ability to close that gap. And so
11 for every artist that we play for the first
12 time on the air, no matter who it is, they can
13 look down and see exactly what it is, and go,
14 "Wow, I love that song. I wonder who it was."
15 We're able to close that loop for a consumer,
16 which is very powerful.

17 Q Now, with respect to, again, the
18 promotional value, I believe it was Judge
19 Roberts who asked Mr. Parsons -- you weren't
20 here, Mr. Logan -- but there was a question
21 about the statement that we had some -- we
22 played some Lowe and Billboard's lists of top

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1 hits. Can you explain, please, to the Judges
2 how that works?

3 A Sure. The Billboard's charts --
4 JUDGE ROBERTS: Mr. Logan, I'll --
5 since Mr. Meyer brought that up, I'll read you
6 the sentence. This appears in your boss'
7 testimony.

8 THE WITNESS: Okay.

9 JUDGE ROBERTS: It says, "As a
10 result, support from XM has a significant
11 impact on whether a record can reach number
12 one on the charts."

13 THE WITNESS: Okay.

14 MR. MEYER: And for the record,
15 Judge Roberts, that's also in Mr. Logan's
16 direct testimony at paragraph 79 on page 30.

17 JUDGE ROBERTS: Thank you.

18 THE WITNESS: So what is meant by
19 that statement, Your Honor, is out of -- using
20 country as an example, just for -- it's my
21 background. So there is over 2,000 radio
22 stations across the country that play country

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1 music in some form or fashion.
 2 The Billboard chart or most charts
 3 have moved to what is referred to as a spin
 4 count, where through technology such as BDS
 5 and Media Base, which actually count the
 6 number of times a record is played on a
 7 particular radio station, it will then say if
 8 record A has 300 plays, record B has 290, that
 9 record A would be higher on the charts than
 10 the record B.

11 In the case where the spin totals
 12 go down week over week, it would lose its
 13 bullet or its positive momentum. Recently, a
 14 number of XM's channels had been selected to
 15 participate in this very exclusive panel by
 16 genre. So in country's case, as we're
 17 talking, Highway 16, which is our top country
 18 hits channel that we have, has been selected
 19 to participate in a panel somewhere between
 20 150 to 200.

21 So if we represent a portion of
 22 that and it's needed for us to play, let's

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1 say, 100 plays a week for a particular record,
 2 if we -- we're not to play that record, that
 3 100 plays would have to be reallocated across
 4 the rest of the panel in order for it to
 5 maintain its number to get to number one.

6 So what -- the real message in
 7 there, in my opinion, is that in the early
 8 days of our business we were looked at as just
 9 a true nascent industry. The record companies
 10 and the publishers and the charts are ow
 11 looking at our channels as very influential
 12 and very powerful ways of measuring what the
 13 popularity of some of these records are, and
 14 so it's a big statement from an industry point
 15 of view for us to be selected to be on this
 16 panel.

17 JUDGE ROBERTS: Who put this panel
 18 together?

19 THE WITNESS: The panel is
 20 comprised of -- there was two, and through the
 21 merger I think Billboard is the surviving one,
 22 so excuse me if I don't have the precise

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1 answer. But Radio and Records and Billboard
 2 are the two primary charts for most genres.

3 And the chart editors of each
 4 genre for those charts actually determine who
 5 will participate on those panels.

6 JUDGE ROBERTS: Thank you.

7 BY MR. MEYER:

8 Q And Radio and Records is what?

9 A Radio and Records is a trade
 10 publication that recently went through a
 11 merger with Billboard.

12 Q Okay. All right. Mr. Logan, let
 13 me just ask you actually one more -- one more
 14 thing about promotion. Does XM give the
 15 ability for new artists who are either on
 16 independent labels or were not signed to any
 17 record label to have a vehicle to present
 18 their music to the public?

19 A Yes. We have a channel called
 20 XMU, which is our ND music channel, and it has
 21 big blocks of what we refer to as unsigned
 22 blocks, where people will come to us and bring

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1 us unsigned material for us to play.

2 Our Program Director, Billy Zero
 3 is his name, will receive those mail crates,
 4 like four at a time each week, just the brown
 5 wrappers of guys who sit in garages and small
 6 independent labels and ask us to play their
 7 music. He will have -- you know, he will
 8 have, candidly, you know, 400 to 500 records
 9 over the course of a two- to three-week period
 10 that he has to listen to and evaluate to put
 11 into his rotation.

12 In addition to that, you know, it
 13 really is a statement for us to be able to
 14 take these acts and become very involved with
 15 them in a very nascent part of their career
 16 and watch them flourish.

17 And in my testimony I give some
 18 examples of people who we've given exposure
 19 to, such as Jennifer Nettles of Sugarland, or
 20 Morningstar, or some of these other bands
 21 along the way, that we played them before they
 22 had major record deals. And we are very

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1 involved in helping them promote their tours,
2 because, really, that's their primary source
3 of income in the early days, because they
4 don't have record sales yet. So we expose
5 them and provide that avenue for up and coming
6 and independent artists.

7 Q One last question. I believe you
8 said earlier in your testimony that you had a
9 library of some millions of songs?

10 A Yes, sir.

11 Q And where did you get the sound
12 recordings?

13 A Well, most of the sound recordings
14 -- I mean, to be honest with you, I'm not
15 really sure is the answer. I don't know.

16 Q Do you get sound recordings given
17 to you for free by the record labels?

18 A As a part of standard practice
19 today, the record companies will provide us
20 copies of current and new releases as they
21 become available.

22 MR. MEYER: Okay. All right. I

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1 have no further questions. Thank you.

2 CHIEF JUDGE SLEDGE: Mr. Joseph,
3 any questions?

4 MR. JOSEPH: No questions, Your
5 Honor.

6 CHIEF JUDGE SLEDGE: Any questions
7 by Music Choice?

8 MR. FAKLER: No questions.

9 CHIEF JUDGE SLEDGE: Any cross by
10 SoundExchange?

11 MR. HANDZO: Yes, sir.

12 CROSS EXAMINATION

13 BY MR. HANDZO:

14 Q Good afternoon, Mr. Logan. Mr.
15 Logan, in your written direct testimony, on
16 page 2, you say that non-music channels play
17 a major role in reporting -- in promoting
18 subscriber acquisition. Do you recall that?

19 A Yes, sir.

20 Q Now, XM conducts survey research
21 to try and figure out what sort of content
22 will bring in new subscribers, doesn't it?

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1 A Yes, sir.

2 Q Okay. And you see the results of
3 that survey research, don't you?

4 A Not generally all of it. There's
5 a lot of research that happens at our company,
6 and I don't see the majority of it. I see
7 things that could pertain to me, but I'm not
8 included in the Research Department.

9 Q Okay. But you do see some of it?

10 A I do see some of it, yes.

11 Q Okay. Let me show you what we've
12 marked as SoundExchange Trial Exhibit 6.

13 (Whereupon, the above-referred to
14 document was marked as SX Exhibit
15 No. 6 for identification.)

16 A Okay.

17 Q Okay. Have you seen that document
18 before?

19 A I have not seen the entire
20 document, but recently I have become familiar
21 with the document through this litigation.

22 Q Okay. Let me ask you to flip to -

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1 - it actually says it's page 1 of the
2 document, but it's the second page of your
3 exhibit.

4 A Okay.

5 Q First of all, when you get survey
6 research results, does it sometimes come, do
7 you get it in sort of different ways? In
8 other words, you might not have seen this
9 actual document, but you might have seen some
10 parts of it?

11 A Yes, that's very common.

12 Q Okay. So looking at the second
13 page of this document, have you seen this
14 slide before?

15 A I might have.

16 Q Okay. And this slide indicates,
17 does it not, among other things, that
18 "diversity of music and music offerings is the
19 most highly rated advantage among all
20 potential segments," do you see that?

21 A Yes, I do.

22 Q So that is information from your

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1 Research Department, that actually the most
2 important content for attracting new
3 subscribers is music?

4 A Well, I -- it says "highly rated."
5 I don't know what it's rated against.

6 Q Okay. It says it is the most
7 highly rated, does it not?

8 A Yes. But, again, I'm sorry, I
9 apologize, I don't know what -- the context of
10 what they mean by "highly rated."

11 Q Just on its face, this would
12 suggest to you that music is the most
13 important for attracting new customers?

14 A Again, it's hard for me to say
15 that music is the most important. This says
16 "most highly rated advantage," and I don't
17 really understand what "most highly rated
18 advantage" means.

19 Q Were you aware of this slide at
20 the time that you wrote your written
21 testimony?

22 A I do not think I was.

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1 Q So when you wrote your testimony
2 and you expressed the opinions that you gave
3 there, you were not aware of this information,
4 is that right?

5 MR. MEYER: I would object to the
6 question, Your Honor. Asked and answered.

7 CHIEF JUDGE SLEDGE: Overruled.

8 THE WITNESS: Could you repeat the
9 question?

10 BY MR. HANDZO:

11 Q Sure. At the time you wrote your
12 written testimony and you expressed the
13 opinions that you gave there, you weren't
14 aware of the information that's contained on
15 the second page of this exhibit. Is that
16 correct?

17 A Well, I thought you were asking me
18 -- I apologize -- about the highly rated
19 advantage. But let me read the rest of the
20 page. Generally, I'm aware that the pool of
21 prospects is not growing as fast as it should.
22 I was generally aware of that fact when I

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1 wrote my testimony. So there are facts in
2 there that I was generally aware of, yes.

3 Q Okay. Were you aware of the fact
4 that, according to your research people,
5 diversity of music and music offerings are the
6 most highly rated advantage among all
7 potential segments?

8 A No, because I don't really know
9 what the segments are, to be honest.

10 Q And were you aware of the findings
11 by -- aware at the time you wrote your written
12 testimony of the findings by your marketing --
13 or by your research people that sports
14 programming has less or more narrow appeal?

15 A I don't think I was knowledgeable
16 of that fact, that less or narrow appeal.

17 Q So, again, it's fair to say that
18 you did not take either of those facts into
19 account when you wrote your testimony?

20 A When I wrote my testimony, I
21 talked about the XM experience, and as the
22 head of programming how I approach that

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1 experience and how I create this place for us
2 to try to generate value for somebody to pay
3 \$12.95 a month. And I take all of my
4 experience as a programmer historically, and
5 the data that I know, into that consideration.

6 Q Okay. I take that, then, as a no,
7 you were not aware of these statements when
8 you wrote your testimony.

9 A I was not aware of these specific
10 statements when I wrote my testimony.

11 Q Okay.

12 MR. HANDZO: Your Honor, I'm going
13 to move Exhibit -- is it 6? Okay. I'm going
14 to move Exhibit 6 into evidence, and I'm just
15 going to anticipate an objection that this
16 witness says he didn't see the particular
17 slide that I was talking about. But --

18 MR. MEYER: Well, I have a
19 different objection.

20 MR. HANDZO: Okay.

21 MR. MEYER: If I'm allowed to
22 articulate it.

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1 MR. HANDZO: Well, that's fine.
2 Why don't I hear the objection before I
3 respond to it.

4 (Laughter.)

5 That's probably the better way to
6 go.

7 MR. MEYER: You're a good lawyer,
8 but I haven't hired you to be my lawyer.
9 Actually, the problem is more fundamental,
10 which is they have laid no foundation
11 whatsoever as to who created this document,
12 where it comes from, how the research was
13 done, and what it represents.

14 MR. HANDZO: Well, Your Honor, it
15 comes from XM, because it's got an XM Bates
16 Number on it. So it is -- I think the record
17 establishes authentic as an XM document. And
18 I think in terms of its findings, the document
19 speaks for itself in terms of what it says.

20 But the relevance of the document
21 is to show what this witness knew or didn't
22 know at the time that he wrote his testimony.

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1 And for that purpose, I certainly think it is
2 admissible.

3 CHIEF JUDGE SLEDGE: You hadn't
4 addressed foundation. The foundation
5 objection is sustained.

6 BY MR. HANDZO:

7 Q Mr. Logan, do you receive
8 documents from your XM Research Department in
9 this format?

10 A I occasionally get them in this
11 format. I sometimes get excerpts or an e-mail
12 that may have a bullet point or two. But I
13 don't have a structured, formal way that they
14 present them.

15 Q Okay. But does this appear to you
16 to be a document created by XM?

17 A Yes, it does.

18 Q And a document created by XM's
19 Research Department?

20 A Without it saying it on there, to
21 be honest, I can't say that it does. But it
22 does look like it came from XM.

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1 Q Okay. And in your experience at
2 XM, this would probably have come from the
3 Research Department?

4 A Yes, it would.

5 Q Okay. And your Research
6 Department regularly creates documents like
7 this?

8 A Yes, it does.

9 MR. HANDZO: Okay. Your Honor,
10 with that further foundation, I would offer
11 Exhibit 6.

12 CHIEF JUDGE SLEDGE: Any
13 objection?

14 MR. MEYER: Yes, I would renew my
15 objection, Your Honor. I don't think that
16 goes far enough to establish, again, who did
17 it, what it is. The fact that it -- we can
18 stipulate we produced it. It has an XM
19 sticker on it, so it was probably produced by
20 someone at XM. But without any further
21 foundation, I think that adequate foundation
22 still hasn't been laid to admit it.

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1 CHIEF JUDGE SLEDGE: Objection is
2 overruled. Exhibit 6 is admitted.

3 (Whereupon, the above-referred to
4 document, previously marked as
5 SX Exhibit No. 6 for
6 identification, was admitted into
7 evidence.)

8 BY MR. HANDZO:

9 Q Mr. Logan, I've handed you what
10 we've marked as Exhibit 7, which for the
11 record has a cover page which says XM
12 Satellite Radio Messaging Study. Have you
13 seen that document before?

14 (Whereupon, the above-referred to
15 document was marked as SX Exhibit
16 No. 7 for identification.)

17 A Again, I have become familiar with
18 it as part of this litigation.

19 Q And this is a document created by
20 XM?

21 A I think it was published by XM,
22 but I see Data Development Worldwide in the

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1 bottom left-hand corner, and I don't know who
2 that is.

3 Q When you say it was published by
4 XM, what do you mean?

5 A I assume, as we discussed earlier,
6 it came from XM. There's an XM logo on it, so
7 either it was prepared by us or distributed by
8 us or prepared for us. I don't know. I can't
9 speak to who made it or what -- I just see --
10 when it says Data Development Worldwide, I
11 don't know who that is.

12 Q Okay. This comes from the files
13 of XM, right?

14 A I assume so.

15 Q Okay. And XM sometimes uses third
16 parties to conduct survey research for it?

17 A Yes, it does.

18 Q That's common, is it not?

19 A Yes, it is.

20 Q So it would not be unusual for you
21 to receive, in the ordinary course of
22 business, a survey research circulated within

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1 XM that was performed by -- for XM by other
2 parties?

3 A Again, it just depends on the type
4 of research that it is. I had not seen this
5 study in totality prior to the litigation.

6 Q Okay. And so the information that
7 is contained -- well, actually, let me ask
8 that question later. Let me ask you to turn
9 to page 6 if you would. Now, I think you
10 indicated just a minute ago that you have seen
11 this document prior to today, right?

12 A Recently, correct.

13 Q Yes. And do you understand this
14 to be a study of what kinds of advertising
15 messages appeal to potential consumers?

16 MR. MEYER: If I can just object,
17 Your Honor. He testimony was he had seen it
18 in the context of the litigation. In other
19 words, in being deposed, in preparing for
20 testimony. He has not testified -- he has not
21 laid a foundation that the witness has
22 otherwise seen it or is familiar with it.

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1 CHIEF JUDGE SLEDGE: And that is
2 an objection to that last question?

3 MR. MEYER: Well, I think he
4 mischaracterized the witness' testimony is the
5 objection. He said he had testified that he -
6 - you've seen this before.

7 CHIEF JUDGE SLEDGE: And he said
8 he had.

9 MR. MEYER: Well, I think earlier
10 he said --

11 CHIEF JUDGE SLEDGE: The objection
12 is overruled.

13 THE WITNESS: I'm sorry. Could
14 you repeat the question?

15 BY MR. HANDZO:

16 Q Sure. Based on your prior review
17 of this document, do you understand this to be
18 research to determine what kinds of
19 advertising messages would appeal to potential
20 subscribers of XM?

21 A Yes.

22 Q Okay. And looking at page 6, it

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1 is correct, is it not, that the two messages
2 which appear to resonate especially well with
3 potential XM customers were 100 percent
4 moneyback guarantee and 100 percent
5 commercial-free music?

6 MR. MEYER: Your Honor, I
7 apologize. Objection.

8 CHIEF JUDGE SLEDGE: Objection
9 sustained.

10 THE WITNESS: Would you repeat the
11 question again?

12 CHIEF JUDGE SLEDGE: It was
13 sustained.

14 THE WITNESS: Oh. Thank you.
15 (Laughter.)

16 BY MR. HANDZO:

17 Q Mr. Logan, do you understand that
18 the finding of this survey was that
19 commercial-free music was one of the best
20 advertising messages XM has?

21 MR. MEYER: Your Honor, and,
22 really, I don't intend to be obstructive at

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1 all, I think part of the problem is that Mr.
2 Handzo in his cross examinations has adopted
3 a practice of reading from the documents or
4 conveying the contents before and without
5 actually offering them into evidence.

6 It should be the fact that you
7 cannot read from a document that is not in
8 evidence. And if he offers the document into
9 evidence, then I'll object to it. But I think
10 to try and get around my objection to its
11 admissibility by reading from it without
12 offering it is not proper. So that's the
13 basis for my objection.

14 CHIEF JUDGE SLEDGE: Objection of
15 reading from a document before it's admitted
16 into evidence.

17 MR. MEYER: Yes, Your Honor.

18 CHIEF JUDGE SLEDGE: Objection is
19 overruled.

20 BY MR. HANDZO:

21 Q Do you recall the question, Mr.
22 Logan, or --

1 paper says. I have not ready this survey.
2 That's what it says.

3 Q Okay. And it is true, is it not,
4 that XM tested other messages besides this?

5 A Again, I have not read it. I
6 would assume that we did, but I don't really
7 know.

8 Q Okay.

9 CHIEF JUDGE SLEDGE: You can't ask
10 him to read something that he is not familiar
11 with and give you an answer of what he is
12 reading. That objection has not been made,
13 but I will sustain it.

14 MR. HANDZO: Your Honor, I am
15 going to move Exhibit 7 into evidence. I
16 think he has established a foundation for it
17 with respect to the fact that it came from XM
18 and was created within XM, perhaps relying on
19 third parties, but it is an XM document
20 created in the ordinary course of business.

21 CHIEF JUDGE SLEDGE: Any objection
22 to Exhibit 7?

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1 A If you could repeat it. I'm
2 sorry.

3 Q Is it your understanding that the
4 finding of this survey was that one of the
5 best advertising messages XM had is
6 advertising 100 percent commercial-free music?

7 CHIEF JUDGE SLEDGE: If you have
8 an understanding.

9 THE WITNESS: I do have an
10 understanding.

11 BY MR. HANDZO:

12 Q Okay. And what is that
13 understanding?

14 A That that message does resonate,
15 among others. That that is a powerful
16 marketing tool, such as a moneyback guarantee,
17 our signal, on many other things.

18 Q Okay. And do you understand from
19 this survey that 100 percent commercial-free
20 music and 100 percent moneyback guarantee were
21 the two best messages?

22 A Again, I'm just going by what the

1 MR. MEYER: Yes, Your Honor. I
2 will object. I don't think the foundation has
3 been laid. In addition, I want to call the
4 Court's attention to Section 351.10 of what I
5 understand to be the governing rules of this
6 proceeding, which says, among other things, no
7 evidence, including exhibits, may be submitted
8 without a sponsoring witness, except for good
9 cause shown. And in this case, since the
10 witness has testified he is not familiar with
11 it, I don't think we have a sponsoring
12 witness.

13 CHIEF JUDGE SLEDGE: Mr. Handzo?

14 MR. HANDZO: Your Honor, I think
15 he is a sponsoring witness in the sense that
16 he is able to authenticate the document, and
17 that's to show us that it is what it purports
18 to be. And to that extent, I think he
19 qualifies as a sponsoring witness under that
20 regulation.

21 CHIEF JUDGE SLEDGE: The Court has
22 heard his testimony very differently than you.

226

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1 The witness has not authenticated the
2 document. The objection is sustained.
3 BY MR. HANDZO:
4 Q Mr. Logan, I'm showing you what
5 we've marked as XM Exhibit Number 8. The
6 front page says XM Research NASCAR Survey.
7 Have you seen this document before?
8 (Whereupon, the above-referred to
9 document was marked as SX Exhibit
10 No. 8 for identification.)
11 A Yes, I have.
12 Q Okay. And did you receive it in
13 the ordinary course of business?
14 A This document, yes, I did.
15 Q Okay. And this document contains
16 focus group research by XM, is that right?
17 A I believe that is correct.
18 Q Was that conducted by XM's
19 Research Department?
20 A Give me one moment, please. To be
21 clear, I think this is a combination study
22 that actually utilizes aided methodology as

229

1 indicated on page 2, and then there is a focus
2 group summary, which was a second I think
3 subset of this. So this deck actually
4 comprises two different types, I believe, if
5 I'm reading it correctly.
6 Q Do you recall when you received
7 this document?
8 A I would have to defer to the date,
9 November '06. That's probably about the time
10 I got it.
11 Q Okay. And at the time, was XM
12 negotiating with NASCAR?
13 A At this time, no, we were not.
14 Q Did XM carry NASCAR content at the
15 time this document was prepared?
16 A At the time this document was
17 prepared, we were winding up, we were
18 completely our coverage, or had just been
19 completed of -- our coverage of NASCAR.
20 Q Okay. So you had had NASCAR up to
21 that point or close to that point?
22 A Correct.

230

1 Q And the focus group portion of the
2 study looked at people who were NASCAR fans,
3 right?
4 A I'm just going by what it says,
5 sir. But, yes --
6 Q Okay.
7 A -- it appears so.
8 MR. HANDZO: I'll just go ahead
9 right now and move this document into
10 evidence, Your Honor.
11 CHIEF JUDGE SLEDGE: Any objection
12 to Exhibit 8?
13 MR. MEYER: No objection, Your
14 Honor, except to request that this document be
15 put on the restricted record, and, in
16 addition, the last exhibit admitted, which was
17 SoundExchange Trial Exhibit 6. And I'm happy
18 to address the reasons, if Your Honor would
19 wish to hear them.
20 CHIEF JUDGE SLEDGE: The last
21 document was Exhibit 7, you're referring to?
22 MR. MEYER: Was 7 the one that did

231

1 not get in? Exhibit 7 was not admitted, Your
2 Honor, so I mean the last one that was
3 admitted, which was Exhibit 6.
4 CHIEF JUDGE SLEDGE: We're not
5 dealing with that one at this time.
6 MR. MEYER: Okay. Well --
7 CHIEF JUDGE SLEDGE: All right.
8 Without objection, Exhibit 8 is admitted.
9 Proceed on your motion.
10 (Whereupon, the above-referred to
11 document, previously marked as
12 SX Exhibit No. 8 for
13 identification, was admitted into
14 evidence.)
15 MR. MEYER: Your Honor, this
16 reflects marketing research, and, again, I
17 think as with respect to any marketing
18 research, it is by its very nature
19 proprietary, particularly vis-a-vis
20 competitors like Sirius.
21 Certainly, you know, Coke and
22 Pepsi do marketing research all the time

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1 trying to gauge the sentiments, the likes, the
2 dislikes, and the demographics of their
3 customers. And, certainly, neither would want
4 the other competitor to see that information.
5 It's extremely competitively sensitive, which
6 I'm sure Mr. Logan can confirm, if Your Honor
7 should wish to hear testimony.

8 (Pause.)

9 CHIEF JUDGE SLEDGE: Mr. Meyer,
10 hearing your comments about the
11 confidentiality of information like this
12 reminds me of the fairy tale of The Emperor
13 has No Clothes, of how people persuade
14 themselves that things are important and
15 protected and secret. Without objection, the
16 motion is granted.

17 BY MR. HANDZO:

18 Q Mr. Logan, looking at page 12 of
19 Exhibit 8, this indicates, does it not, that
20 the focus group study found that diversity of
21 music is the primary reason participants
22 report getting XM?

233

1 A This is what the slide says, but
2 there's actually -- I'd like to explain, if I
3 could.

4 Q I expect you might get a chance on
5 redirect.

6 A Sure.

7 Q And when they talk about the
8 participants here, they're talking about focus
9 group study members who were NASCAR fans,
10 right?

11 A The point that I was going to make
12 prior to that was the fact that --

13 Q Well, I think --

14 A -- early in the document it's not
15 NASCAR fans, it's passive, not who were NASCAR
16 fans. There was a difference in who it was.

17 Q Okay. They are NASCAR fans?

18 A Generally, yes.

19 Q Mr. Logan, I'm going to show you
20 what we marked as Trial Exhibit 1 this
21 morning.

22 CHIEF JUDGE SLEDGE: Let's clear

234

1 up the record. Mr. Handzo introduced -- begin
2 with Exhibit 8 being XM Exhibit 8, and that is
3 SoundExchange Exhibit 8 rather than XM
4 Exhibit 8.

5 MR. HANDZO: I am sorry, Your
6 Honor.

7 BY MR. HANDZO:

8 Q Mr. Logan, looking at
9 SoundExchange Trial Exhibit 1, have you seen
10 this document before?

11 A I've seen this document in
12 connection with this litigation, but prior to
13 that I have not seen this entire document, no.

14 Q Is this a document produced by XM?

15 A It looks like it would be, yes.

16 Q Let me ask you to look at page 2.
17 Have you seen the information that's conveyed
18 on this page before?

19 A Yes, I'm familiar with parts of
20 it.

21 Q Are you familiar with the part of
22 it that's reflected in the second bullet

235

1 point?

2 A My only question is that I don't
3 understand what it means when it talks about
4 programming genre. We typically don't look at
5 music programming as a programming genre. So
6 without understanding what the roll-up date is
7 behind this, I don't understand what that word
8 means in this context.

9 Q You just talked about the roll-up
10 date. What do you mean by that?

11 A Well, what I mean by "roll-up
12 date," it's like there's probably a lot of
13 data behind that sentence that justifies that
14 point. And I assume that that's probably
15 what's through here. And without actually
16 going through it, I -- I don't know how
17 they're defining that word "genre" is my
18 point.

19 Q Okay. But has the information
20 that appears in the second bullet point been
21 conveyed to you in the course of business in
22 some fashion?

236

1 A Yes. I mean, I think -- I think
2 I've stated and continue to state, you know,
3 the music and music experience as we call it
4 is an important part of what we do.

5 Q Okay. And this indicates that
6 music programming is the most important part.
7 Has that information been conveyed to you?

8 A Again, I mean, I -- the most
9 important part, has that been conveyed to me?
10 No. I mean, is it part of our service and
11 what we do? Yes, it's an important part. But
12 without knowing what it means in the context
13 of this study, I don't see a data. I
14 apologize, I don't know when this study was
15 done. I don't have any clarity as to what
16 that specific sentence means.

17 Q Okay. So I take it that you did
18 not have this available to you when you wrote
19 your written testimony in this case?

20 A This document? No, sir.

21 Q Okay. Let me ask you to turn to
22 page 24. Have you seen that data previously?

1 about the importance of all of these, yes.

2 Q Okay. And has the data that
3 you've seen been consistent with this data
4 with respect to the fact that music
5 programming is the most important type of
6 programming for subscribers?

7 A My experience in seeing all of the
8 data that I see, you know, the segments of it,
9 I've seen data where it shows that aspects of
10 music programming like Bob Dylan is more
11 important than certain things, and I've seen
12 a variety of data that would show equality,
13 show in some regards the importance of traffic
14 and weather more important than others.

15 But I have seen -- I have seen
16 generally this sort of breakout in terms of
17 how we look at it. It's all predicated on the
18 type of questions we've asked and what was the
19 point of the survey that we were trying to do.

20 Q Okay. And the point of this
21 survey is to look at customer satisfaction,
22 right?

237

239

1 A Well, I have not seen this slide
2 before.

3 Q Have you seen this same data
4 conveyed in some other form?

5 A I have not seen data specifically
6 comparing, you know, Sirius and XM in this
7 form before. But I have seen data that looks
8 at relative importance, if you will, of some
9 other, you know, segments, if you will, of our
10 content.

11 Q Okay. So leaving out the Sirius
12 part of this slide, and looking just at the XM
13 portion of it, have you seen the data that is
14 conveyed there?

15 A I'm struggling with how you're
16 defining "seen the data." I apologize.

17 Q All right. Well, have you seen
18 data in the ordinary course of business which
19 indicates to you that -- the importance of
20 music programming versus news and sports and
21 local and weather, and so on.

22 A Yes, I have seen data that talks

1 MR. MEYER: Objection. There is
2 no foundation from this witness as to the
3 point, as Mr. Handzo said, of the survey.

4 CHIEF JUDGE SLEDGE: Overruled.

5 BY MR. HANDZO:

6 Q I'm sorry. The point of this
7 survey is to explore customer satisfactory,
8 right?

9 A It appears to, correct.

10 Q Okay. And that's important to XM,
11 because once you get the customers in the door
12 you want to make sure you keep them, right?

13 A Yes, it is.

14 Q So you want to make sure they're
15 satisfied.

16 A That is correct.

17 Q All right. And --

18 CHIEF JUDGE SLEDGE: I don't think
19 I understood the question the same as it was
20 asked the second time and answered, as that
21 question was asked the second time. Your
22 objection is sustained. He asked him to read

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1 something from the -- from the exhibit, and
2 that objection is sustained.

3 BY MR. HANDZO:

4 Q Correct me if I'm wrong, Mr.
5 Logan, but I assume that you have seen survey
6 data that ranks different types of content
7 with respect to consumer -- customer
8 satisfaction.

9 A Sure, I have.

10 Q Okay. And are the rankings that
11 you've seen of various types of content
12 consistent with what you see on page 24 of
13 this document?

14 A In some respects they are. In
15 some respects they are not.

16 Q Are they consistent with respect
17 to music programming being the highest rated?

18 A Not every time.

19 Q Okay. Mr. Logan, on page 4 of
20 your written direct testimony, you say that
21 bandwidth is XM's principal commodity. Do you
22 see that?

241

1 A Yes, I do.

2 Q And am I correct that you are the
3 person who decides how bandwidth gets
4 allocated at XM?

5 A Yes, I am.

6 Q Mr. Logan, let me show you a copy
7 of the document that was admitted into
8 evidence earlier today as SoundExchange
9 Exhibit 2. I'm going to ask you to turn to
10 page 29 of this document. Do you see there
11 that it indicates that currently -- this
12 indicates that the current bandwidth
13 allocation to music is about 68 percent of
14 total bandwidth?

15 A Approximately, that's correct.

16 Q And that's a result of your
17 decisions, is it not?

18 A I have the final say-off, but it's
19 a company decision that ultimately, you know,
20 bandwidth, our principal commodity, is how we
21 make our business, how we monetize our
22 business, that we are willing to devote 70

242

1 percent approximately, or 68 in this case, of
2 our bandwidth to music.

3 Q Well, on the next page, there's a
4 slide which says future bandwidth
5 considerations.

6 A Yes.

7 CHIEF JUDGE SLEDGE: What page?

8 MR. HANDZO: I'm sorry. The next
9 page, Your Honor, which is page 30 of the
10 document.

11 BY MR. HANDZO:

12 Q And that indicates, does it not,
13 that the bandwidth allocation to music is not
14 anticipated to change much?

15 A Well, if I can explain what this
16 chart means, this is -- this is us -- this
17 document was created for a strategy session
18 that we did at the company. We have new
19 technology called hierarchical modulation that
20 will provide us additional bandwidth that will
21 only be applicable to new receivers and new
22 chip sets.

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1 What this slide was -- taking the
2 same percentage of our base bandwidth and
3 applying that to the future bandwidth, just we
4 could look and see, if we just did steady
5 state with our new spectrum, what would it
6 look like. That's all this slide was -- is
7 able to do.

8 Q My understanding, Mr. Logan, is
9 that you can actually fit two talk channels
10 into the bandwidth you would need for one
11 music channel. Is that right?

12 A Generally speaking, yes.

13 Q And at this point, has XM used all
14 of its bandwidth capacity? In other words,
15 could you add a new channel without having to
16 drop one?

17 A No, we could not.

18 Q When you added -- when XM added
19 Oprah, for example, it had to drop a channel,
20 didn't it?

21 A Yes, it did.

22 Q Okay. And it dropped a talk

244

1 channel, not a music channel, right?

2 A Precisely, we don't look at it --

3 I actually manage the pipe from a bit ratio

4 standpoint, to have bits fund the channels.

5 We made a variety of changes in terms of

6 changing some bit rates on some channels,

7 eliminating a particular talk channel. So,

8 generally speaking, yes, we eliminated a talk

9 channel, but there were other things that

10 happened at the time with that change.

11 Q Okay. Currently, XM has 69

12 channels of music, is that right?

13 A No, sir.

14 Q How many do you have?

15 A 74.

16 Q 74. Sorry. 69 that are

17 programmed by XM and some that are programmed

18 by Clear Channel?

19 A Correct.

20 Q Okay. And at any given time,

21 eight or nine of the most listened to channels

22 are music, isn't that right?

245

1 A Could you define what you mean by

2 "most listened to" for me?

3 Q Well, there are a number of

4 different ways of looking at listenership, is

5 that right?

6 A Correct.

7 Q AQH would be one?

8 A Correct.

9 Q Cume would be another?

10 A Correct.

11 Q And just we've got our record

12 clear, can you tell us what you understand

13 "cume" to mean?

14 A "Cume" is short -- "cume" is an

15 Arbitron term that was really coined by the

16 company Arbitron. It's short for cumulative.

17 It is the cumulative number of people who

18 would sample a station, or a channel in this

19 case, for less than a five-minute period in

20 one quarter-hour over the course of whatever

21 that period would be.

22 So, generally speaking, we look at

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1 things on a Monday through Friday, 6:00 a.m.

2 to midnight basis.

3 Q Okay. And can you give us your

4 definition of "AQH"?

5 A Sure. AQH is the average quarter-

6 hour, which Arbitron -- it's an Arbitron term

7 again that is used to approximate the number

8 of people who spend approximately 15 minutes

9 with a particular channel, or a station in

10 this case, over the course of the same period.

11 Q Okay. Now, on an AQH basis, is it

12 not the fact that at any given time generally

13 eight or nine of your top channels are music

14 channels?

15 A Eight or nine, correct.

16 Q Okay. And, actually, the same

17 would be true if you measure it on a cume

18 basis, isn't that true?

19 A That would be true on a cume

20 basis.

21 Q Now, among the other top channels

22 on, let's say, an AQH basis, comedy channels

247

1 are popular, are they not?

2 A Yes, they are.

3 Q You have four comedy channels?

4 A In the category I think five, but

5 --

6 Q Okay. And those comedy channels

7 play prerecorded comedy, do they not?

8 A Correct.

9 Q There are also two kids' channels?

10 A Yes, there is.

11 Q Those channels play sound

12 recordings, do they not?

13 A Yes, they do.

14 Q Do you know what -- of the total

15 sound recordings played by XM, do you know

16 what percentage of sound recordings are played

17 on those kids' channels?

18 A I don't understand what -- could

19 you just restate it again for me? What

20 percentage of sound recordings?

21 Q If we're looking at the total

22 number of sound recordings played by XM, what

248

1 percentage of sound recordings are played on
2 the kids' channels?
3 A Well, I don't know. I don't know
4 the amount. I apologize.
5 Q And if we looked at the total
6 number of sound recordings played on XM, do
7 you know what percentage of sound recordings
8 are played on the comedy channels?
9 A In total again?
10 Q Yes.
11 A No. Sorry, I don't. Not off the
12 top of my head, sorry.
13 Q Okay. Mr. Logan, I've given you
14 what we've marked as SoundExchange Trial
15 Exhibit 9, which on the coverage page says XM
16 Research Overview. Have you seen this before?
17 (Whereupon, the above-referred to
18 document was marked as SX Exhibit
19 No. 9 for identification.)
20 A I have become familiar with this
21 document.
22 Q In connection with litigation or

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1 not in connection with this litigation?
2 A Specifically with this litigation.
3 Q Had you not seen it other than in
4 connection with this litigation?
5 A I think I -- there are some slides
6 that I would have been familiar with, but the
7 entire document I would not be.
8 Q Okay. Let me ask you to turn to
9 the page that has a Bates Number 45107 towards
10 the back of the document. Have you seen that
11 slide before?
12 A I've seen a variation of this
13 presentation, yes.
14 Q Okay. And when you say "a
15 variation," how is it different?
16 A The numbers may be -- my differ
17 from this slide from what's actually on here.
18 Q Okay. Are the numbers that are
19 represented here generally in line with what
20 you've seen in other versions of this chart?
21 A Yes.
22 Q Okay. So that -- and by the way,

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1 when you've seen other versions, has it been
2 a pie chart like this?
3 A Yes.
4 Q Okay. And do you know if you've
5 seen pie charts which actually have these
6 particular numbers on it?
7 A It's very possible that I could
8 have, but specifically I can't say that I
9 have, but very likely that I did.
10 Q Okay. You know you've seen pie
11 charts, they look like this, you just don't
12 know if the numbers are exactly the same.
13 A That's correct.
14 Q But they were generally in this
15 range?
16 A Correct.
17 Q Okay. So is it accurate, as you
18 understand it, that music programming
19 represents about 62 percent of the percentage
20 of time subscribers use XM?
21 A It's my understanding that the
22 time spent listing, this is how long they

251

1 would listen, yes, to that particular genre.
2 Q Okay. So this number appears
3 accurate to you?
4 A Yes, generally in the same place.
5 MR. HANDZO: Your Honor, I am
6 going to move the admission of this page of
7 the document.
8 CHIEF JUDGE SLEDGE: I don't think
9 you can do that.
10 MR. HANDZO: In that case, Your
11 Honor, I will move the admission of the whole
12 document.
13 CHIEF JUDGE SLEDGE: Any objection
14 to Exhibit 9?
15 MR. MEYER: Your Honor, based on
16 this record as it exists now, a foundation has
17 not been laid for the entire document. And if
18 it is admitted, I would, Your Honor, move that
19 it be put on the restricted record.
20 CHIEF JUDGE SLEDGE: Mr. Handzo?
21 MR. HANDZO: Your Honor, there has
22 certainly been a foundation laid for the

252

1 portion of the document that I showed the
2 witness. And since that is the relevant
3 portion of the document, I believe it can be
4 admitted under those circumstances.

5 CHIEF JUDGE SLEDGE: With no
6 foundation laid for the Exhibit 9, the
7 objection is sustained.

8 BY MR. HANDZO:

9 Q Okay. Mr. Logan, I'm going to
10 hand you what we've now marked as
11 SoundExchange Trial Exhibit 10, a page from
12 this document you were just looking at. We've
13 just separated it out as a separate document.

14 (Whereupon, the above-referred to
15 document was marked as SX Exhibit
16 No. 10 for identification.)

17 MR. HANDZO: So, Your Honor, I
18 would move the admission of SoundExchange
19 Trial Exhibit 10.

20 MR. MEYER: I think Your Honor
21 already covered this with the initial attempt
22 to do this. It's the same thing. You can't

1 isn't that true?

2 A That's what the content providers
3 want to have happen, but we've been successful
4 in going the other way.

5 Q Okay. Mr. Logan, I'm showing you
6 a transcript of your deposition, and I'm going
7 to ask you to turn to page 109.

8 (Whereupon, the above-referred to
9 document was marked as SX Exhibit
10 No. 11 for identification.)

11 CHIEF JUDGE SLEDGE: Mr. Joseph?

12 MR. JOSEPH: Your Honor, we have
13 not been handed a copy of the what the witness
14 has been handed.

15 MR. HANDZO: I'm sorry.

16 MR. JOSEPH: Thank you.

17 JUDGE ROBERTS: 109, Mr. Handzo?

18 MR. HANDZO: Yes, Your Honor. I'm
19 starting actually at the end of page 108.

20 BY MR. HANDZO:

21 Q And didn't you testify in your
22 deposition, Mr. Logan --

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1 take part of a document out of context.
2 Without the rest of the document, it's
3 misleading. So I would object on that basis.

4 CHIEF JUDGE SLEDGE: The witness
5 has said that this page is familiar to him,
6 and consistent with his information, the page
7 is -- objection is overruled and Exhibit 10 is
8 admitted.

9 (Whereupon, the above-referred to
10 document, previously marked as
11 SX Exhibit No. 10 for
12 identification, was received into
13 evidence.)

14 BY MR. HANDZO:

15 Q Mr. Logan, while we're redoing
16 that document, let me ask you an unrelated
17 question. In your experience, when the non-
18 music content deals come up for renewal, the
19 rates for those deals typically increase, is
20 that right?

21 A Not necessarily.

22 Q Okay. But typically, they do,

1 MR. MEYER: Your Honor?

2 CHIEF JUDGE SLEDGE: Mr. Meyer?

3 MR. MEYER: Can I object? This
4 deposition was taken of Mr. Logan in the 2005-
5 5 case. As you know, we have fairly stringent
6 restrictions on the number of depositions that
7 can be taken in each case. And they could
8 have noticed Mr. Logan in 2006 and taken his
9 deposition, but I'm sure preserving their
10 number of depositions, saving some for
11 rebuttal, they chose not to. So since it's
12 not taken in this case, I would object on that
13 basis.

14 MR. HANDZO: Your Honor, I think
15 if you're impeaching a witness with a prior
16 statement, it's utterly irrelevant in what
17 manner it was taken. I mean, if he testified
18 in a totally different trial in a totally
19 different court, I'd be able to use a
20 deposition from that matter. As long as there
21 is a matter in which he testified under oath,
22 he can be impeached with the prior testimony.

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1 CHIEF JUDGE SLEDGE: Mr. Meyer?
 2 MR. MEYER: Again, Your Honor, I
 3 don't think we should allow a procedure
 4 whereby the limitations on the number of
 5 depositions in each proceeding can effectively
 6 be circumvented by noticing a deposition in
 7 one case and then using it in the other case.
 8 If that's the case, then the limitations can
 9 easily be circumvented, and they really have
 10 no meaning.
 11 CHIEF JUDGE SLEDGE: Do you have
 12 any disagreement with the statement Mr. Handzo
 13 made?
 14 MR. MEYER: Which statement, Your
 15 Honor?
 16 CHIEF JUDGE SLEDGE: The statement
 17 he made in offering this exhibit.
 18 MR. MEYER: I agree that prior
 19 testimony under oath can be used to impeach
 20 the witness. In this particular circumstance,
 21 we have a particular rule limiting the number
 22 of depositions.

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1 CHIEF JUDGE SLEDGE: Well, I've
 2 heard that.
 3 MR. MEYER: And I think that --
 4 CHIEF JUDGE SLEDGE: Don't repeat
 5 yourself. I've heard what you said there.
 6 What's your response to what he said other
 7 than that?
 8 MR. MEYER: I think it would give
 9 him an unfair tactical advantage to be able to
 10 use it in this case.
 11 CHIEF JUDGE SLEDGE: All right.
 12 Without any objection to the offer, with the
 13 objection being raised as to something else,
 14 the objection is overruled.
 15 BY MR. HANDZO:
 16 Q Mr. Logan, didn't you testify, "I
 17 have seen on many occasions where, as we do
 18 renewals, the renewal rate goes up. It's
 19 customary in business and content, especially
 20 in the entertainment business, that rates
 21 typically increase; they don't decrease. So
 22 that has been my experience at XM, yes."

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1 Didn't you give that answer?
 2 A I gave that answer.
 3 Q Okay. And you were referring
 4 there to non-music content deals, were you
 5 not?
 6 A Yes, I was.
 7 Q Okay. And that was a correct
 8 statement, was it not, that your experience at
 9 XM has been that rates typically increase,
 10 they don't decrease?
 11 A I clarified further in my
 12 deposition, and I gave examples of what I said
 13 a moment ago to you, sir, which was they
 14 typically generally go up, but we have been
 15 successful -- and in my deposition I give
 16 examples of us walking from deals that were
 17 too expensive, of successfully negotiating
 18 contracts at a lower fee.
 19 Q So let me just be clear.
 20 Regardless of whether it has always been the
 21 case that rates go up, it is your testimony in
 22 this deposition that typically they do,

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1 correct?
 2 A Yes. What I testified to was that
 3 it's customary in business in a content
 4 entertainment space that they customarily
 5 would like to go up. And I further clarified
 6 in my deposition examples of where
 7 specifically I have negotiated them down.
 8 Q What you testified to, Mr. Logan,
 9 was not what your content partners want. What
 10 you said was, "In the entertainment business,
 11 rates typically increase, so that has been my
 12 experience." That's what you said, right?
 13 A That's correct.
 14 Q And that is a correct statement,
 15 is it not?
 16 A That is a correct statement in
 17 that context.
 18 Q Mr. Logan, you testified earlier
 19 today about some of the personalities who host
 20 shows, like Bob Dylan. Do you recall that?
 21 A Yes.
 22 Q Mr. Dylan's show is one hour a

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1 week, is that right?
 2 A He creates a one-hour weekly show,
 3 but it's not necessarily weekly. He'll give
 4 us a slate of 26 or 30 shows over the course
 5 of a year.
 6 Q So maybe less than a week? I'm
 7 sorry, less than one per week?
 8 A Well, I mean, he'll give us a
 9 show, and we run it multiple times. We'll run
 10 a show 15, 20 times over the course of a week.
 11 Q Okay.
 12 A But he'll give us, much like
 13 network television, an episode.
 14 Q All right. So what Mr. Dylan
 15 gives you is 20 or 30 one-hour shows in the
 16 course of a year?
 17 A Correct.
 18 Q Tom Petty Show, that's one or two
 19 hours per week?
 20 A It's a one-hour show, and, again,
 21 I think without reading it specifically it's
 22 40 shows a year.

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1 Q Okay. And you also get shows from
 2 Snoop Dogg?
 3 A That we do.
 4 Q Those are an hour to an hour and a
 5 half apiece?
 6 A Those actually I think range
 7 between an hour and a half to two hours.
 8 Q All right. And how many shows per
 9 year do you get from Snoop Dogg?
 10 A Assuming he delivers the shows on
 11 time, we're supposed to get 30.
 12 (Laughter.)
 13 Q I take it that's a problem?
 14 A It has been a recurring problem,
 15 yes.
 16 Q Probably no one here is surprised.
 17 CHIEF JUDGE SLEDGE: I'm
 18 surprised.
 19 (Laughter.)
 20 I have never heard of Snoop Dogg.
 21 (Laughter.)
 22 BY MR. HANDZO:

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1 Q Now, you mentioned in your written
 2 testimony some special music events that
 3 include Artists Confidential, Then Again Live,
 4 Artist to Artist, and Off Stage, do you recall
 5 that?
 6 A Yes, I do.
 7 Q Okay. XM has done about 70
 8 Artists Confidential shows, is that right?
 9 A Approximately, yes.
 10 Q Okay. And that's 70 over the
 11 entire course of time that you've been
 12 offering that kind of show, correct?
 13 A Yes. We started that program in
 14 late '04.
 15 Q Okay. So since late 2004, there
 16 have been 70 of those shows.
 17 A Yes, there have been.
 18 Q And that's a one-hour show?
 19 A Yes, it is.
 20 Q Then Again Live shows, there have
 21 been 10 or 11 of those?
 22 A That is -- approximately, yes.

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1 Q That's an hour-long show?
 2 A Some of them run a little over an
 3 hour, but generally speaking, yes, it's an
 4 hour.
 5 Q Artist to Artist, there have been
 6 four or five of those shows?
 7 A That's correct.
 8 Q And you don't offer those anymore?
 9 A No, sir.
 10 Q Now, the Off Stage shows, those
 11 are ones where you play recorded music, right?
 12 A That is correct.
 13 CHIEF JUDGE SLEDGE: Did I
 14 understand you to say that you consolidate
 15 Ballyhoo to one hour?
 16 THE WITNESS: Excuse me?
 17 CHIEF JUDGE SLEDGE: Did I
 18 understand you to say that you consolidate
 19 Ballyhoo to one hour?
 20 THE WITNESS: I don't understand,
 21 sir. I apologize. Ballyhoo?
 22 CHIEF JUDGE SLEDGE: Don't you

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1 record the Festival of Ballyhoo?
 2 THE WITNESS: Oh, Bonoroo?
 3 CHIEF JUDGE SLEDGE: Bonoroo.
 4 Thank you.
 5 THE WITNESS: Okay. I'm sorry.
 6 Sorry, Your Honor. No. We actually -- we
 7 record that festival, and we will play back as
 8 many of the performances as it requires us to
 9 play back. So a broadcast here on Cross
 10 Country could last four to five hours in that
 11 example.
 12 CHIEF JUDGE SLEDGE: And that's
 13 one of your live performances.
 14 THE WITNESS: Yes, sir, it is.
 15 CHIEF JUDGE SLEDGE: Okay.
 16 MR. HANDZO: Your Honor, it's
 17 3:00, and this is probably a good break time
 18 for me, if the Court wants to do that.
 19 CHIEF JUDGE SLEDGE: We'll recess
 20 for 10 minutes, please.
 21 (Whereupon, the proceedings in the
 22 foregoing matter went off the

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1 record at 3:00 p.m. and went back
 2 on the record at 3:12 p.m.)
 3 CHIEF JUDGE SLEDGE: Mr. Handzo?
 4 MR. HANDZO: Thank you, Your
 5 Honor.
 6 BY MR. HANDZO:
 7 Q Mr. Logan, you were talking before
 8 we broke about some of the special musical
 9 events, like Artists Confidential. And I just
 10 had one or two more questions about that.
 11 In terms of the artists who
 12 actually appear on Artists Confidential, it is
 13 sometimes the case that XM reaches out to
 14 artists and wants them to be part of that,
 15 correct?
 16 A Yes, it is.
 17 Q And that's because those are
 18 popular artists and they create exclusive
 19 material for you, right?
 20 A In some cases, yes.
 21 Q So it is a two-way street here?
 22 There's benefit to XM, and there's benefit to

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1 the artist, correct?
 2 A Correct.
 3 Q Now, with respect to the sort of
 4 what we'll call on air personalities others
 5 might think of as DJs, there are a lot of
 6 subscribers who actually don't like that,
 7 right?
 8 A There are some who would prefer us
 9 to have none, I'm sure.
 10 Q You actually sometimes get e-mail
 11 that says, "We would like less DJ chatter,"
 12 right?
 13 A Yes, we do.
 14 Q Mr. Logan, I'm going to show you
 15 what we have marked as SoundExchange trial
 16 exhibit 12.
 17 (Whereupon, the aforementioned
 18 document was marked for
 19 identification as SoundExchange
 20 Trial Exhibit No. SX 12.)
 21 MR. HANDZO: And I will represent
 22 to the Court and counsel that this is another

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1 page that was extracted from what was
 2 originally marked as SoundExchange trial
 3 exhibit 9.
 4 BY MR. HANDZO:
 5 Q And my first question, Mr. Logan,
 6 is whether you have seen this page before.
 7 MR. MEYER: Can I ask, please,
 8 what page of exhibit 9?
 9 MR. HANDZO: The page number is on
 10 the page.
 11 CHIEF JUDGE SLEDGE: Mine has got
 12 it printed on there. Yours doesn't have it
 13 printed on there?
 14 MR. HANDZO: XM-45079.
 15 CHIEF JUDGE SLEDGE: Thank you.
 16 MR. MEYER: That's 45079?
 17 MR. HANDZO: Correct.
 18 BY MR. HANDZO:
 19 Q Mr. Logan, have you seen that page
 20 before?
 21 A Only recently with this
 22 proceeding.

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1 Q I take it, then, you were not
2 aware of this document at the time you wrote
3 your written testimony?
4 A No, I was not.
5 Q Mr. Logan, I'm showing you what we
6 have marked as SoundExchange trial exhibit 13,
7 which on the first page says "Voice of the
8 Subscribers."
9 (Whereupon, the aforementioned
10 document was marked for
11 identification as SoundExchange
12 Trial Exhibit No. SX 13.)
13 BY MR. HANDZO:
14 Q Have you seen this document
15 before?
16 A I think I have, actually.
17 Q And have you seen it in the
18 ordinary course of business?
19 A Yes, I have.
20 Q This another sort of compilation
21 of survey research. Is that right?
22 A Yeah. And on page 2, it talks

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1 about something that is referred to as a
2 omnibus, which was a study that was sort of
3 ongoing that measures certain metrics. And
4 then there were open-ended responses from our
5 subscribers from three of these surveys.
6 Q So this is aggregating responses
7 from three surveys?
8 A It appears to be that, yes.
9 MR. HANDZO: Your Honor, I would
10 move the admission of SoundExchange trial
11 exhibit 13.
12 MR. MEYER: Object to the lack of
13 foundation, Your Honor. I don't think the
14 witness testified that he is familiar with it
15 other than what it appears to be the sort of
16 things that would be speculating.
17 CHIEF JUDGE SLEDGE: Overruled.
18 It's not his answers.
19 (Whereupon, the aforementioned
20 document, having previously been
21 marked for identification as
22 SoundExchange Trial Exhibit No.

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1 SX 13, was received in evidence.)
2 BY MR. HANDZO:
3 Q Mr. Logan, if you turn to page 4,
4 you'll see in the fourth bullet point there is
5 a statement that regarding music channels,
6 there are a number of complaints about DJs
7 talking too much. Do you see that?
8 A Yes, I do.
9 Q Was that information that you took
10 into account when you wrote your written
11 testimony?
12 A Can you define "written" and "into
13 account"?
14 Q Did you have this document at the
15 time you wrote your written testimony?
16 A Yes, I did.
17 Q Now, Mr. Logan, you talked towards
18 the end of your direct testimony today about
19 promotion with respect to XM. And you
20 attached a number of documents to your written
21 testimony in exhibit 23 that include a lot of
22 e-mails. Did you select those e-mails?

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1 A Personally?
2 Q Yes.
3 A Not all of them, no.
4 Q Who selected them for you?
5 A I requested it from members of my
6 programming staff to pull for me some of the
7 e-mails at the time that it was requested. I
8 read them and put them into part of my
9 testimony.
10 Q And you collected e-mails that go
11 all the way back to 2002. Is that right?
12 A Correct. I did, yes.
13 Q You didn't cite any survey
14 evidence in your testimony, did you, with
15 respect to promotion?
16 A No, sir, I did not.
17 MR. HANDZO: This one, 14.
18 (Whereupon, the aforementioned
19 document was marked for
20 identification as SoundExchange
21 Trial Exhibit No. SX 14.)
22 BY MR. HANDZO:

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1 Q Mr. Logan, I am showing you what
2 we have marked as SoundExchange trial exhibit
3 14, which on the first page has a heading that
4 reads, "XM Satellite Radio Advanced Tracking
5 Program." Have you seen this document
6 previously?

7 A Prior to this litigation, no.

8 Q Let me ask you to flip to page 50
9 of this document.

10 A I'm sorry? Again?

11 Q Fifty. Do you see the chart on
12 that page?

13 A Yes, I do.

14 Q Have you received that chart or
15 have you seen that chart previously other than
16 in connection with this litigation?

17 A No, sir, I have not.

18 MR. HANDZO: Let's mark this.
19 (Whereupon, the aforementioned
20 document was marked for
21 identification as SoundExchange
22 Trial Exhibit No. SX 15.)

1 believe denote why people subscribe and
2 understand why they activated.

3 JUDGE ROBERTS: So that is a
4 separate operation within XM?

5 THE WITNESS: Yes, sir. It falls
6 under our Marketing Department.

7 JUDGE ROBERTS: And you don't have
8 any witness testifying from the Marketing
9 Department?

10 MR. MEYER: Well, actually, Your
11 Honor, we have Mr. Cook coming up next, who is
12 no longer in the Marketing Department but was
13 previously.

14 JUDGE ROBERTS: All right.

15 BY MR. HANDZO:

16 Q Mr. Logan, turning to page 35 of
17 this document, have you seen the information
18 that is presented here previously?

19 A I've seen it in connection with
20 this, yes.

21 Q I'm sorry? When you say, "in
22 connection with this," do you mean in

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1 BY MR. HANDZO:

2 Q Mr. Logan, sir, if I can show you
3 what we have marked as SoundExchange trial
4 exhibit 15, which is headed, "Recent XM
5 Activation Satisfaction Study"? Again, have
6 you seen this before?

7 A No, sir, I have not.

8 Q Let me ask you to turn to page
9 35.

10 JUDGE ROBERTS: Let me ask you a
11 quick question, Mr. Logan.

12 THE WITNESS: Yes, sir?

13 JUDGE ROBERTS: If you're not
14 seeing a document like this or exhibit 14, who
15 at XM is?

16 THE WITNESS: That would be our
17 Marketing Department, our consumer group that
18 actually would be looking at what messaging
19 and how to adopt -- this is a tracking, so
20 like for Major League Baseball somebody who
21 would determine messaging. This is an
22 activation satisfaction, which would, I think,

1 connection --

2 A Litigation.

3 Q -- with this litigation?

4 A With this, yes.

5 Q I'm sorry. You need to wait for
6 me to finish my question before you answer.

7 A Yes, sir.

8 Q You've seen it in connection with
9 this litigation but not in the ordinary course
10 of business. Is that correct?

11 A That is correct.

12 Q Have you seen any similar
13 information from XM which indicates the impact
14 on listening to CDs and cassettes as a result
15 of a subscriber getting XM Radio?

16 A I personally have not.

17 Q So that's not survey research that
18 you took into account in drafting your
19 testimony. Is that right?

20 A No, sir, it was not.

21 Q Mr. Logan, I'm showing you what we
22 have marked as SoundExchange trial exhibit 16.

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1 (Whereupon, the aforementioned
2 document was marked for
3 identification as SoundExchange
4 Trial Exhibit No. SX 16.)
5 BY MR. HANDZO:
6 Q This is an e-mail to you, correct?
7 A Yes, it is.
8 Q Actually, the very top is an e-
9 mail from you, right?
10 A Correct.
11 Q And then right below that is an e-
12 mail to you from Lee Abrams?
13 A That is correct.
14 Q And who is Mr. Abrams?
15 A Lee Abrams is my chief creative
16 officer.
17 Q As your chief creative officer,
18 what are his duties?
19 A Lee's duties are to really be one
20 of my point liaisons between most of our high
21 profile talent, Bob Dillon, Paul McCartney,
22 the book of our artist confidentials as part

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1 of his responsibility.
2 Another part of his responsibility
3 is for him to ensure that we're pushing the
4 bounds of creativity and exploration and doing
5 new things across our entire network.
6 Q And you received this e-mail from
7 Mr. Abrams in the ordinary course of business?
8 A Yes. I think in the opening line,
9 it was requested. He was following up on a
10 request I made to him.
11 MR. HANDZO: Your Honor, I would
12 move the admission of SoundExchange trial
13 exhibit 16.
14 CHIEF JUDGE SLEDGE: Any
15 objection?
16 MR. MEYER: No objection, Your
17 Honor.
18 CHIEF JUDGE SLEDGE: Without
19 objection, it is admitted.
20 (Whereupon, the aforementioned
21 document, having previously been
22 marked for identification as

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1 SoundExchange Trial Exhibit No.
2 SX 16, was received in evidence.)
3 BY MR. HANDZO:
4 Q Mr. Abrams in his e-mail refers to
5 a McCartney deal. Do you see that?
6 A Yes.
7 Q I assume we're talking there about
8 Paul McCartney?
9 A That is correct.
10 Q And is that a deal where XM agree
11 to buy advertising to support a CD being
12 released by Mr. McCartney?
13 A Yes, it was.
14 Q And that was advertising not on
15 XM? That was actually advertising somewhere
16 else?
17 A That is correct.
18 Q And that's what Mr. McCartney
19 wanted, to promote his CD, correct?
20 A Correct.
21 MR. HANDZO: I think that's all I
22 have, Your Honor. If I might just have a

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1 moment?
2 (Pause.)
3 MR. HANDZO: That's all I have,
4 Your Honor. Thank you.
5 CHIEF JUDGE SLEDGE: Any redirect,
6 Mr. Meyer?
7 MR. MEYER: One question, Your
8 Honor.
9 CHIEF JUDGE SLEDGE: Usually when
10 a gentleman says that, they regret it.
11 MR. MEYER: I've learned over the
12 years not to say it. In this case I really
13 mean it.
14 REDIRECT EXAMINATION
15 BY MR. MEYER:
16 Q Mr. Logan, anything you have been
17 shown by Mr. Handzo today about which you have
18 said you don't recall seeing at the time you
19 did your affidavit, has anything changed in
20 your view anything that is in your affidavit?
21 A No, sir, it has not.
22 MR. MEYER: Thank you very much.

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1 CHIEF JUDGE SLEDGE: I cannot
2 imagine any follow-up questions to that.
3 (Laughter.)
4 CHIEF JUDGE SLEDGE: Any questions
5 from the Bench?
6 JUDGE WISNIEWSKI: Yes, I have.
7 CHIEF JUDGE SLEDGE: All right.
8 JUDGE WISNIEWSKI: Can we return
9 to your exhibit 23, Mr. Logan? I take it that
10 this exhibit is meant to display e-mails that
11 indicate they either purchased more CDs as a
12 result of listening to XM or are thinking
13 about doing so or something of that sort. Is
14 that a fair characterization?
15 THE WITNESS: Yes, Your Honor, it
16 is.
17 JUDGE WISNIEWSKI: How many unique
18 e-mails are there?
19 THE WITNESS: In this document?
20 JUDGE WISNIEWSKI: Yes.
21 THE WITNESS: Precisely I don't
22 know off the top of my head, Your Honor.

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1 JUDGE WISNIEWSKI: Can somebody
2 tell me at some point here?
3 MR. MEYER: Yes, Your Honor.
4 JUDGE WISNIEWSKI: I take it that
5 it also covers the period 2002 to 2006?
6 THE WITNESS: That is correct,
7 Your Honor.
8 JUDGE WISNIEWSKI: Does it go
9 earlier than that?
10 THE WITNESS: To the best of my
11 knowledge, it doesn't, Your Honor.
12 JUDGE WISNIEWSKI: And since you
13 don't know how many are here, I don't suppose
14 you could answer this question, but I'll ask
15 it anyway. What percent of subscribers does
16 this represent?
17 THE WITNESS: That's a very
18 difficult question to answer. I do not know
19 the answer to that, Your Honor.
20 JUDGE WISNIEWSKI: I would
21 appreciate an answer to that, too. Thank you.
22 MR. MEYER: Very well.

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1 JUDGE WISNIEWSKI: That's all the
2 questions I have.
3 CHIEF JUDGE SLEDGE: Thank you,
4 sir.
5 THE WITNESS: Thank you.
6 (Whereupon, the witness was
7 excused.)
8 CHIEF JUDGE SLEDGE: Next witness?
9 MR. RICH: Your Honor, Mr.
10 Vendetti is our next witness and will be
11 examined by my partner, Ralph Miller.
12 MR. MILLER: May it please the
13 Court, my name is Ralph Miller, here for --
14 CHIEF JUDGE SLEDGE: Mr. Miller, I
15 will call on you when I am ready.
16 MR. MILLER: Thank you. I am
17 sorry, Your Honor.
18 (Pause.)
19 CHIEF JUDGE SLEDGE: Mr. Vendetti,
20 will you please stand? If you will raise your
21 right hand?
22 Whereupon,

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1 MARK J. VENDETTI
2 was called as a witness by counsel for XM
3 Satellite Radio and, having been first duly
4 sworn, was examined and testified as follows:
5 CHIEF JUDGE SLEDGE: Thank you.
6 Please be seated.
7 MR. MILLER: Thank you, Your
8 Honor. My name is Ralph --
9 CHIEF JUDGE SLEDGE: All right,
10 Mr. Miller. If you will now proceed?
11 MR. MILLER: Thank you, sir.
12 CHIEF JUDGE SLEDGE: I will be in
13 charge here, not you.
14 MR. MILLER: I apologize, Your
15 Honor.
16 DIRECT EXAMINATION
17 BY MR. MILLER:
18 Q Mr. Vendetti, will you state your
19 full name for the record, please?
20 A My name is Mark J. Vendetti.
21 Q Where do you work, sir?
22 A I work at XM Satellite Radio.

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**RESTRICTED VERSION: CONTAINS PROTECTED MATERIALS SUBJECT TO
PROTECTIVE ORDER IN DOCKET NO. 2006-1 CRB DSTRA**

**Before the
LIBRARY OF CONGRESS
Copyright Royalty Board**

In the Matter of)
)
Adjustment of Rates and Terms for)
Preexisting Subscription and) Docket No. 2006-1 CRB DSTRA
Satellite Digital Audio Radio Services)
_____)

**DIRECT TESTIMONY OF GARY PARSONS
(ON BEHALF OF XM SATELLITE RADIO INC.)**

1. My name is Gary M. Parsons. I am currently Chairman of the Board of Directors of XM Satellite Radio Inc. ("XM"), a position I have held since May 1997. As Chairman, I participate directly in the development of XM from concept to service, and share the responsibility to oversee and implement XM's business operation.

2. My testimony primarily will focus on XM's company history, the substantial risks inherent in the launch and continuation of its business, and its prospects for the future. To summarize some of the key points:

-- The challenge of taking XM from an on-paper concept to an on-the-air broadcast service was virtually unprecedented in the radio industry. We built the new satellite radio industry and the XM business from scratch from technological, business, and programming perspectives.

-- XM has required extraordinary infusions of capital from inception to the present stage of our development as a company. XM forged significant partnerships to attract the

massive funding required to launch and operate the business, and the automotive and retail marketing support to become successful. Despite many formidable challenges, XM was able to launch the service in 2001, approximately five years from the company's inception. XM since has grown to serve more than seven million subscribers in less than five years since launch.

-- Despite XM's success, we are a young business that is still developing. By the end of 2006, XM will have invested more than \$6 billion to reach where we are today. We are not yet cash flow positive. Despite substantial increases in our subscriber base and revenue, analysts estimate that XM will continue to lose more than \$1.9 million per day. To continue building our business, XM requires significant ongoing investments to maintain and improve its infrastructure, and to effectively market the concept of satellite radio as well as the XM service. Because of the high-risk nature of the satellite radio business, our investors from inception to the present expect high returns on their investments and have yet to see that return. In fact, our stock price today is 10% lower than when the company first went public in September 2001, indicating the investment community's concerns over XM's ability to generate profits in the next several years. We face many risks ahead before XM becomes a business that is profitable and begins to provide any reasonable return to our investors. An increase in our royalty fees could disrupt the tenuous balance between our already substantial costs and our uncertain future returns.

-- The fundamental value proposition of XM is built on diversity of programming, exclusive content and a unique and powerful delivery platform to serve both the mobile (automotive and hand-held portable) and the home environment. This value proposition includes offering content that appeals to both mainstream and niche audiences across a broad demographic, particularly exclusive programming such as sports and talk, brand-name but limited availability content (such as CNN and Fox News), and XM's commercial-free music

programming. The depth of XM's programming appeals to "fans" of the many different kinds of content we broadcast. Music fans learn from XM about new music, artists and genres they had not been exposed to before, and buy music and concert tickets based on the exposure these artists received on XM.

Personal Background and Management Experience in Communications

3. After graduating with an engineering degree from Clemson University and an MBA from the University of South Carolina, I worked for ten years at BellSouth Corp. After the breakup of the Bell System in 1984, I became Executive Vice President of a fiber-optic and long-distance service startup, Telecom*USA. I joined MCI Communications Corporation ("MCI") when MCI acquired Telecom*USA. I served in a variety of roles at MCI from 1990 to 1996, including as Executive Vice President of MCI and as Chief Executive Officer of MCI's subsidiary MCImetro, Inc.

4. In 1996, I became Chief Executive Officer of both American Mobile Satellite Corporation ("AMSC"), a data-services company that provided satellite technology for truckers, the Red Cross, and government institutions, and American Mobile Radio Corporation ("AMRC"), its subsidiary created in 1992 to study a multi-channel, nationwide audio service provided via satellite direct to subscribers. Based on my belief that satellite technology would appeal to a wider consumer market for audio radio services as well as data services, AMSC decided to pursue a satellite radio license through AMRC, whose name was subsequently changed to XM Satellite Radio. Following the recruitment of Hugh Panero as CEO of XM Satellite Radio in 1998, I have continued to serve as Executive Chairman of XM.

Challenges XM Faced to Launch an Unproven Technology and Business

5. XM had to overcome many significant challenges to create a new satellite-based audio entertainment business. Like other satellite businesses, massive investments would be required to build the business. XM would have to expend years of effort and billions of dollars before receiving our first subscriber dollar, and we would face a host of formidable technological and business risks. Given the nature of satellite radio, XM had to overcome a number of obstacles and risks not previously encountered or surmounted by other satellite-based businesses. Many of these risks persist to this day, and many of the decisions that were necessary to the launch of the business present ongoing challenges to XM profitability.

Creating a New Radio Business Model

6. At the outset, our belief was that the success of the Direct Broadcast Satellite (“DBS”) television services -- DirecTV and Echostar -- showed that people, particularly those living in rural environments, were willing to subscribe to a satellite service that provided a broad variety of entertainment and information channels. We also recognized that a national service would appeal to professional truckers and drivers who lose the signal of favorite local stations as they drive long distances. With the consolidation of terrestrial radio stations, escalating commercial minutes and narrowing formats, we perceived an unmet consumer need for XM’s concept in the urban and suburban populace as well. In short, we anticipated that a nationwide service offering programming diversity and choice, coupled with high-quality audio, and limited or no commercials on the music channels, would appeal to enough different demographic sectors to create a prospect of future success.

7. While the DBS example was useful, our effort was unparalleled in the radio industry. We were not just starting another station or acquiring and managing a group of radio

RESTRICTED – Subject to Protective Order in Docket No. 2006-1 CRB DSTRA

stations. XM was to be a different kind of audio service and a different kind of satellite business, with national reach in the home, office and automobile. We were creating a new industry from the ground up, and had to raise immense amounts of capital to support our new technology.

Challenges to Raising Sufficient Early Capital to Fund XM

8. Our largest concern during the 1997 to early 2000 timeframe was raising the billions of dollars needed to launch commercial service. The first hurdle requiring substantial sums of money was the acquisition of XM's license. In October 1997, XM paid \$90 million for one of the two available satellite digital audio radio service licenses. Including the contracts for building the satellites and other expenses such as salaries for the initial personnel, XM paid out **[\$130 million]** at this early stage. The initial funding for the license came from parent company American Mobile Satellite Corporation ("AMSC") and WorldSpace, a digital satellite radio network that currently broadcasts in Asia, Europe, and Africa, which became a 20% equity partner. In the 1990's, WorldSpace was in the process of developing an international service facing many of these same challenges.

9. In July 1999 six investors, including business partners General Motors, Clear Channel Communications, and DirecTV, joined AMSC, and AMSC bought out the WorldSpace ownership interest. These entities invested \$250 million in the business, and provided expertise in various elements of the business, such as billing, programming, and customer service. These investors entered into contracts with XM for programming or distribution, and some of these contracts even provided the investor with a portion of the bandwidth on the planned XM system. For example, XM's long-term distribution agreement with GM requires XM to make guaranteed payments of over \$300 million to date, to subsidize the installation of XM radios in new GM vehicles, to make additional payments based on the subscription revenue attributable to GM

vehicles with XM radios installed, and to make available a certain amount of bandwidth for GM audio and/or data transmission. Deals with American Honda likewise provided them substantial returns on their investment, as well as data transmission rights for in-vehicle data services (such as information and traffic services featured in recent television advertisements).

10. XM had no real choice but to enter into these and other deals when they were made. XM needed the early infusions of capital and the marketing platform to reach consumers through factory installation of XM radios in new cars, both of which were absolutely crucial to the development of XM as a viable consumer offering. The size of the required investments, the risky nature of the investments, and the nature of the investment marketplace required us to provide our business partners lucrative agreements that gave these investors an added interest in the XM business. At that time, we were competing for capital against high-tech “dot-com” companies that were expected to deliver extremely high rates of return within a very few years, based on fairly modest capital investments and low infrastructure requirements. By contrast, our business required massive infusions of capital to build both the broadcast infrastructure and a new programming service, with no guarantee of success, and with a certainty that it would be years before the business could launch its service and generate any revenue whatsoever. For these reasons, XM could not raise money simply by promising a high rate of return, nor could we raise our early capital through Wall Street alone.

11. After receiving these early infusions of capital through our business partners, in 1999, XM became a publicly traded company.

Capital and Technology Challenges Before Launch of the XM Satellites

12. With sufficient capital behind us, we successfully recruited top-notch personnel to create the technology and infrastructure for the XM satellites, transmission facilities, studios, and

business. XM had to invent, design and build all aspects of the business needed to create and distribute this service. XM has compiled an intellectual property portfolio in excess of 40 patents in this field, and additional patent applications remain pending before the U.S. Patent and Trademark Office. We had to surmount formidable technological challenges in creating the satellite signal, designing and building the satellites and transmission facilities, and designing the chipsets and the radio receivers. There was no room for error. We had to do it all correctly before launching the satellites.

13. In March 2000, the status of the economy and the capital markets changed precipitously when the “dot-com” bubble burst. At that time, we were in the midst of designing and building out our broadcast facilities and our transmission and radio receiver technology. We were still more than a year and a half away from launching the service and obtaining any revenues. We anticipated pre-launch costs approaching a billion dollars, and many technical milestones needed to be achieved before we could go live. I was very concerned that the capital markets would become less receptive to a risky, capital-intensive technology venture at a time before launch when XM would require additional substantial investments.

14. Until mid-2001, I also was concerned whether the transmission and reception technology would work in a manner that could meet reasonable customer expectations. To succeed, XM had to be a truly robust coast-to-coast broadcast service. Our signal had to blanket the country to reach automobiles, trucks, and pleasure craft, as well as fixed or portable XM radios used in a listener’s home, office or other location. Convincing consumers to pay for audio services they were used to getting for free meant that the reception for XM had to be extremely reliable in a wide variety of challenging man-made and natural environments. Subscribers would expect to hear XM in their cars without interference or interruption, regardless of vehicle speed

or terrain. Even momentary signal cut-outs during a game or a song could be unacceptable. To ensure a seamless listening experience, we not only had to design, build and maintain our satellite system, but also had to invest \$262 million through 2005 in a ground-based repeater network to retransmit the signal from our satellites in urban environments, so as to provide reliable digital audio service to all XM radios. It was not until our repeater network was in place and we could perform actual reception and drive-testing that I felt assured that XM could provide the kind of continuous listening experience that subscribers would demand.

Challenges in Launching the First XM Satellites and the XM Service

15. Once we had successfully tested the transmission system using simulations in the field, we finalized preparations to launch our satellites. Because of our need for an omnidirectional, high-powered signal capable of being received by a car antennae rather than a parabolic dish antennae, we could not rent time on existing satellites. Designing, building, launching and insuring each satellite cost us on average more than \$250 million. The launch itself is inherently risky, even for the most experienced launch companies. Launch insurance alone for the three satellite launches cost us \$90 million. Moreover, at the time of the launches of XM's first satellites on March 18, 2001, and May 8, 2001, the company performing the launch (Sea Launch) was itself a new service that had only successfully launched a handful of satellites.

16. On September 25, 2001, XM began to roll out service to subscribers in certain markets, after our September 12, 2001 service launch date was postponed due to the events on September 11, 2001. November 12, 2001, marked the official launch of full nationwide XM service. Although at the time the licenses were awarded and satellite contracts were signed, we had envisioned offering 50 channels, due to technical advances, we were able to launch with 100 channels. It required [\$60-70 million] of capital expenditures to boost the satellite power as well

as research and development spending to achieve this channel increase. Initially, 71 of these channels were music channels; the remaining channels were primarily news, talk and sports.

Marketing Challenges and the “Value Chain”

17. The single largest question investors had in the 1997 – 2002 period was whether a broad enough cross-section of consumers would be willing to pay for radio service, and whether XM could attract more than just a minimal group of early adopters. We therefore recognized that another key to the future success of XM was our ability to aggressively market XM to a mass audience.

18. These marketing efforts depended on more than XM alone. XM needed to forge strategic partnerships with many companies at each link of the value chain to commit sufficient resources to developing and marketing XM. This included consumer electronics companies to build the radios that XM designed; automobile manufacturers such as GM and Honda to include the radios and service as a factory-installed feature in their vehicles; sales distribution partners such as Circuit City and Best Buy to help us get radios in the hands of consumers; and diverse, compelling brand-name program content, including key content available only by subscribing to XM, to augment the high quality programming being created by XM. We needed each of these partners to help launch our business, and we still need them today for our business to grow and to someday turn a profit.

19. In return for their support, however, they each require significant incentives. Certain automobile manufacturers [demand a share of revenues from the installation fees, and the ongoing subscription fees.] Equipment manufacturers demand subsidies because, given the cost of manufacturing, the novel nature of the technology, and the relatively small number of units

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produced annually, they had little interest in producing XM radios as opposed to a different product. Thus, XM has been heavily involved in the development, design and manufacturing of the radios, and has paid incentives to consumer electronics companies to distribute and brand the radios. XM similarly subsidizes mass retailers to promote and sell XM radios in order to stimulate consumer acceptance of the satellite radio concept and of the XM service in particular.

20. Similarly, XM must pay to produce and license content. To compete against terrestrial radio, internet music offerings, and the other satellite radio licensee, Sirius, XM must carry exclusive content available only on XM, such as live sporting events carried on a national basis and talk and entertainment programs featuring well-known on-air personalities. Exclusive content commands a high price, but that must be weighed against a number of factors, such as the ability of that content to attract new subscribers and keep existing subscribers; the potential increase in advertising revenue from that content; and the negative impact of a competitor acquiring that content. High-value brand name content, such as Fox News, ESPN and CNN, also has limited availability through other mobile audio providers and requires very substantial annual payments for carriage on XM. These programming services bring returns in subscriptions, subscriber satisfaction, advertising revenue and enhancement of the XM brand. [The Fox News channel has more listeners than any other channel on the XM line-up, and this has consistently been the case for the last three years.]

21. XM also spends tens of millions of dollars annually to create and produce the music programming for XM's 69 commercial-free music channels, and currently pays tens of millions of dollars annually in royalties for the music and sound recordings performed over the XM service. To create the unique sound of XM, we have attracted a highly skilled and dedicated

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staff of programmers and on-air talent. Collectively, our staff have more than one thousand years of on-air broadcasting experience, hold more than 300 gold records awarded by the RIAA reflecting their contributions to the recording industry, 62 record industry awards, two Emmy awards, and four New York Festival Awards.

22. Every piece of this value chain has to work in harmony. Changes in compensation paid by XM to any of its partners effects the timing and ability of XM to attain future profitability. ~~[Currently, that equation is out of balance.]~~ Even with seven million subscribers and nearly a billion dollars in recurring revenue, analysts estimate XM continues to incur losses of more than \$1.9 million per day and has not yet generated any profit for itself or its shareholders. Yet despite the magnitude of the payments XM makes to individual business partners and suppliers, it is doubtful that any XM partner believes it is receiving sufficient compensation from XM. To the extent that any one or more of these partners demands greater compensation, the balance tips further.

23. At some future date, XM naturally would like to decrease the payments to some of its partners, at least as a percentage of our overall revenue (principally by increasing our revenue and stabilizing our costs). However, these investments in XM's past development and current efforts have been necessary to build the business. Substantial additional investment capital is needed to support XM's ongoing operations and future development, and to secure XM against the possibility of unforeseen risks. XM learned some years ago that because of an unanticipated manufacturer defect, our first two satellites began losing the ability to generate sufficient power several years sooner than anyone expected. That compelled XM to accelerate its plans to launch additional satellites to maintain and improve our nationwide coverage. We launched a third satellite in February 2005 and our fourth satellite is scheduled to be launched

before the end of the year. Given that each satellite costs XM more than \$250 million dollars, XM requires ready access to capital both to be prepared for foreseeable risks and to be able to rapidly respond to unforeseen circumstances. Therefore, XM must evaluate extremely carefully the potential impact of any major economic transaction or event on XM's access to capital and the cost of capital to XM.

Programming to Attract and Retain Subscribers

24. XM faces an ongoing challenge to convince potential and current subscribers of the value they receive in return for buying an XM radio and paying a monthly subscription fee. Consumers are bombarded with media offerings and with monthly subscription fees, such as newspapers and magazines, cable television service, video-on-demand, and online music and game services. XM's value proposition is based on innovative and diverse programming, commercial-free music channels, compelling exclusive programming such as live sports with a national reach and talk personalities, premium news and talk brands, traffic and weather, and nationwide coverage with high quality sound in the car, at home and on the go. We must appeal to a broad spectrum of consumers' passions -- reaching out to the many different categories of sports fans, news junkies and talk radio listeners, as well as music lovers whose interests are spread across a wide variety of genres. Exhibit 1 is a listing of our current channel line-up.

25. XM also must appeal to a broad range of demographics across different age groups and interests, and various cultural and political spectrums. We carry news, sports and music programming in Spanish. Our "XM Kids" channel appeals to children and their parents. For women, we recently launched the "Oprah and Friends" channel, in addition to our "Take Five" channel featuring talk programming from Ellen De Generes, Tyra Banks, Good Morning

America Radio, as well as programming produced specifically for XM. Exhibit 2 illustrates our content strategy.

26. We aim to provide a true mass market media service. To reach that mass market, we cannot offer only the most popular types of programming that anyone can hear on terrestrial AM and FM radio. XM has to succeed both by offering the most popular “mainstream” types of programming and by aggregating together different types of “niche” content (such as jazz, blues, and classical) that had been abandoned by local radio because it could not attract sufficient support from a local audience. However, it could reach a substantial passionate audience on a national scale.

27. To attract and acquire subscribers, XM needs to feature exclusive programming that consumers can only receive by subscribing to XM. This means that XM programming has to be differentiated from both AM and FM radio, and from Sirius Satellite Radio, as well as other audio entertainment services. For example, our acquisition of broadcast rights to all Major League Baseball games, World Cup soccer and college sports was important to XM in two ways. First, live sports appeals to new and existing subscribers with exclusive play-by-play content not available nationally on broadcast radio. Second, carrying major sporting events on an exclusive basis helps XM compete effectively against Sirius, which acquired broadcast rights to National Football League and National Basketball Association games.

28. XM carries talk and news television programming available on television but not on terrestrial radio, as well as five of the ten top talk radio talents, who are available on various terrestrial radio services. We use this news and talk programming to attract subscribers by offering a complete, compelling package of programming and to keep subscribers on the XM

platform for large portions of the time they spend listening to the radio. Fox News and CNN command significant fees because they are not available on terrestrial radio stations.

29. Talk radio personalities such as Glenn Beck and Art Bell are carried on XM because of their popularity, even though their programs are available in various markets from other outlets as well; but, because of this non-exclusive availability through other outlets, XM carries these programs for relatively modest fees.

30. Although XM offers a significantly greater number of non-music channels than Sirius, both Sirius and XM play a wide variety of music and musical genres, and have a similar number of commercial-free music channels. XM's distinctive offerings of commercial-free music serves as an important component of XM's platform. Being "commercial-free" helps differentiate XM from terrestrial radio in a way that consumers can immediately grasp, even without hearing the quality of how music is showcased on XM.

31. XM is much more than a jukebox. The music on XM is selected by music experts employed by XM, not by the Billboard sales charts. Our on-air personalities talk about the music, the musicians, and our life and times. Each of these music channels plays a much deeper and more diverse catalog of music than can be heard on terrestrial radio stations of the same format. And, XM plays many music genres and formats that cannot be heard on broadcast radio, even in major metropolitan areas.

32. We create unique music programming that showcases artists and gives insight into their approach to music. Examples include our Artist Confidential series, and programming produced for XM by legends such as Bob Dylan, Quincy Jones, Wynton Marsalis, and Tom Petty, folk favorites like Christine Lavin, hip-hop stars like Snoop Dogg and Ludacris, and new country artists like Jack Ingram. XM subscribers appreciate the differences in music

programming between XM and terrestrial radio -- the breadth and depth of XM's music offering, the special music programming produced by XM, the expertise and experience of XM's on-air talent, the insights into the music from the minds of the musicians themselves, and the extraordinarily deep knowledge of XM's music programmers.

Promotional Impact of Music Programming

33. XM provides significant promotional benefits for performing artists and record labels. Our commercial-free music channels provide a diversity of music programming that both appeals to a broad range of subscribers and allows a large variety of musical genres and performing artists to receive valuable exposure via airplay. Our expert programmers create a unique music experience for the listener. As just one example, our most popular music channel is "Willie's Place," produced by XM along with music legend/XM subscriber and enthusiast, Willie Nelson. "Willie's Place" is an audio environment, where our on-air personalities welcome the listener to an imaginary honky tonk bar, with classic country music pouring out of the nickel jukebox. Our "XM Kids" channel has helped build demand for music specifically for young children and their parents. XM's diversity and depth of content helps even the most popular musical artists. For example, despite his fame, Billy Joel could not get past the terrestrial radio gatekeepers and get airplay for his CD of classical compositions, entitled "Fantasies and Delusions." XM not only played the CD but also carried an interview with Mr. Joel, conducted by one of XM's classical music experts, Martin Goldsmith. The singer Sting recently was featured on an Artist Confidential performance of his new CD, "Labyrinth" of 16th century music for the lute and voice, which will receive very little exposure on any broadcast platform other than satellite radio. XM has many channels, including The Verge, XMU, 20 on

20, Raw, Watercolors, Hear Music, Fine Tuning, and Highway 16, that play music by new and emerging artists.

34. While we pride ourselves on our music diversity, not surprisingly XM's hit music channels are also very popular. Thirteen XM stations report to Billboard and/or Radio and Records magazine. As a result, support from XM has a significant impact on whether a record can reach Number 1 on the charts which, in turn, also has a direct impact on sales of recorded music. These relationships further exemplify XM's power as a tastemaker for recorded music, and as an important promotional vehicle for musicians and record labels. XM has received from a multitude of new and established artists and major and independent labels expressions of their appreciation for the positive impact that XM has had on their sales and their careers.

35. We believe that XM's promotional value results in a direct positive effect on sales of music. Virtually every record label sends us promotional recordings seeking airplay on XM. Artists, managers and record label promotional people contact and visit XM to help promote their records. Our programmers receive telephone calls and emails from recording artists, labels, and artist managers telling us about the positive effect that XM airplay has on sales of recordings and concert tickets. Our programming department gets "thank you's" from XM subscribers who learn about and buy new music that they heard on XM. Our internal surveys show that many subscribers buy music downloads and CD's after hearing a specific artist or song on XM. We are building additional strategic alliances to help promote music sales, such as our compilation CDs sold through Starbucks stores and our relationship with the new Napster online music store.

Future Challenges for XM

36. XM has achieved significant success over a relatively short period of time. In less than ten years, we have built a new broadcasting business from the ground up, and launched

reliable nationwide coverage. Less than five years after the national launch, XM has more than seven million subscribers. Our employees have been successful in making XM America's most popular satellite radio service. Indeed, according to Greystone Communications, as shown on Exhibit 3, consumers are adopting XM within a shorter period of time after launch than any consumer electronics product other than the DVD player. These are enormous accomplishments, but satellite radio is an industry still in its infancy, and many challenges remain for XM as a company. The primary near-term challenge is to build the consumer success of XM's satellite radio service into profitability for XM's satellite radio business.

37. To succeed, we must continue to substantially increase the number of XM subscribers. We must continuously convince consumers that the diversity and quality of the content XM offers is worth a continuing expenditure. This effort includes attracting new subscribers, converting trial subscriptions, and minimizing churn (the number of paying subscribers who discontinue their service). We must continue to acquire exclusive, and often expensive, high-value content that cannot be heard anywhere else but on XM. Our marketing partnerships continue to be key to exposing consumers to our service and adding customers. We must continue to innovate and introduce new products, such as our new portable radios which expand XM's reach beyond the car and outside the home. XM's recent portable XM2Go line of products have received awards and accolades from Popular Science magazine, CNET News, and the Consumer Electronics Show. Exhibit 4 includes announcements reflecting recognition of XM's innovative radio products. Finally, our technical capabilities must be first-rate, especially given increasing options for high-fidelity music. We constantly strive to improve transmission and reception, and to get the most channels and value out of our limited bandwidth.

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38. In addition to the risks facing XM's early partners and investors, there are significant risks for later investors as well. Risks for later investors in XM include the impact on XM of its past obligations, potential changes in the industry, and uncertainties as to whether XM will be able to expand and retain its subscriber base at a sufficient rate to support XM's ongoing operations and obligations. [Our current programming deals are generally paid at a flat rate, so XM's programming costs effectively decline on a per subscription and percentage of revenue basis.] If this trend continues, eventually XM will be profitable per subscriber. Our past projections were that we would have a profit per subscription once we hit four million subscribers and be cash flow positive at the end of 2005, at which point we would have five and a half million subscribers. Currently, analysts project XM to be cash flow positive at some point in 2007, to attain positive EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) in 2008, and to reach profitability in 2010. There is uncertainty whether consumer willingness to pay for the end product is sufficient to compensate everyone in the value chain and still leave a reasonable profit for XM's shareholders.

39. The answer is not simply to charge the customer more. Pricing consumer subscriptions is a balancing act. At our current new subscriber rate of \$12.95 per month, we have a strong potential to be included in a substantial percentage of new cars. In our view, this approach has the greatest long-term attractiveness to our business partners, the best potential return for our shareholders, and will result in a large and growing subscriber base to XM services. [At higher monthly rates, XM might be prohibitively expensive to attract mass consumer appeal.] XM faces competition from a number of existing services, as well as services that are anticipated to grow significantly over the next several years, and these services may

constrain XM's ability to increase subscription rates. For example, FM stations that currently compete against XM increasingly are rolling out HD Radio digital channels that consumers can receive without additional charge. These digital HD Radio stations may feature music programming in niche formats (like WAMU-FM's "Bluegrass Country" HD Radio channel), that compete directly against XM channels. Unlike XM, HD Radio stations do not have to pay royalty fees to the sound recording owners (the record labels) for those music channels, and their programming will not be restricted by the license conditions imposed on XM (for example, the sound recording performance complement, which restricts the frequency with which XM can play certain artists or songs). The large cellular carriers already offer streaming music services over cell phones, often at significantly lower monthly service charges than XM, and new technologies being deployed will deliver rich multi-media (including video and music) over upgraded cellular and broadband Wi-Fi and Wi-Max networks, which will also fuel additional competition to satellite radio. The impact of such services on the popularity of satellite radio and on our ability to maintain our current monthly subscription fee is difficult to project.

Potential Impact of Royalty Rate Proceeding on XM's Business

40. Our understanding is that satellite radio services pay more to SoundExchange than all other statutory licensees combined -- even though our primary competitor, terrestrial radio, is exempt from such payments and pays absolutely nothing for performing sound recordings. The rate that XM proposes in this proceeding is .88% of XM's gross revenue. If our subscriptions and revenues increase over the next several years as analysts expect, this rate will result in very substantial increases in payments to copyright owners and performing artists, projected to be in excess of \$100 million over the license period.

41. However, XM's ability to achieve analysts' revenue projections, and therefore to be able to pay that compensation, depends upon many key factors and assumptions that all must fall into place. Under our proposed rate, XM believes it still should be able to attain its reasonable financial objectives. One of those key factors for XM and its investors is the rate that will be set in this proceeding. Any increase in the royalty at issue in this proceeding would directly affect the timing and ability of XM to reach cash flow positive status in the near-term, and to attain profitability in the future. A substantial increase in that proposed royalty would not only postpone or constrain XM's ability to reach profitability, it could also impede our ability to raise capital and to fund improvements and operations that we believe necessary to reach our objectives. Paradoxically, by impairing XM's prospects for achieving profitability, a high royalty could result in lower payments to copyright owners and artists over the long term.

42. XM makes substantial payments for exclusive content that can only be heard on XM. National coverage of live sports, such as MLB, and the Oprah & Friends channel are examples of exclusive content offerings that distinguish XM from both terrestrial radio and other competitors. Exclusive content also presents XM with important additional revenue opportunities, since it gives XM an opportunity to sell advertising time. For such exclusive content, XM has been willing to pay a substantial fee.

43. While music is an important element of XM's overall channel offerings, all of our competitors have equal access to the same library of music. Any broadcaster and webcaster can play the same CDs that XM plays. A non-exclusive sound recordings license does not, by itself, differentiate XM from the many competitors that also have that license, or from terrestrial broadcasters that are exempt from that license requirement. We could not successfully define

XM as a service worth paying for if XM merely replicated the same type of listening experience one can get from terrestrial radio or internet webcasting.

44. What makes XM's music channels unique is how XM uses the library, music programming staff, and our special programming to create the personality of the XM service. XM special programming – including concerts, music specials, themed programming, music surveys, artists as disc jockeys, and so on – create the sound of XM and the attraction for subscribers of XM's music programming. XM dedicates very substantial effort and expense to programming and production on our music channels, to present the music in a proper context and character. It is the skill behind XM music programming that makes XM music programming attractive to its subscribers. But that value exists because of what XM contributes; it does not flow merely from a license to sound recordings.

45. Moreover, a high royalty would be unfair to XM in light of the fact that XM's major competitors in broadcast radio do not pay any royalties whatsoever to sound recording labels or performers. This is true certainly for FM radio, but is also true for digital "HD Radio" going forward into the future even though HD Radio is a digital service and was designed to provide many of the same consumer advantages as satellite radio. As noted above, as free HD Radio becomes more available and more popular, the challenge to attract paying subscribers to satellite radio will become that much tougher. A high royalty in this proceeding would further unfairly tilt the playing field in favor of terrestrial broadcasting, and could further distort competition in the radio industry.

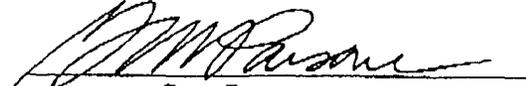
46. Finally, a high royalty would chill investment in innovative technologies like XM. Every technology from the phonograph to FM radio to CDs to satellite radio has created new promotional and revenue opportunities for musicians and recording companies, but they also

have generated significant benefits to the public and the spread of art and culture. Bringing culture, news and information to our citizens depends on the availability of new media technology. The rate we propose in this proceeding would be consistent with public policies favoring innovation and encouraging investment in new technologies and media.

Certification

I declare under penalty of perjury that the foregoing is true and correct.

Dated: Washington, DC
October 30, 2006



Gary Parsons

Chairman of the Board
of Directors, XM Satellite Radio Inc.

Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 In the matter of: °
 Adjustment of Rates and Terms ° Docket No.
 for Preexisting Subscriptions ° 2006-1
 Services, ° CRB DSTR
 and °
 Satellite Digital Audio Radio °
 Services °
 Room LM-408
 Library of Congress
 First and Independence
 Avenue, S.E.
 Washington, D.C. 20540
 Monday,
 June 4, 2007

The above-entitled matter came on
 for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES: (cont'd)

On Behalf of Music Choice:
 PAUL M. FAKLER, ESQ.
 of: Moses & Singer LLP
 406 Lexington Avenue
 New York, New York 10174-1299
 (212) 554-7800
 pfakler@mosessinger.com

APPEARANCES:

On Behalf of SoundExchange:
 DAVID A. HANDZO, ESQ.
 MICHAEL B. DeSANCTIS, ESQ.
 JARED O. FREEDMAN, ESQ.
 THOMAS J. PERRELLI, ESQ.
 MARK D. SCHNEIDER, ESQ.
 of: Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 (202) 639-6060
 dhandzo@jenner.com
 On Behalf of XM Satellite Radio Inc.:
 BRUCE RICH, ESQ.
 JONATHAN BLOOM, ESQ.
 TODD LARSON, ESQ.
 BENJAMIN MARKS, ESQ.
 BRUCE S. MEYER, ESQ.
 of: Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 (212) 310-8238
 On Behalf of Sirius Satellite Radio
 Inc.:
 BRUCE G. JOSEPH, ESQ.
 KARYN K. ABLIN, ESQ.
 MATT J. ASTLE, ESQ.
 JENNIFER L. ELGIN, ESQ.
 THOMAS W. KIRBY, ESQ.
 MICHAEL L. STURM, ESQ.
 of: Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 (202) 719-7528
 bjoseph@wileyrein.com

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 By Mr. Rich 299

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1 All right. Let's take five minutes, and then
 2 start with our first witness at 4:15.
 3 (Whereupon, the proceedings went
 4 off the record at 4:11:20 p.m., and went back
 5 on the record at 4:17:51 p.m.)
 6 CHIEF JUDGE SLEDGE: We'll come to
 7 order. Mr. Joseph, are you first at the
 8 podium?
 9 MR. JOSEPH: No, Your Honor. I
 10 have a housekeeping issue.
 11 CHIEF JUDGE SLEDGE: All right.
 12 MR. JOSEPH: On behalf of actually
 13 all the parties, I don't know how that counts
 14 as to Judge Roberts taking this time.
 15 CHIEF JUDGE SLEDGE: It counts
 16 against XM.
 17 MR. JOSEPH: We're going to have
 18 to have others stand up. The issue that
 19 actually is still hanging, and was hanging a
 20 little bit from the webcasting case is whether
 21 the direct testimony and the exhibits are
 22 deemed to be in the record of proceeding

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1 unless moved to strike. That was certainly
 2 the way it was handled in the last proceeding.
 3 There was a question that was raised as to
 4 whether the new rules, which weren't applied
 5 to that proceeding, would have the same
 6 effect. Certainly, the parties believe it
 7 should. We've discussed. We wanted to make
 8 sure Your Honors have the same view, or else,
 9 lest we spend a lot of the allocated time
 10 offering into evidence exhibits that have been
 11 attached to the written direct testimony, and
 12 I was asked to raise that issue, so I have.
 13 CHIEF JUDGE SLEDGE: I think
 14 that's a more significant question than I'm
 15 willing to respond on the cuff without any
 16 advance thought, or anything filed in writing.
 17 MR. JOSEPH: Okay, Your Honor.
 18 MR. RICH: Your Honor, XM proposes
 19 to call Mr. Gary Parsons as our first witness.
 20 CHIEF JUDGE SLEDGE: Thank you.
 21 Mr. Parsons, please raise your right hand.
 22 WHEREUPON,

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1 GARY PARSONS
 2 was called as a witness and, after having been
 3 first duly sworn, was examined and testified
 4 as follows:
 5 CHIEF JUDGE SLEDGE: Thank you.
 6 Please be seated.
 7 MR. RICH: Good afternoon, Mr.
 8 Parsons.
 9 THE WITNESS: Good afternoon.
 10 DIRECT EXAMINATION
 11 BY MR. RICH:
 12 Q Would you please state your name
 13 for the record.
 14 A Gary M. Parsons.
 15 Q And where are you currently
 16 employed, Mr. Parsons?
 17 A XM Satellite Radio.
 18 Q And what position or positions
 19 have you held during your tenure at XM?
 20 A I was essentially the founder and
 21 Chairman, and CEO originally at the inception.
 22 I stepped down as Chief Executive Officer in

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1 1998, when I recruited Hugh Panero to take
 2 that responsibility, and have continued as the
 3 Executive Chairman since that time.
 4 Q And what are your responsibilities
 5 as Executive Chairman?
 6 A Certainly, Board of Directors
 7 duties, working with large shareholders, much
 8 of the effort of any strategic direction that
 9 the company takes, and certainly fund raising,
 10 which is fairly significant in this case. And
 11 since I have an engineering technology
 12 background, I also on a fairly hands-on basis,
 13 work with the engineering technology
 14 laboratories.
 15 Q Beyond the engineering interface
 16 you just mentioned, do you have other
 17 participation in the day-to-day operations of
 18 the company?
 19 A I do so, but not with direct
 20 responsibility for running the day-to-day
 21 operations, but certainly, I am a 12-14 hour
 22 a day, five-day a week Chairman.

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1 Q What's your educational
 2 background, sir?
 3 A I have a Bachelor's of Science in
 4 Electrical and Computer Science Engineering
 5 from Clemson University, and a Master's in
 6 Business Administration from the University of
 7 South Carolina.
 8 Q That might signal the answer to my
 9 n next question; which is, where do you hail
 10 from?
 11 A I am a South Carolinian, yes.
 12 Q I've set in front of you a binder
 13 of material, which comprises your written
 14 direct testimony in this case, together with
 15 exhibits. I would ask you to review it, and
 16 tell the Court if you identify that, in fact,
 17 as your written direct testimony in this
 18 proceeding?
 19 A Yes, it is.
 20 Q And you reviewed and approved that
 21 testimony before it was filed?
 22 A That is correct.

1 associated Exhibits 1-4 into evidence.
 2 CHIEF JUDGE SLEDGE: Any objection
 3 to the written direct statement of Mr. Parsons
 4 with the attached four exhibits?
 5 MR. HANDZO: No, Your Honor.
 6 CHIEF JUDGE SLEDGE: No
 7 objections. The written direct statement is
 8 admitted.
 9 (Whereupon, Parsons
 10 Written Direct Statement
 11 and Exhibits were
 12 admitted.)
 13 MR. RICH: Thank you.
 14 BY MR. RICH:
 15 Q You mentioned a few moments ago,
 16 Mr. Parsons, that you were one of the founders
 17 of XM, if not the founder. I think you used
 18 the singular. Is that right, the founder?
 19 A Yes.
 20 Q Tell the Court a little more about
 21 the conceptualization and eventual development
 22 of XM from your perspective as the founder.

1 Q To your knowledge, its contents
 2 are accurate?
 3 A Accurate as of the date of
 4 submission.
 5 Q Which was in or about the end of
 6 October of '06. Is that correct?
 7 A I believe so.
 8 MR. RICH: Your Honor, in light of
 9 Mr. Joseph's colloquy, we could either offer
 10 this is now, or we could hold and do that as
 11 clean-up once we have a protocol hereafter.
 12 Do you have a preference?
 13 CHIEF JUDGE SLEDGE: No.
 14 MR. RICH: Okay.
 15 CHIEF JUDGE SLEDGE: Well, that's
 16 not true. It's difficult on notes to hold
 17 things in one matter and put them in the order
 18 in which they are presented, so it's much
 19 cleaner if you take things as they arise.
 20 MR. RICH: All right. So at this
 21 point, we would, without objection, I hope, we
 22 would offer Mr. Parsons testimony and

1 A Well, it was -- I was running
 2 American Mobile Satellite Corporation at the
 3 time, which was in the business of two-way
 4 voice and data communications to, principally,
 5 truckers, 18-wheel over-the-road truckers, as
 6 well as governmental organizations, FEMA, Red
 7 Cross, FBI, others that needed nationwide, or
 8 continent-wide capabilities.
 9 Q When you say "at the time", can
 10 you put a time frame around that?
 11 A This would have been beginning in
 12 1996, but when the SDARS licenses came up
 13 available for auction at the FCC, was in April
 14 1997, and at that point in time, was the time
 15 where we made a determination that we would,
 16 in fact, approach that market, try to develop
 17 that service. And I went out at that point in
 18 time to gain partners for it, gain some
 19 financing for it, and generate a business plan
 20 to go with it.
 21 Q You mentioned your role at
 22 American Mobile Satellite Corporation.

1 Paragraph 4, I believe, of your written direct
2 testimony, actually, look at paragraphs 3 and
3 4, sets forth a variety of prior employment
4 situations. Is that a complete summary of
5 your relevant employment background before
6 becoming Chairman of XM?

7 A Yes.

8 Q Now you also mention in paragraph
9 4 an entity called American Mobile Radio
10 Corporation. Is that correct?

11 A Yes.

12 Q What is or was American Mobile
13 Radio Corporation?

14 A American Mobile Radio Corporation
15 was the original name of XM Satellite Radio.
16 It was a wholly-owned subsidiary of American
17 Mobile Satellite Corporation, and so when we
18 decided to actually generate and go into that
19 business, and pursue this business, we took
20 that separate subsidiary and spun it off to
21 bring other investors into it. They were very
22 dissimilar business opportunities, and so I

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1 felt that the most important, or the best way
2 of effecting that was to separate a management
3 team. I would have to say at that point in
4 time, by the way, there were other founders,
5 the initial people that went into that
6 subsidiary at that point in time, helped found
7 that company. It was a relative handful of
8 people.

9 Q And according to your testimony,
10 American Mobile Radio Corporation was later
11 renamed XM Satellite Radio. Is that correct?

12 A That is correct. In mid-1998.

13 Q Now you indicated that American
14 Mobile Radio Corporation was formed to study
15 multi-channel, nationwide audio service via
16 satellite. Is that basically correct?

17 A That is correct.

18 Q And tell the Court a little bit
19 about, again conceptually, why you believed,
20 and perhaps others of your colleagues believed
21 that that was a prospective business
22 opportunity?

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1 A Well, if you look back prior in my
2 history, all of the other entrepreneurial
3 startups that I had done were taking a new
4 technology opportunity, and then trying to
5 compete with the large incumbent, whether it's
6 in long distance, or local telephony, and
7 fiber optics. And those had proven
8 successful, and so I felt that the use of a
9 new technology at that point in time, there
10 was an opportunity with the terrestrial radio
11 companies, in my view, becoming somewhat
12 homogeneous in the programming that they
13 offered, building up a very high commercial
14 load relative to the commercials that they
15 were inserting into it, that presented an
16 opportunity. And then, candidly, from 1966 to
17 '72, I was a radio announcer. I worked my way
18 through college that way, and so I had a great
19 affinity for the radio industry. I felt that
20 there would be a resonance from consumers to
21 radio that was done better on a commercial-
22 free basis, and with a ubiquitous nationwide

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1 capability where they did not drive out of the
2 range of the signal as they were going.

3 Q In your written direct testimony
4 in paragraphs 6 and 7, you talk a little more
5 about creating what you term "a new radio
6 business model." Do you see that?

7 A Correct.

8 Q You indicate, and make reference
9 in paragraph 7, both in paragraphs 6 and 7, to
10 direct broadcast satellite television
11 services.

12 A Correct.

13 Q What did you learn, or what were
14 the lessons to be learned, pro or con, with
15 respect to what you understood about the
16 operation of those services?

17 A Well, there were lessons to be
18 learned relative to the fact that I think they
19 led the way in showing that you could, in
20 fact, sell directly to consumers, rather than
21 through some other organization. They did
22 that through the Circuit City, or Best Buy-

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1 type of relationship and direct installers.
 2 Now, clearly, in their cases, they
 3 had a proven appetite for their product. The
 4 cable TV industry had already proven that
 5 consumers were willing to pay a certain amount
 6 of money for a multi-channel video
 7 entertainment service. And so, from our
 8 standpoint, the bigger risk was whether or
 9 not, I think one of the central risks at that
 10 point in time was whether or not people would
 11 pay for radio, pay for something that were, in
 12 fact, receiving free. It was actually in the
 13 DBS situation, it generally wasn't competing
 14 against free over-the-air broadcasters, it was
 15 more competing against cable TV offerings, who
 16 were offering similar channels. We learned
 17 the things that worked well for them. We also
 18 learned from some of their missteps.

19 Q Can you describe the things that
 20 you learned that worked well from them, that
 21 you thought would have relevance to the
 22 building of a new radio business model?

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1 A Well, I think we learned that the
 2 ability to put up satellites that could see a
 3 nationwide service all at one time allowed you
 4 to program and sell on a nationwide basis, and
 5 satellites work very well for that.
 6 Unfortunately, there are things that
 7 satellites don't work so well for, and we
 8 learned that from them, as well, too.

9 In essence, the DBS players, or,
 10 frankly, any satellite service is affected in
 11 an urban market. The buildings block the
 12 signal. There is no powerful enough satellite
 13 ever known to man to go through buildings in
 14 an urban marketplace, and so Direct TV and
 15 EchoStar concentrated principally on the rural
 16 environment. We also learned that,
 17 unfortunately, you can't have a tree in front
 18 of a dish either. In many cases, the foliage
 19 or a large tree in front of the satellite dish
 20 also block the signal, so you had to be very
 21 careful where you placed that. And,
 22 unfortunately, from our standpoint, what we

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1 understood for a mobile service, because while
 2 television and cable is something you do in
 3 the home, principally. You don't do it at
 4 work so much, and you certainly don't do it in
 5 the car very much, but radio is to the car,
 6 what television is to the home. But,
 7 unfortunately, that presented us quite extreme
 8 technology challenges from the fact that you
 9 cannot avoid driving passed trees, and you
 10 cannot avoid driving through cities. And,
 11 unfortunately, it is very expensive and very
 12 cumbersome to have a satellite receiver
 13 antenna on a vehicle that is simultaneously
 14 tracking to remain pointed at the satellite.

15 Historically, satellite services,
 16 in fact, have an antenna that is very
 17 carefully positioned and pointing to the
 18 location in the sky where the satellite is
 19 located. And when you're in a moving car,
 20 it's very difficult, and expensive to do.

21 MR. RICH: Why don't we put a
 22 little demonstrative that your office prepared

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1 in aid of perhaps describing what you're
 2 talking about.

3 THE WITNESS: I think this is the
 4 only demonstrative I have.

5 MR. RICH: This is pretty
 6 rudimentary, but please feel free to talk off
 7 of that to the extent useful. We have copies
 8 for everybody.

9 THE WITNESS: This is fairly
 10 simplistic in laying it out, but it shows the
 11 different reception situations that form the
 12 basis of the technology challenge, in other
 13 words. To put up a satellite and send a
 14 signal to a fixed location, Mr. Handzo is
 15 right, there's hundreds or thousands of
 16 satellites that do that every day.
 17 Profitable, very dependable, and they do not
 18 work in this case. They go to a fixed
 19 location, you point the dish at it, all of us
 20 know what a satellite dish looks like, and we
 21 see it in our mind. It's this big enormous
 22 thing pointed at a point in the sky.

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1 The DBS players raised the power
2 of the satellites so they could have a more
3 moderate sized dish pointed at a point in the
4 sky, but the real complexity comes, is if
5 you're driving along blocked either by
6 buildings, blocked by a house, blocked by a
7 tree, even, as you're driving through. So the
8 essence of the technology innovations that had
9 to occur were to be able to create this
10 environment that you got a purely seamless
11 signal so people were willing to listen to and
12 pay for across the entire country, including
13 all of these severe operating environments.

14 By the way, dramatically different
15 than the World Space environment, which, once
16 again, only extends to a fixed location with
17 a fairly large antenna associated with it, not
18 something that can work on a vehicle.

19 At the end of the day, this is the
20 XM antenna. And the technology challenge
21 associated with this, which can be pointed in
22 any direction; obviously, it doesn't have to

1 this process, was you took the signals from
2 the two satellites, even though they contained
3 all of the exact same information, you
4 scattered the bits differently through a
5 different algorithm about a four or five
6 second period between the two. So, in fact,
7 as you're driving along, you can have a bad
8 signal from Satellite A, and a bad signal from
9 Satellite B, and you actually combine those
10 signals together inside the chipset inside the
11 radio to create a good signal.

12 Now that level of complexity had
13 not been done before, and, in fact, allowed
14 for a very good, high-quality listening
15 experience as you're driving along the
16 roadside. Unfortunately, the still didn't fix
17 the cities, because you would be behind a
18 building for more than four or five seconds,
19 and you would not be moving between trees
20 where you got a signal, missed a signal, got
21 a signal, missed a signal, where you could
22 combine it that way. So the next innovation

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1 be pointed at the satellite, that's what it
2 takes to have a mass market consumer product
3 available. So the first steps we went to was
4 rather than using a single satellite, as all
5 of the other satellite services have, and
6 today do, and like the World Space system had,
7 a single satellite, we use two satellites,
8 located one over the east coast, one over the
9 west coast, but sending the exact same
10 information, and both covering completely
11 overlaying the architecture, so you get both
12 a spatial diversity as you're driving along.
13 One may be here blocked by a tree, but another
14 one may be in the other location allowing you
15 to get a clear line of sight to the second
16 satellite.

17 Unfortunately, that is also not
18 enough because as you're driving down a road,
19 both of them may be blocked by a tree at any
20 given instant in time. So the next
21 innovation, and all of this is the subject of
22 40 something patents that were created out of

1 was, in fact, building a terrestrial-based
2 urban repeater network that would receive the
3 signal from one of the satellites, and
4 essentially boost it within that urban market.
5 By boosting that signal in the urban market,
6 you were able to -- terrestrially, you can put
7 out a powerful enough signal to go through
8 buildings, and around buildings, and bounce
9 off of buildings, so that ability then opened
10 a third path.

11 So what you do then,
12 technologically speaking, within the chipset,
13 you are simultaneously processing three
14 different signals.

15 Q When you talk about a chipset,
16 what's a chipset?

17 A A chipset would be, essentially,
18 the intelligent microprocessor that is
19 listening to these three incoming signals, and
20 then combining the signals. By the way, I
21 make a point of saying combining the signals,
22 because that is also a radically different

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1 technology technique than what cell phones,
 2 for example, use. I'm sure many of you have
 3 experienced a cell phone. In a cell phone
 4 there is a handoff from one of these towers to
 5 the next tower. You're not receiving both
 6 towers simultaneously, or else you wouldn't
 7 have dropped calls. So what happens is, as
 8 you're driving in a cell phone network, you're
 9 leaving one tower, it gets ready to hand you
 10 over to the other one, that is when you get
 11 static, clips, dropouts, and that is totally
 12 unacceptable for a listening experience for an
 13 audio entertainment system that people are
 14 paying for. So in this case, we developed a
 15 system in the chipset that processed all
 16 three, and combined the three, such that it
 17 was never handing off from one to the other.
 18 The chipset developments which form,
 19 essentially, the brains of the radio are, in
 20 fact, the elements that control these three
 21 different signals that are put forward.

22 Q I think it's implicit in your

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1 response, but was there an off-the-shelf set
 2 of satellites that could accomplish the
 3 objectives you described?
 4 A No, there were not. All of the
 5 existing satellites, including, by the way,
 6 the DBS satellites, totally incapable of doing
 7 this. First, it was a totally separate
 8 frequency spectrum that had never been
 9 utilized for this purpose before. Secondly,
 10 what the DirectTV or EchoStar people did is -
 11 and what historically satellite companies have
 12 done through time - it's very expensive to
 13 launch a satellite, so you want to make the
 14 maximum use of it. So you put as little as
 15 possible in the air, and you put all of the
 16 expense on the ground. You don't mind
 17 building a big dish. Even in the predecessor
 18 company, American Mobile Satellite
 19 Corporation, the reason it was effective
 20 serving governmental organizations, they'd pay
 21 three thousand, four thousand dollars for a
 22 handset or a device, the FBI or FEMA is

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1 equipped to do that, and you can serve the
 2 expense of the satellite.
 3 We knew and understood that to be
 4 a mass market consumer product, if it was
 5 going to be a mass market consumer product,
 6 rather than a niche-type of a service, you had
 7 to completely flip that economic equation on
 8 its head. You put all of the expense in the
 9 air, and in the terrestrial network. You try
 10 to drive down the cost of the antennas and the
 11 cost of the chipsets so that you could not be
 12 selling a four hundred, eight hundred, six
 13 hundred dollar radio, but a thirty-nine,
 14 fifty-nine dollar radio; and, therefore, end
 15 up with 10 or 12 million customers, not 2 or
 16 3 million customers. And that was the essence
 17 of - the creation of these satellites were
 18 custom-built in order to provide the maximum
 19 amount of power sending actually over a very,
 20 very small amount of bandwidth and number of
 21 channels.

22 Q DBS satellites, did they send out

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1 high-power or low-power signals?
 2 A Compared this, it would be very
 3 low-power. That's why you need a huge antenna
 4 pointing directly at them in order to be able
 5 to receive it.
 6 Q What amount of new design for the
 7 type of antenna you were holding up was
 8 required?
 9 A Well, admittedly, this is like
 10 five or six years worth of work. The first
 11 one was somewhat larger than that, but
 12 clearly, at this point in time, I know of no
 13 other satellite service on the face of the
 14 earth that has antennas or receivers this
 15 size. I know of some that are under
 16 development now that likely in the 2010 time
 17 frame will be launching, that may be able to
 18 achieve this.
 19 Q Were there challenges in
 20 developing the repeaters that would properly
 21 serve the needs of the system, as well?
 22 A They had to be custom designed, as

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1 well. Once again, it was a totally separate
2 new frequency. It was a new wave form that
3 was being used, using OFDM technology, which,
4 once again, allows you to use a single
5 frequency, not handoff between cell sites, and
6 have the combinational effect of these
7 frequency modulations. And so that, in fact,
8 was -- Hughes Network Systems was the master
9 contractor on that. We had a number of
10 subcontractors that we worked with.

11 Q I believe you testified to the
12 innovation necessary to develop the chipset.
13 That wasn't an off-the-shelf item, either, I
14 take it?

15 A No. And, unfortunately, because
16 it was a very unproven business model, because
17 no one believed, frankly, that people would
18 pay for something you were getting for free,
19 most companies, most major radio manufacturers
20 or other chipset manufacturers were unwilling
21 to undertake that development. In fact, that
22 was the reason for building our own internal

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1 research and development group and
2 capabilities. They used parts and pieces as
3 they could, as best they could, to try to
4 utilize as proven in architectures, we used
5 geostationary satellites for very proven
6 architecture. Sirius' architecture was
7 somewhat more creative and inventive than
8 that, but all of the chipset development work
9 to add the mobile capability to this had to be
10 undertaken internally.

11 Q Tell us a little bit about what
12 was entailed in developing receivers. Could
13 one go to Radio Shack or the equivalent and
14 get what you need for this purpose?

15 A No. Once again, there was extreme
16 reluctance on the part of any brand name radio
17 manufacturers to do the sort of research and
18 development activity, which was the reason
19 that we actually internally designed the first
20 antennas, the first chipsets, the first RF
21 sections or receivers, and the base band
22 portions on it, and we actually provided those

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1 components to the manufacturers to get them to
2 build the first units.

3 That's what we launched service
4 with in 2001. They were very expensive units,
5 even though we had done all of the technology
6 development and had all the patents and
7 intellectual property associated with it. We,
8 eventually found, after about a year and a
9 half of service, that those companies, once
10 again, had no great incentives to continually
11 improve the product, because it was a limited
12 part of their business, and once again, was
13 still a fairly uncertain market. So we
14 actually increased our internal engineering
15 capabilities to design the final end-user
16 products, and so we actually designed the
17 radios, create the users manuals, we take it
18 to Flextronics or other third-party
19 manufacturing groups. And then once we build
20 the radios, we will generally take those to a
21 radio manufacturer and say would you like to
22 put your brand name on it. They seem to be

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1 willing to do that.

2 Q Was it given in your view during
3 this conceptual phase that consumers would
4 pay, say, \$9.95 or any significant monthly fee
5 for access to this business you were building
6 up?

7 A I would hate to use the phrase,
8 "it was a given", but as an entrepreneur, your
9 view is, anything is possible. And it's my
10 idea that people will do that. And we were
11 able to convince early investors that there
12 was a reasonable shot at pulling this off.

13 Q Before we go into the investor
14 piece of it, just following this aspect of it,
15 what, in your view, were the keys to consumer
16 acceptance of a new radio business model of
17 this type?

18 A Well, the first keys were the
19 technology keys. I mean, the pure and simple
20 fact is, if you're going to ask somebody to
21 pay for something they are receiving free
22 already, then it has to have enough capacity

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1 to be able to put a very wide variety of
 2 content on it, which maybe they don't get
 3 locally. It has to be seamless. They cannot
 4 be driving down the road and it constantly is
 5 clipping, or static'ing, or having problems.
 6 And, frankly, one of the key selling points
 7 was the fact that you could travel across the
 8 country. I mean, many of our earliest
 9 adopters were traveling sales people, long-
 10 haul truckers, others who were in the vehicle
 11 an extensive period of time; and, therefore,
 12 they valued the fact that they could drive
 13 outside of their local terrestrial market and
 14 still be able to receive the signal.

15 And then, finally, obviously, the
 16 device itself had to be competitively priced.
 17 We understood that 500, 700, 800 dollar radios
 18 were just not going to meet that consumer
 19 price point. We had to subsidize those down,
 20 or provide equipment subsidies. They had to
 21 be attractive enough to not take up the whole
 22 dashboard of a car. And, frankly, we felt

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1 that if it were an early adopter market, we
 2 probably could have gotten by with simply
 3 having an attachment that you put on your
 4 dashboard, or you replace your old radio with
 5 a new radio. But for true mass market
 6 adoption, anything that would reasonably
 7 justify the multi-billion dollar up-front cost
 8 that we had to put in there, we felt we had to
 9 have it included as standard or some part of
 10 equipment in the new car purchase, where there
 11 were not wires running all over the dashboard,
 12 antennas that were having to be installed on
 13 the outside and plugged in. That's not
 14 something that is going to be a commercial
 15 success for the mass market, even though you
 16 may attract several hundred thousand, or even
 17 a million or so early adopters who would be
 18 willing to go through that process. So we
 19 felt it was critical to actually bring in as
 20 partners the new car manufacturers to, in
 21 fact, have the product in a seamless
 22 transparent basis without wires running all

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1 over the dashboard.

2 Q Beginning at paragraph 8 of your
 3 written direct testimony, you talk about the
 4 challenges to raising capital early on. Tell
 5 the Court a little bit, in your own words,
 6 about what those challenges entailed.

7 A Well, the challenges,
 8 unfortunately, in the late 90s time frame like
 9 that, were the fact that the earliest
 10 investors in this, American Mobile Satellite
 11 and World Space together. We put in something
 12 in the \$130 million range, most of that went
 13 just to pay for the spectrum. It went to the
 14 FCC to purchase the spectrum, and we began our
 15 satellite contract. But literally within a
 16 year and a half after that time frame,
 17 virtually all of the capital was exhausted,
 18 and we understood that we were nowhere near
 19 the public market capabilities to where we
 20 could access the public markets, even though
 21 there was a very vibrant public market in the
 22 late 90s that we would like to avail ourselves

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1 of at that point in time. So we, in fact, had
 2 to seek either private equity or strategic
 3 partners who tend to demand a significantly
 4 greater return by going in a highly risky
 5 situation before you're able to access the
 6 public capital markets either on a debt or an
 7 equity basis.

8 Q I take it from your testimony that
 9 World Space was an early equity partner?

10 A Primarily, a debt partner,
 11 actually. They were a minor equity partner
 12 and had a convertible debt facility, but they,
 13 themselves, were having difficulties, and
 14 continue having difficulties today with their
 15 own financial rollout of their business model.
 16 This is not a slam dunk business model.
 17 Everyone in it has just lost massive amounts
 18 of money, so they needed their money back.

19 Q How important a technology partner
 20 was World Space?

21 A Fairly minimal. We had a
 22 technical services agreement that we signed

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1 with American Mobile Satellite, World Space,
2 even DirectTV, which would allow us to access
3 any of their engineers on kind of an hourly
4 basis, that we could pull in.

5 The primary benefit that we got
6 out of the World Space system was some early
7 work that Fraunhofer Group out of Germany had
8 done for them. They wrote the initial code
9 for their first chipset, and so we used that
10 wave form that was a proven wave form from
11 Fraunhofer. Unfortunately, that wave form was
12 only for a fixed service. It did not include
13 the elements that allowed for mobility, but it
14 still was a useful start to that point.

15 Q Paragraph 9, you talk about the
16 next tranche of investors, the six investors
17 who are identified. Could you tell us a bit
18 about how you managed to attract those, and
19 what their interest in this new venture was?

20 A Yes. It was roughly a year's
21 worth of pursuing these particular investors
22 to try to get them on board. We understood,

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1 there were three private equity firms, and
2 then three strategic investors, including
3 DirectTV, General Motors, and Clear Channel,
4 which is one of the largest terrestrial radio
5 broadcasting groups. And, frankly, we sought
6 out those because we understood that for them
7 to risk this capital, there was almost no
8 financial return that would be big enough for
9 them to justify just purely as a financial
10 investor. They had to both de-risk it from
11 their standpoint, they had to have some added
12 benefits over and above whatever the return on
13 their equity might be.

14 Q Take General Motors as an example,
15 how did that play through?

16 A That played through in the form of
17 General Motors receiving not only equity
18 ownership for their investment, they also
19 received a very lucrative distribution
20 contract, which pays them for each radio they
21 put in a new General Motors car, and gives
22 them a percentage of the revenue from any of

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1 those. They, essentially, consider those
2 their customers, if they came through that.
3 And it also gave them access to bandwidth,
4 some of the raw capacity of the satellite that
5 they could use for some of their OnStar or
6 other data purposes within the vehicle. So,
7 essentially, they had three areas of economic
8 return, the standard investor return, the
9 return based on owning a piece of the
10 bandwidth of the satellite system once it was
11 created that they could use for their own
12 technology purposes inside the vehicle. And
13 then, finally, an economic return for the
14 inclusion of radios within General Motors cars
15 going forward into the future.

16 Q And how many aspects of that
17 relationship you've just described are still
18 in place today with General Motors?

19 A All of them.

20 MR. RICH: Your Honors, I'm about
21 to move to another section, and might we
22 consider pausing for the day, at five minutes

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1 to five now, rather than just begin to get
2 into it?

3 CHIEF JUDGE SLEDGE: What happens
4 on a new car when they don't renew the
5 subscription?

6 THE WITNESS: It stays there. The
7 radio is actually an AM-FM XM radio, so you
8 don't lose your AM and FM. And the biggest
9 single struggle that we have, we pay to have
10 each radio put in the car. And then we give
11 the customer three months free service, just
12 as a trial or a sampler. General Motors pays
13 for two of those months, we pay for one of
14 those months. And so after three months of
15 experiencing it, some number of subscribers
16 decide okay, I like this enough. I'm going to
17 continue to pay. That's a little bit north of
18 50 percent that do that.

19 The other less than 50 percent -
20 well, unfortunately, we've paid for the radio,
21 we gave them a free month trial, and that's a
22 lost customer to us now. At some point in

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1 time, that car may eventually be resold as a
2 used car, and we will try again at that point
3 in time to try to reach out. And then
4 periodically, we will actually turn on those
5 radios and send them a flyer that says hey,
6 you're getting another one week free trial to
7 bring them in, but you never lose your AM and
8 FM. And, clearly, that is our primary
9 competitor, because half of the people at the
10 end of their free trial say AM and FM is fine
11 with me. I don't drive it that much. It's
12 too expensive for me. And so, clearly, that
13 is, in fact, one of the most important keys to
14 eventually getting that subscriber base up to
15 a reasonable number, is how effective we are
16 at doing that.

17 CHIEF JUDGE SLEDGE: Does your
18 antenna apply to AM-FM as well, or just --

19 THE WITNESS: No, there's a
20 separate AM-FM antenna. Most of the new cars
21 now, actually, since this is small enough,
22 they include it in - you see the little,

333

1 either the little shark fins or there are GPS
2 devices where your navigation system, some of
3 them have their cellular antennas built in
4 there so that they can drive their cell phone
5 services off of it. So we have like quad
6 mode; we work with them to actually create
7 antennas that do the GPS, the navigation
8 systems, cellular, and our's. But, generally,
9 the AM-FM antenna is separately located on the
10 car.

11 CHIEF JUDGE SLEDGE: Thank you.

12 THE WITNESS: Okay.

13 MR. RICH: Thank you very much.

14 CHIEF JUDGE SLEDGE: Thank you.

15 We'll recess until 9:30 in the morning.

16 (Whereupon, the proceedings went
17 off the record at 4:57 p.m.)

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Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 In the matter of: °
 Adjustment of Rates and Terms*
 for Preexisting Subscriptions* Docket No.2006-1
 Services, °CRB DSTR A
 and °
 Satellite Digital Audio Radio*
 Services °
 VOLUME II

On Behalf of Music Choice:
 PAUL M. FAKLER, ESQ.
 Moses & Singer LLP
 406 Lexington Avenue
 New York, New York 10174-1299
 212/554-7800
 pflakler@mosessinger.com

Room LM-408
 Library of Congress
 First and Independence Avenue,
 S.E.
 Washington, D.C. 20540
 Monday,
 June 5, 2007

The above-entitled matter came on
 for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES:

On Behalf of SoundExchange:
 DAVID A. HANDZO, ESQ.
 MICHAEL B. DeSANCTIS, ESQ.
 JARED O. FREEDMAN, ESQ.
 THOMAS J. PERRELLI, ESQ.
 MARK D. SCHNEIDER, ESQ.
 Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 202/639-6060
 dhandzo@jenner.com
 On Behalf of XM Satellite Radio, Inc.:
 BRUCE RICH, ESQ.
 JONATHAN BLOOM, ESQ.
 TODD LARSON, ESQ.
 BENJAMIN MARKS, ESQ.
 BRUCE S. MEYER, ESQ.
 Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 212/310-8238
 On Behalf of Sirius Satellite Radio,
 Inc.:
 BRUCE G. JOSEPH, ESQ.
 KARYN K. ABLIN, ESQ.
 MATT J. ASTLE, ESQ.
 JENNIFER L. ELGIN, ESQ.
 THOMAS W. KIRBY, ESQ.
 MICHAEL L. STURM, ESQ.
 Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 202/719-7528
 bjoseph@wileyrein.com

I N D E X					
WITNESS	DIR	CRS	REDIR	RECRS	VOIR DIRE
GARY PARSONS	5	33	93	101	75
ERIC LOGAN	119	210	218	---	---
MARK VENDETTI	284	---	---	---	---
EXHIBIT	IDENTIFIED		RECEIVED		
SX 1	60		---		
SX 2	66		71		
SX 3	82		---		
SX 4	87		89		
SX 5	89		92		
SX 6	211		220		
SX 7	220		---		
SX 8	229		232		
SX 9	249		---		
SX 10	253		254		
SX 11	255		---		
SX 12	267		---		
SX 13	269		270		
SX 14	272		---		
SX 15	273		---		
SX 16	277		278		
XM 2	125		126		
XM 3	132		135		
XM 4	295		297		
XM 5	304		---		

1 P R O C E E D I N G S
 2 9:35 A.M.
 3 CHIEF JUDGE SLEDGE: Thank you.
 4 We'll come to order.
 5 MR. RICH: Your Honor, may we
 6 resume with Mr. Parsons?

7 CHIEF JUDGE SLEDGE: Yes, sir.
 8 WHEREUPON,
 9 GARY PARSONS
 10 HAVING BEEN PREVIOUSLY SWORN, WAS RECALLED AND
 11 TESTIFIED AS FOLLOWS:
 12 DIRECT EXAMINATION (CONTINUED)
 13 BY MR. RICH:

14 Q Good morning, Mr. Parsons.
 15 A Good morning.
 16 Q When we left off with your
 17 testimony last evening, you were talking a bit
 18 about a second group of investors which are
 19 described at paragraph nine of your written
 20 direct testimony. I'd like to turn your
 21 attention to paragraph ten in the second,
 22 third sentence of which you state: "The size

1 required a high rate of return plus other
 2 elements of compensation out of the business
 3 because frankly at that point in time we were
 4 out of money.

5 There was a very risky, unproven
 6 business venture and we needed the credibility
 7 of parties like General Motors or DirecTV or
 8 Clear Channel, as well as, obviously the
 9 capital to move forward.

10 Q Did there come a time when XM
 11 became a publicly-traded company?

12 A Yes. Shortly after the
 13 credibility and dollar-enhancing private
 14 placement by these companies, we went public
 15 in September of 1999.

16 Q Okay, now if you turn to paragraph
 17 12 of your testimony at the top of page 7, you
 18 there testify, "XM had to invent, design and
 19 build all aspects of the business needed to
 20 create and distribute this service."

21 Do you see that?

22 A Yes, I do.

1 of the required investments, the risky nature
 2 of the investments, and the nature of the
 3 investment marketplace required us to provide
 4 our business partners lucrative agreements
 5 that gave these investors an added interest in
 6 the XM business."

7 Do you see that?

8 A Yes.

9 Q Could you expand on the meaning of
 10 that briefly, please?

11 A I think as I noted yesterday,
 12 particularly in the General Motors case, they
 13 received more than simply an investment, but
 14 they received other means of compensation,
 15 including the distribution contract, the right
 16 to have them installed in their cars and be
 17 compensated for that bandwidth on the system.
 18 Some of the other parties, Clear Channel
 19 Communications as well received bandwidths and
 20 the rights to program various channels, so
 21 unlike a normal investor, even if they're
 22 seeking a very high rate of return, they

1 Q Yesterday, you gave everybody a
 2 bit of a tutorial about the challenges, but
 3 was that literally true that you had to build
 4 out, as you put it, all aspects of the
 5 business needed to create and distribute it?

6 A Within reasonable constructs, yes.
 7 We don't manufacture satellites. We don't
 8 manufacture launch vehicles to launch
 9 satellites, but beyond that the actual chip
 10 sets, the brains of the computers, the designs
 11 for the repeater network, actually the designs
 12 for requirements for the satellites themselves
 13 and the type of satellites that they needed to
 14 be in all of those systems were, in fact, yes,
 15 designed.

16 Q I take it was a collaborative,
 17 from your testimony, that it was a
 18 collaborative exercise with significant in-
 19 house R&D coupled with outside expertise?

20 A That is correct.

21 Q Now what was the cost of designing
 22 and building and launching each of the

1 satellites?

2 A Each satellite in orbit launched
3 and performing is about a quarter of a billion
4 dollars.

5 Q Quarter of a billion?

6 A Yes, \$250 million, roughly.

7 Q What was the cost of building out
8 your repeater network?

9 A The terrestrial repeated network
10 is a bit more than that. It's roughly in the
11 same range, but maybe \$260 million, \$270
12 million to build out the side of a network in
13 the major markets that we needed to cover.

14 Q How many repeaters are we talking
15 about?

16 A Originally designed actually at
17 nearly 2,000 repeaters.

18 Q How many were actually built?

19 A Eight hundred were actually built
20 or 800 operate today. We actually built about
21 1400, but it's very expensive to operate and
22 run those and so in the testing process, you

1 Boston, where we still don't have adequate
2 repeater coverage. And I apologize to anyone
3 who lives in those particular areas.

4 Q What was the approximate end cost
5 prelaunch of developing this service?

6 A Roughly one billion, approaching
7 one billion dollars in the capital expended up
8 front to get the operational nationwide
9 system.

10 Q Let's turn, if we can, please, to
11 your testimony at paragraphs 15 and 16,
12 relating to the actual launch.

13 JUDGE WISNIEWSKI: Excuse me, Mr.
14 Parsons, when you say one billion dollars,
15 could you break that down for me? Maybe I
16 wasn't hearing your testimony completely.

17 You say that the systemwide would
18 cost you one billion dollars. Are you just
19 talking about the repeater network? Are you
20 talking about the repeater network plus the
21 satellites?

22 THE WITNESS: That would be the

9

11

1 can't actually test the system and know it's
2 going to work until you have all of the pieces
3 together, so we took -- we didn't have
4 satellites, we took helicopters and broadcast
5 the signal from a helicopter down to a
6 terrestrial repeater network in a particular
7 city to see if we could replicate what a
8 combined operation would be and actually
9 revealed a flaw in the design of the repeater
10 network. And so we had to redesign the
11 repeater network in which case we actually
12 shrunk the size of the network somewhat and
13 used different power settings.

14 Q Did you face zoning or similar
15 restrictions and obstacles as well with
16 respect to placement of repeaters?

17 A Yes. Those are always there, but
18 those, I would say, even the cellular company
19 or any company is going to face that. It's a
20 multi-year process and it's a fairly slow
21 torturous process. We still have areas,
22 Westchester County, north of New York; west of

1 capital cost of what I would consider the
2 overall infrastructure.

3 JUDGE WISNIEWSKI: And that was
4 the initial expenditure?

5 THE WITNESS: That was the initial
6 expenditure. It was the two satellites in
7 orbit. There was a ground spare that you have
8 to have for emergencies or in case there's a
9 launch failure. There's the repeater network.
10 There's also a fairly significant, nearly \$100
11 million broadcast uplink studios, that
12 infrastructure; and then there's the actual
13 R&D costs, the development of the chip sets
14 and the radios.

15 JUDGE WISNIEWSKI: Thank you.

16 BY MR. RICH:

17 Q Turning to paragraph 15 and 16,
18 sir, involving the actual launch of the
19 satellites that you have described, there is
20 some of the risks. What risks did XM face in
21 relation to the launch of these satellites?

22 A Well, launching satellites are a

1 historically fairly risky venture and
 2 therefore you pay a fairly significant
 3 insurance premium to try to cover those risks.
 4 It doesn't mitigate the entire problem,
 5 because then you are shelved back in time. We
 6 actually had an aborted launch on our first
 7 launch, which was scheduled for January of
 8 2001. We had to return to port, try to
 9 replace the launch vehicle on it.
 10 Fortunately, the satellite was okay -- so it
 11 didn't not destroy the satellite from the
 12 abort. We then launched in March
 13 and I believe late May of 2001 the two
 14 successful launches. We paid roughly 18
 15 percent insurance premiums for those
 16 particular launches, which covered the launch
 17 and then some period of in- orbit insurance.
 18 Q And did experience with you call
 19 XM 1 and XM 2, your first two satellites, I
 20 won't refer to them by their musical monikers,
 21 did experience with those bear out the risk
 22 factor?

13

1 A Yes, unfortunately they did.
 2 Q Could you tell the panel about
 3 that?
 4 A After the launch of the satellites
 5 in the early part of 2001, we had an
 6 expectation of going into service in the
 7 latter part of 2001, commercial service. We
 8 were informed by Boeing, the satellite
 9 manufacturer, in August of that year of a
 10 latent defect in the solar panels, on those
 11 two birds that were in fact endemic for the
 12 entire 702 class of satellites that they had
 13 created.
 14 In fact, they informed us that
 15 there would be a reduced life time associated
 16 with the usefulness of those.
 17 MR. HANDZO: Your Honor, I believe
 18 that is beyond the scope of the written
 19 document. CHIEF JUDGE SLEDGE: I'm
 20 having a hard time seeing any benefit from
 21 this testimony. In any event, the objection
 22 is overruled.

14

1 MR. RICH: We will move along
 2 promptly, Your Honor.
 3 BY MR. RICH:
 4 Q Just to complete this immediate
 5 question, did launch insurance cover part or
 6 all of the loss you experienced with respect
 7 to XM 1 and XM 2?
 8 A It was a partial recovery on it
 9 and then we replaced the satellites with new
 10 satellites before the end of their useful
 11 lifetime.
 12 Q Do you recall the amount of the
 13 insurance settlement?
 14 A It was \$144 million, which
 15 obviously did not cover the full cost of the
 16 replacements.
 17 Q Now having made the investment
 18 between 1997 when XM acquired its license and
 19 launching in 2001, how many customers did XM
 20 sign up in that period?
 21 A Well, there were no customers and
 22 certainly no revenue in that because you have

15

1 to have a fully rolled out system before you
 2 can achieve your very first customer or a
 3 dollar of revenue.
 4 Q Well, in paragraph two of your
 5 testimony you state that "XM made four
 6 strategic partnerships with many companies at
 7 each link of the value chain to commit
 8 sufficient resources to developing and
 9 marketing XM". Do you see that?
 10 A Yes.
 11 Q Can you very briefly identify the
 12 sets of relationships and why they were
 13 critical to the success of XM?
 14 A Well, the primary relationships
 15 here would be the distribution channels. The
 16 car companies to, in fact, get the radios
 17 installed in new vehicles as well as the
 18 retailers, Circuit City, Best Buy, others, and
 19 radio manufacturers. The pure and simple fact
 20 is the billion dollars or something that it
 21 takes to get it in place accounts for zero
 22 customers, and some of the largest cash

16

1 outlays that have occurred since that
2 timeframe are the cash outlays that it takes
3 to get each new customer. That requires radio
4 subsidies, marketing efforts, and payment to
5 these distribution channels.

6 Q Now when was the service actually
7 first rolled out nationally?

8 A Nationally, it would have been
9 November of 2001. We were scheduled to launch
10 the first two cities, actually September 12,
11 2001, but due to the occurrence of September
12 11th we shoved that back. The actual
13 nationwide launch was November of 2001.

14 Q And how many channels did you go
15 live?

16 A We went live with 100 channels.

17 Q And today, how many channels are
18 there are programming does XM offer?

19 A Roughly 170.

20 Q We will leave it to Mr. Logan's
21 testimony and explication of basically the
22 content of those, but I do want to ask you a

1 what they get over the air would be of lesser
2 importance. Those things that they could only
3 get through our service that were unique to
4 our service would be the primary motivator,
5 the primary differentiator to the service.

6 Clearly, from our view -- this was
7 also, by the way, the reason why we didn't
8 simply run a music jukebox service with just
9 record after record after record. You know,
10 that's in our view, our employees and
11 programmers are the chefs that are creating
12 the meal, even though they are all using the
13 same basic ingredients that every other radio
14 station has to do that.

15 So it was important that we add that
16 creativity and talent to it.

17 Then it was particularly important
18 that we be able to find something that
19 differentiated, was not available through
20 other sources and certainly the ones that we
21 mention there are some of the high-value brand
22 content. Certainly Oprah that we have talked

17

19

1 couple of questions about what you testified
2 to beginning at paragraph 20 of your testimony
3 relating to exclusive content. You state in
4 the middle of paragraph 20 "exclusive content
5 commands a high price, but that must be
6 weighed against a number of factors such as
7 the ability of that content to attract new
8 subscribers and keep existing subscribers, the
9 potential increase in advertising revenue from
10 that content and a negative impact of a
11 competitor acquiring that content".

12 Will you expand briefly on that
13 testimony, please, and what you had in mind
14 there?

15 A Yes, our view from the very
16 beginning -- our primary competition,
17 virtually 100 percent of the listeners were
18 listening to free over-the-air radio. We had
19 to have something that was clearly
20 differentiable in order to get people to pay
21 for the service. And we understood that those
22 portions that would be very, very similar to

1 about, Major League Baseball, Fox News that
2 are not commonly available over a local over-
3 the-air radio station were items.

4 As we went through an assessment
5 of all of that different type of programming,
6 first whether it did provide differentiation;
7 secondly, whether we could get advertising
8 revenue off of it, which we offset against the
9 costs of that content. Then did it bring us
10 brand image? Did it bring us some marketing
11 capability that was differentiable?

12 Q Let's get specific with respect to
13 two of these. Oprah -- what special
14 attributes or qualities may it bring to XM?

15 A Oprah is Oprah and as much as our
16 competitor mentioned the uniqueness of Stern,
17 which is in fact very unique and brings a very
18 substantial following there. We found
19 particularly in the female demographic that
20 Oprah was a particularly positive influence.
21 We knew that she has obviously promoted books
22 and Broadway plays and everything else very

1 successfully through her television show, so
2 we would get an advertising displacement. We
3 would not have to spend the advertising
4 dollars that we would otherwise spend by her
5 or her guests talking about it on the
6 television program.

7 We understood that while it was
8 initially a male-dominated service, people who
9 went out to a Circuit City or Best Buy tend to
10 be 18-34 male, as the new cars come in, that
11 actually tends to be female dominated. So we
12 didn't have sufficient programming to attract
13 a female demographic. We felt overall that
14 combination was a very unique property on
15 radio.

16 Q What special value did Major
17 League Baseball bring to XM?

18 A A similar one. Major League
19 Baseball, more than any other sport in our
20 view was built for radio. It occurs at all
21 different times during the day. It has a
22 very, very long season and historically it was

1 the cost of that service is in fact the
2 marketing deal. A minor portion of the
3 service is the programming content deal.

4 Q It is suggested by Sound Exchange
5 that since a significant portion of the
6 listenership of XM is associated with
7 listening to music programming that the most
8 significant portion of the value provided by
9 XM is attributable to the sound recordings and
10 the sound recording performing right at issue
11 here. Do you have a view of that?

12 A Value, as I've just finished
13 explaining, comes in a lot of different forms
14 when you're trying to attract a new audience.
15 Your ability to increase the awareness of your
16 brand, to get the message in front of people,
17 to bring them in what advertising you may be
18 able to generate off of it that you may not be
19 able to generate off of a different property
20 that is commercial free. All of those things
21 impact value and certainly I think, you know,
22 listening is one of those. But as Mr. Handzo

21

23

1 one that just the pace of the game allowed
2 people to listen to it at a leisurely pace.
3 It goes well with radio.

4 It also has a very large number of
5 displaced fans. In other words, even though
6 a lot of people listen to sports on the radio
7 or Major League Baseball on the radio, they
8 listen to a local team. Seventy percent of
9 XM's Major League Baseball listeners identify
10 themselves as displaced fans. You know,
11 they're a Red Sox fan that happens to be
12 living in, Heaven forbid, New York or
13 something. It is an ability to catch -- the
14 same way with college sports. We do out of
15 market type capabilities and there is
16 obviously a huge branding opportunity that we
17 get of placements of ads in those stadiums and
18 associated with the Major League Baseball,
19 television broadcasts and others.

20 So we generally in these
21 attribute some portion of the cost of that
22 service. For example, in Oprah a majority of

1 said in the opening argument yesterday, they
2 talk about cable TV. A lot of the viewership
3 of that is on the over-the-air networks, but
4 they receive minimal compensation from the
5 cable networks even though there is a
6 significant viewership.

7 However, by the way, I think if
8 any one of those networks agreed to shut down
9 their over-the-air broadcast or only provide
10 it to DBS or Direct TV and not provide it to
11 Comcast, yes, I suspect that would suddenly
12 get a huge value in that cable operator. I
13 don't think video as a lot of dissimilarities,
14 but I do think it is a situation where the
15 exclusivity of this, when your primary
16 competitor has it for free is a clear value
17 proposition.

18 Q Thank you. Turning to the section
19 of your testimony beginning at paragraph 36
20 which is future challenges, you testified to
21 a number of the major capital expenditures
22 faced by XM at the outset. Looking forward,

22

24

1 are a substantial or all of those capital
2 expenditures now behind XM?
3 A Well, I hope the satellites are
4 behind us for awhile, although we did have a
5 blip last week. There is still remaining
6 capital expenditures to go forward. We are
7 finishing the construction of our fifth
8 satellite, which will act as a ground spare
9 for the two new ones which have recently been
10 launched prematurely.

11 Q Let me pause you there. What is
12 the expected use for life of a satellite?

13 A Generally, 15 years.

14 Q And would XM 1 and 2, what was the
15 actual experience?

16 A Four years fulfilling their full
17 mission, and then we will use them as a backup
18 in essence for another three years or so.

19 Q And that's because of the
20 technical problems you testified to?

21 AA -- problems and that is why you
22 always have to have a spare already built

25

1 because it takes two to three years to build
2 a satellite, and then generally another year
3 to find an available launch window, you know,
4 to put it up. So you cannot be without
5 service for a very limited period without
6 devastating, completely devastating your
7 business.

8 Q And what is the useful life of
9 your repeater network?

10 A Generally a five to seven year
11 type of a timeframe. We will be looking at
12 continued expansions on that front. I would
13 say that the primary developmental elements
14 that we have in front of us are the fact that
15 with new competition that is coming, clearly
16 the tiny little antenna that I showed you is
17 still not small enough to be, you know,
18 integrated into a cell phone. The power
19 consumption of the chips is too great to
20 currently be integrated into a cell phone, yet
21 we believe that in order to remain
22 competitive, to get the sort of subscriber

26

1 growth that we would like to have, we are
2 clearly going to need to be able to integrate
3 into some of these other devices in order to
4 have a competitive market place there from
5 those sort of competitors coming.

6 Q Are most of the technology risks
7 now behind XM in your estimation?

8 A I think the technology risks for
9 the running of the core system are now in
10 place. But for example, the technology risks
11 associated with reasonably competing -- we
12 clearly can't make money at the number of
13 subscribers we have today. We've proven that
14 fairly effectively. We need vastly more
15 subscribers to be able to ever break even,
16 much less get our money back in any sense.

17 So we have to continually be
18 breaking through these technology challenges
19 to reach marketplaces, or reach a distribution
20 capability that will sustain that growth rate
21 or we begin to taper over like the DBS players
22 are tapering over now, and then it is

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1 disaster.

2 Q You referenced a problem a few
3 days ago. With the Court's consent, I would
4 ask if you might describe in a few sentences
5 what you were referring to?

6 A We had an outage on our third
7 satellite, which was just launched to replace
8 one and two that were failing. It was out of
9 service for almost two days, which had a
10 fairly major impact on our network and
11 operations. We obviously were able to repair
12 that situation and have it back in service,
13 but it clearly highlighted to us, the amount
14 of impact and customer service and credits and
15 negative publicity we received over that, were
16 simply a day's worth of outage. If that issue
17 had not been able to be fixed in a month, I
18 think we don't have a business.

19 Q What is XM's current financial
20 picture?

21 A It is not good right now.
22 Obviously, we -- I think we noted that we lost

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1 something in the range of \$1.9 million, almost
 2 \$2 million per day during this recently
 3 completed year. We are continuing to lose
 4 well in excess of a million dollars a day for
 5 this current period, and obviously, we hope to
 6 some number of years in the future, stop that,
 7 and actually get to a -- first, a positive
 8 cash flow situation to sustain ourselves and
 9 then eventually begin earning.

10 Q Well, if you turn to paragraph 38
 11 of your written testimony, you speak about
 12 obtaining positive cash flow and EBITDA and
 13 profitability. Do you see your testimony
 14 beginning currently analyst project?

15 A Yes, that's correct.

16 Q Sitting here today, do those
 17 numbers still hold?

18 A No, those numbers were accurate as
 19 of last October. They have deteriorated since
 20 that time frame.

21 Q Can you update the Court, please?

22 A I think the general analysts'

29

1 consensuses that are out there, at this point,
 2 would show cash flow positive, pushed off
 3 until 2008, some of them issued at 2009, but
 4 I think most show 2008.

5 Positive EBITDA were in the 2009
 6 time frame and profitability in the 2011 or
 7 beyond. So essentially in the last six months
 8 with the slowing of the subscriber growth that
 9 is being witnessed, all of the analysts have
 10 pushed out
 11 their profitability thresholds again.

12 Q What has happened, generally, or
 13 specifically, to XM stock price in the time XM
 14 became publicly traded in 1999?

15 A Well, we have a stock price today
 16 that is below the stock price when we went
 17 public in 1999. Essentially, all of the --
 18 this -- as indicated earlier, I've had an
 19 awful lot of start ups in my time. This is
 20 actually the most positively favorably
 21 rewarded one from a creativity awards basis
 22 and feeling good about it and it's the worst

30

1 one so far from a financial or any sort of
 2 investment basis.

3 Q Let's finally talk about a couple
 4 of questions about the rates being sought in
 5 this proceeding.

6 Are you familiar with XM's rate
 7 proposal, sir?

8 A Yes, I am.

9 Q What do you understand it to be?

10 A I understand the economist came up
 11 with a range of reasonable rates between .88
 12 and 2.35 percent of revenue.

13 Q Focusing on that range, can XM, in
 14 your estimation, sustain a significantly
 15 larger sound recording performing royalty
 16 without hampering its growth?

17 A No. Clearly, any increase from
 18 what we are currently sustaining today will
 19 hamper the time frame that you've --
 20 mathematically, it will slow down the time
 21 frame when you either receive profitability or
 22 certainly cash flow positive, and would, in

31

1 fact, hamper the growth.

2 Q In your judgment, can the royalty
 3 increase sought by SoundExchange be absorbed
 4 by XM without having a disruptive impact on
 5 the satellite radio industry?

6 MR. HANDZO: Again, I'll object,
 7 Your Honor. Beyond the scope of the direct.
 8 Obviously, there wasn't anything in the direct
 9 testimony about the impact of SoundExchange's
 10 proposal, since it hadn't been made at the
 11 time he wrote his testimony.

12 MR. RICH: You may answer, sir.

13 THE WITNESS: I think my direct
 14 testimony is any substantial increase would
 15 have a significant impact and as I understand
 16 the SoundExchange proposal, that's like ten
 17 times or so what we're paying.

18 No, that's sort of a dis-economic
 19 disruptive, clearly would call into question
 20 the ability to continue t e fund or growth or
 21 grow the business.

22 MR. RICH: Subject to any

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1 questions from Your Honors, that concludes my
2 direct examination.

3 CHIEF JUDGE SLEDGE: MusicChoice?

4 MR. FAKLER: No, Your Honor.

5 CHIEF JUDGE SLEDGE:
6 SoundExchange?

7 MR. HANDZO: Yes, Your Honor.

8 CROSS EXAMINATION

9 BY MR. HANDZO:

10 Q We had some questions in response
11 to questions from Mr. Rich this morning. You
12 talked about the XM agreement with General
13 Motors why which General Motors invested in
14 XM. Do you recall that?

15 A Yes, I do.

16 Q And you said that XM got more than
17 in investment. It also got some other
18 business benefits out of that deal.

19 A You mean GM?

20 Q GM.

21 A Correct.

22 Q In fact, XM also got some business

1 receiver in it?

2 A That is correct.

3 Q And that is a fairly substantial
4 benefit to XM, is it not?

5 A That's a \$20 benefit.

6 Q It's a \$20 benefit, but it's also
7 a benefit in terms of now having consumers who
8 buy a car getting a free exposure free from
9 XM's -- to the service?

10 A Right. XM provides one month.

11 The \$20 compensates us for the other two
12 months that we would have been providing
13 ourselves.

14 Q So there's two months where you
15 get paid for that service?

16 A That's correct.

17 Q And the consumer gets free
18 exposure to it?

19 A That's correct.

20 Q And that's a substantial benefit
21 for XM?

22 A It's a \$20 benefit.

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1 benefits out of that deal in addition by the
2 investment by General Motors?

3 A Yes, and credibility, yes.

4 Q In addition to credibility, there
5 are other business benefits that you got from
6 GM as a result of that investment, correct?

7 A They don't immediately appear to
8 me.

9 Q For example, as part of that
10 agreement, GM provides two months' free
11 service to people who buy a car with factory-
12 installed XM receiver, right?

13 A Actually, that was entered into
14 later. Originally, they had no obligation to
15 pay for the two months, three, nor did they
16 have any obligation to install radios.

17 Q That's part of the deal now,
18 right?

19 A Yes, we subsequently amended the
20 deal.

21 Q All right, so now they pay for two
22 months of free service in a car that has an XM

1 Q Plus the promotional value?

2 A I guess you're misunderstanding
3 me. In all of our agreements, the subscriber
4 gets three months free. So we have the
5 promotional benefit. We pay for it in certain
6 of those environments, 100 percent. In this
7 case, we only pay one third of it.

8 Q And my point, I don't mean to have
9 us argue with each other, but you get \$20 from
10 GM, right?

11 A Yes.

12 Q And you're getting a consumer who
13 just bought a car?

14 A Correct.

15 Q Exposure to your service?

16 A That's correct.

17 CHIEF JUDGE SLEDGE: Mr. Handzo,
18 if I may interrupt. I don't understand what
19 GM cars include this service.

20 THE WITNESS: Actually, at this
21 point in time, every single GM car that is
22 manufactured today has the factory-installed

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1 option. Only about 40 percent of them
2 actually come with it. Some of the say an
3 Escalade or Cadillac, 100 percent of them have
4 it. It is just rare you cannot buy that
5 vehicle without it.

6 In many of the other ones,
7 particularly some of the -- a Chevy Cobalt, or
8 something like that, a low-end entry level
9 car, they're available, but you would have to
10 pay \$200 additional. If you paid \$200
11 additional, then in fact, you get a Chevy
12 Cobalt with an XM radio in it.

13 So it is widely available and if
14 you got to most dealerships on any GM car or
15 any Honda or Acura car and coming through
16 other manufacturers as well, you'll see some
17 20-30 percent or so of those on the lot
18 actually have it installed.

19 CHIEF JUDGE SLEDGE: Is it
20 standard on about 40 percent of cars?

21 THE WITNESS: Thirty to 40.
22 Depends on the manufacturer.

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1 CHIEF JUDGE SLEDGE: Thank you.

2 BY MR. HANDZO:

3 Q And just to follow up on that, am
4 I right that the percentage of cars that have
5 XM receivers as standard has been increasing
6 over time?

7 A Yes, that is true.

8 Q Mr. Rich asked you some questions
9 about the insurance recovery for XM Rock and
10 RX Roll?

11 A Correct.

12 Q Am I right that Xm submitted an
13 insurance claim for constructive complete loss
14 of their satellites?

15 A Yes, I believe we did.

16 Q And the insurance company didn't
17 agree that they were a complete loss, right?

18 A Right, because they were gradually
19 deteriorating. They did not blow out of the
20 sky.

21 Q And in fact, from the time you
22 learned there was a problem with XM Rock and

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1 XM Roll, you were able to continue to use them
2 for a period of time?

3 A That is correct.

4 Q Until you got Rhythm in orbit,
5 right?

6 A Until we got what?

7 Q Until you got Rhythm in orbit?

8 A In other words, Sex and Drugs were
9 the other choices for those two.

10 (Laughter.)

11 CHIEF JUDGE SLEDGE: It sounds
12 like the responses Senator Clinton has gotten
13 to her theme song.

14 (Laughter.)

15 THE WITNESS: Correct.

16 BY MR. HANDZO:

17 Q In response to a question by Mr.
18 Rich, I'm not sure I sort of caught the answer
19 so I'm just going to ask you again. He had
20 asked you whether most of the technology risks
21 were behind you at this point and I think your
22 response was that the technology risks for --

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1 and you're running the basis part of the
2 network was in place. Did you mean that basic
3 risk was in the past?

4 A That basic risk developmentally is
5 in the past. Unfortunately as experienced
6 this last weekend, the actual operation in
7 keeping it running is not in the past. It's
8 very, very current.

9 Q XM has a plan to launch a fifth
10 satellite. Right now there are four in orbit?

11 A Correct.

12 Q And the fifth is likely to be
13 launched in 2008?

14 A Likely beyond that.

15 Q And that would be used as a spare
16 that's already in orbit, right?

17 A That's correct.

18 Q So once that's in orbit, you've
19 got a satellite already up there that you can
20 use if there's a problem with one of the
21 existing constellations?

22 A The reason you would do that is to

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1 speed up the length of the outage would be
2 lessened if you go to the extraordinary expend
3 of launching an additional.

4 Q Now in your written testimony, Mr.
5 Parsons, you talk among other things about the
6 fact that you had to create a new business
7 model. And I want to ask you a few questions
8 about that.

9 When XM first went into business,
10 DirectTV and EchoStar were already in business,
11 correct?

12 A You say we went into business, you
13 mean when we commercially launched our service
14 or when we decided to go into the business?

15 Q Well, when you commercially
16 launched your service?

17 A Yes.

18 Q And DirecTV and EchoStar are
19 satellite TV companies, right?

20 A That is correct.

21 Q And those satellite TV services
22 showed you that people were willing to pay

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1 money to subscribe to a multi-channel
2 satellite entertainment service, right?

3 A Well, cable TV had already shown
4 us that.

5 Q So you had some comfort looking at
6 the DirecTV and EchoStar and cable TV, that
7 selling a subscription satellite service was
8 a viable business model?

9 A No, I had recognition that people
10 would pay for multi-channel video services.
11 I think every investor that I spoke to in the
12 early stages had great question as to whether
13 people would pay for a multi-channel audio
14 service.

15 Q Well, you knew you had at least
16 part of the equation, that people were willing
17 to pay a subscription for a satellite
18 entertainment service?

19 A That is correct.

20 Q Well, in fact, DirecTV was an
21 early investor in XM. Is that right?

22 A Yes. They were one of the groups

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1 that we brought in in 1999.

2 Q XM had a technical services
3 agreement with DirectTV?

4 A That is correct.

5 Q And XM was able to learn from some
6 of DirectTV's experiences, right?

7 A Primarily in their area of
8 involvement was in the fraud encryption area
9 where they had a particularly troubled history
10 and were able to help us avoid those errors.

11 Q You also learned from their
12 experience that you needed to create a channel
13 to sell subscriptions and receivers direct to
14 consumers through retailers?

15 A Yes, that was in existence -- at
16 least in existence at the retail level. There
17 clearly was not the view to be able to do that
18 through the new car marketplace, which is the
19 preponderance of our sales today. There was
20 not a model for that at the time.

21 Q But you thought it was important
22 to have a separate channel to sell directly to

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1 consumers, right?

2 A And we felt it was essential in
3 the early stages, and that is, in fact,
4 proving out. That is the part of the market
5 that is unfortunately drying up right now as
6 it is for DirecTV and EchoStar.

7 Q And DirecTV had sort of developed
8 that method of selling through stores like
9 Circuit City and Best Buy, direct to
10 consumers, right?

11 A They as well as the cell phone
12 companies.

13 Q And so you were able to learn from
14 that experience, right?

15 A That is correct.

16 Q You were also able to learn from
17 DirecTV's experiences with its billing
18 systems, right?

19 A I'll say once again the learning
20 by avoiding the negatives. There were in fact
21 -- we learned a lot from other people's
22 failures, particularly the mobile satellite

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1 services industry.

2 Q And it is helpful to know what not

3 to do as well as what to do, isn't it?

4 A That is correct.

5 Q Other area investors provided

6 expertise and things like programming and

7 customer service, right?

8 A Not so much.

9 Q Isn't that what you say on page

10 five of your written testimony, Mr. Parsons?

11 I will direct you to paragraph nine. It says

12 "these investors entered into contracts with

13 XM for programming and distribution, and some

14 of these contracts even provided the investor

15 with a portion" -- that's not the part I

16 wanted to read. "They provide expertise of

17 various elements of the business, such as

18 billing, programming, and customer service"?

19 A Yes, I thought you were referring

20 to other than DirectTV.

21 Q Are you saying it was only

22 DirectTV that --

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1 A No, DirectTV provided the customer

2 service elements, where once again they had a

3 difficulty. The programming was provided by

4 Clear Channel.

5 Q All right, and what about billing?

6 A That is DirectTV.

7 Q And Clear Channel was also an

8 early investor?

9 A That is correct.

10 Q So they provided some expertise

11 with respect to programming?

12 A The programming aspect, yes.

13 Q You also talked in your written

14 testimony and in your oral testimony about

15 creating the technology for your satellite

16 radio service?

17 A Yes.

18 Q I have a few questions about that.

19 Two of the -- actually, the two original

20 investors in XM were American Mobile Satellite

21 Corporation and World Space. Is that right?

22 A That is correct.

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1 Q The business, I will refer to

2 American Mobile Satellite Corporation as AMSC

3 if that is okay?

4 A Okay.

5 Q The business of AMSC was to

6 provide two-way voice and data services,

7 right?

8 A That is correct.

9 Q And some of those services were

10 provided to mobile receivers in moving

11 vehicles?

12 A Yes.

13 Q And AMSC owned satellites that

14 were used to make those mobile communications

15 transmissions, right?

16 A Yes, a satellite.

17 Q And World Space at the time that

18 it invested was developing a satellite radio

19 service to serve under-developed nations,

20 correct?

21 A That is correct.

22 Q And XM had technical support

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1 services agreements with both companies, isn't

2 that right?

3 A That is correct.

4 Q And that allowed XM to use the

5 technical employees of AMSC and World Space?

6 A It allowed us to avail it on an as

7 available, if available basis.

8 Q Okay, but you had access to those?

9 A We had access to those personnel

10 when they were available.

11 Q Now World Space used a consulting

12 group called the Fraunhofer group?

13 A That is correct.

14 Q And you also had access to what

15 the Fraunhofer group developed, isn't that

16 right?

17 A Well, anyone had access to what

18 Fraunhofer developed, but yes, we did.

19 Q In particular, Fraunhofer

20 developed an algorithm for the chip sets for

21 World Space?

22 A A portion of that. As I think I

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1 have stated in kind of laying out the
2 complexities that had to be dealt with, none
3 of those systems -- neither the AMSC system
4 nor the World Space system were designed for
5 this type of an application. The World Space
6 system clearly only dealt with a fixed type of
7 an application and a single satellite. So the
8 Fraunhofer group code was isolated to only
9 that portion of it.

10 We have subsequently, by the way,
11 licensed back to World Space all of our
12 innovations and patents relative to turning
13 that into a mobile service, although
14 Fraunhofer group does not have access to that.

15 Q But some portion of the work that
16 the Fraunhofer did on algorithms for World
17 Space, XM was able to take advantage of,
18 right?

19 A Yes.

20 Q I think you alluded to this
21 earlier, but XM also learned from the
22 experiences and sometimes from the failures of

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1 other satellite services like Iridium and
2 Global Star?

3 A Yes. Unfortunately, most of the
4 mobile satellite service companies in
5 existence at that time all went bankrupt.

6 Q But you learned from their
7 mistakes?

8 A I guess so.

9 Q For example, one of the things you
10 learned was you need to put more into the
11 satellite so you can have a cheaper receiver
12 if you want to sell to a mass market, right?

13 A Correct.

14 Q So you knew not to make that
15 mistake?

16 A Right.

17 Q Well, with respect to the
18 satellites themselves, XM didn't design and
19 build the satellites, is that right?

20 A No, we did not. Boeing did.

21 Q XM contracted with Boeing for the
22 satellites?

1 A Correct.

2 Q XM purchased a 702 class Boeing
3 satellite?

4 A Yes.

5 Q Other companies like Pan Am Sat
6 and Telesat have purchased those 702 class
7 satellites from Boeing before you did?

8 A Yes.

9 Q And had placed them in service
10 before XM did?

11 A They were not in service prior to
12 our commissioning. In other words, we
13 assessed the different manufacturers of
14 satellites to try to determine those that
15 would meet our needs. Our needs were right at
16 the edge of the available technology.

17 In fact, the power from our
18 satellites are higher, the output power from
19 the payload is much higher than any of those
20 previous ones that you mentioned. And we knew
21 that that was going to be extremely risky. So
22 we did, in fact, award the contracts to Boeing

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1 at a time when there were no other 702s in
2 orbit, flight-proven.

3 There were 702s that launched
4 prior to our launch and all of us,
5 unfortunately, got stuck with the failed
6 silver systems.

7 Q Just so I'm understanding, Boeing
8 had designed the 702s for other customers
9 before you bought them, right?

10 A The bus.

11 Q Okay. And other customers lost
12 them before you did, right?

13 A Before we launched ours, correct.

14 Q XM does not operate the satellites
15 itself, is that true?

16 A No. It's operated by Telesat out
17 of Canada. We actually have four legal U.S.
18 Government reasons. We have a control
19 override capability at XM headquarters on U.S.

20 soil. So, in fact, we can take control of
21 those at any instant if Canada attacks or
22 something.

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1 (Laughter.)
 2 So from a governmental standpoint,
 3 we control the satellites, but only on an
 4 override basis, the day-to-day operation is
 5 Telesat.
 6 Q But right now, the Canadians are
 7 controlling --
 8 A But right now, Canadians, on a
 9 day-to-day basis are controlling.
 10 Q And XM contracted with Hughes
 11 Network Systems to design the terrestrial
 12 repeaters. Is that true?
 13 A They were the master contractor on
 14 it. There were other subcontractors that we
 15 worked with that were actually far more
 16 familiar with the particular terrestrial
 17 algorithms that we were trying to create for
 18 that purpose which were, in fact, unique.
 19 Q Hughes oversaw the design of
 20 those?
 21 A Hughes oversaw the manufacturing
 22 integration of it.

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1 Q You spoke a little bit in your
 2 testimony about technology risks. And in your
 3 written testimony you talked about risks that
 4 come with the launcher of the satellite. And
 5 in particular, in your written testimony you
 6 refer to Sea Launch who XM used to launch a
 7 satellite which you said was a new service
 8 that had only successfully launched a handful
 9 of satellites. Do you recall that?
 10 A That's right.
 11 Q Now at the time XM chose Sea
 12 Launch, there were other more experienced
 13 launch services available, correct?
 14 A That is correct.
 15 Q Sea Launch was less expensive than
 16 those more experienced services.
 17 A They were less expensive than some
 18 of the more experienced services or actually
 19 more expensive than one of the more
 20 established ones. Proton was actually less
 21 expensive in the bidding. Aerion was more
 22 expensive.

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1 But Sea Launch provided the best
 2 accommodation of all.
 3 Q Including less cost.
 4 A Correct.
 5 Q So that was a business choice that
 6 XM made. You had other more experienced
 7 launch services you could have gone with?
 8 A Yes. It's a balancing of risk
 9 versus cost in all aspects of the business.
 10 Q Mr. Rich, excuse me, asked you a
 11 couple of questions about whether you were
 12 cash flow positive and you gave you answers in
 13 terms of what the analysts are projecting.
 14 It's XM's projection that you will
 15 be cash flow positive in 2008, is that right?
 16 A Yes. Which is a -- to make sure
 17 it's very clear here. Later than what we
 18 showed at the time of this submission, that in
 19 fact has pushed out again from our projection.
 20 Q In your written testimony, you
 21 talk about the amount of money that XM loses
 22 every day. Do you expect that number to

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1 decrease over time?
 2 A That is certainly our hope and
 3 intention.
 4 Q Until it turns positive?
 5 A That is also my hope an intention.
 6 Q Well, then you started this
 7 business. You started to lose money at the
 8 outset, right?
 9 A Yes, I think any new venture that
 10 requires spending over one billion before you
 11 get the first dollar of revenue, obviously
 12 understands that there are going to be losses
 13 during that period. The real key to success
 14 in that venture is to be able to fairly
 15 rapidly reach that positive cash flow
 16 situation which unfortunately has been pushed
 17 out a number of times as we have developed
 18 this service.
 19 Q But as you say, it is the nature
 20 of the business, is it not, that you spend a
 21 lot of money up front, and it's going to take
 22 you a while to recover it until you build the

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1 subscriber base to pay for it?
 2 A Well, the length of time is what's
 3 not the nature of the business. As I say,
 4 I've done a number of different start ups in
 5 my time, all of which have that exact same
 6 characteristic and all of which became
 7 profitable far more rapidly than this is.
 8 Q It took a considerable number of
 9 years for DirectTV and EchoStar to reach a
 10 position of being cash flow positive, correct?
 11 A That is correct.
 12 Q But they made it?
 13 A They eventually made the cash flow
 14 positive part.
 15 Q With respect to your testimony
 16 that the fact that XM is losing money, the
 17 fact that XM was losing money in 2006 when it
 18 signed its agreement with Oprah Winfrey wasn't
 19 it?
 20 A That is correct.
 21 Q The fact that XM was losing money
 22 didn't stop it from spending many millions of

1 standpoint, I'm not sure, but certainly it is
 2 a very popular aspect of what people listen to
 3 on a daily basis.
 4 Q Well, it is what your subscribers
 5 value the most, isn't it?
 6 A Once again, I wouldn't necessarily
 7 say that. I believe in most of the results
 8 that come back, it is the full diversity of
 9 choice and the richness of choice that appears
 10 to be the strongest single element. But among
 11 individual elements that people say they
 12 enjoy, music is certainly maybe the highest
 13 one of those individual ones.
 14 Q Mr. Parsons, XM conducts survey
 15 research of its subscribers periodically,
 16 right?
 17 A Yes, we do.
 18 Q And you see some of the results
 19 from that, don't you?
 20 A Yes, I do.
 21 Q Mr. Parsons, I want to show you
 22 what we've marked as SoundExchange Exhibit 1.

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1 dollars on Oprah?
 2 A That is correct.
 3 Q And XM was losing money when it
 4 signed its deal with Major League Baseball,
 5 isn't that right?
 6 A That's correct.
 7 Q And it spent even more than it did
 8 on Oprah with respect to Major League
 9 Baseball?
 10 A I think it's accurate to say
 11 everything we've done was when we were losing
 12 money.
 13 Q Okay, so if content is valuable to
 14 XM, it will pay market rates to get it even
 15 though it's losing money, right?
 16 A If content and marketing and
 17 awareness and the other benefits that come
 18 with it are, then yes.
 19 Q Now isn't it true, Mr. Parsons,
 20 that music is actually your most important
 21 content?
 22 A From a value proposition

1 (Whereupon, the above-referred to
 2 document was marked as SX Exhibit
 3 1 for identification.)
 4 And I would just note for the
 5 record that this document, I believe, was
 6 designated restricted by XM. And as I
 7 understand the Court's current regulations, we
 8 need to provide you with the certification by
 9 XM that they -- when they marked it restricted
 10 which I have done.
 11 I do have some questions for Mr.
 12 Parsons about the documents. I'll leave it to
 13 Mr. Rich to address the Court if he wants
 14 those to be treated as restricted.
 15 MR. RICH: Your Honors, without
 16 knowing the specifics of what is going to be
 17 inquired as to, it's a little bit difficulty
 18 to be conclusive over all. These are subject
 19 matters that are proprietary to the company
 20 and competitively sensitive in relation to
 21 Sirius as a matter. That's why these are
 22 prepared in part to evaluate the competitive

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1 landscape. But again, without knowing more
2 precisely where Mr. Handzo is going I can't
3 necessarily react more narrowly to the
4 sensitivity of the questions and the answers
5 that are likely to elicit.

6 JUDGE ROBERTS: Maybe Mr. Handzo
7 can tell us which pages?

8 MR. HANDZO: Yes, I am going to
9 start with page 2, page 24, page 27, page 40.

10 MR. RICH: Did you say 40?

11 MR. HANDZO: Forty, yes.

12 CHIEF JUDGE SLEDGE: Mr. Rich has
13 indicated appropriately that he'll respond to
14 specific questions. Please proceed.

15 BY MR. HANDZO:

16 Q Mr. Parsons, let me direct your
17 attention to page two.

18 And I'm going to ask you, if you
19 would, to read the second bullet point there.

20 A Music programming still remains
21 the most important programming genre for
22 nearly all satellite radio listeners, despite

1 XM concluded that music programming is the
2 most important programming genre for nearly
3 all satellite radio listeners?

4 A Yes, you would have to understand
5 how tightly that genre is defined. But yes,
6 that is correct.

7 Q And you have no reason to disagree
8 with that conclusion, do you?

9 A No.

10 Q And the people who wrote this
11 document went on that say that it is true that
12 music is the most important genre for nearly
13 all satellite listeners despite the investment
14 in alternative and differentiating content
15 such as sports and talk. Do you see that?

16 A Correct.

17 Q And you have no reason to disagree
18 with that conclusion, do you?

19 A Once again, subject has seen the
20 details behind it. It's very difficult
21 sometimes with global generalities to
22 understand the depth of what is being

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1 investments in alternative and differentiating
2 content such as sports and talk.

3 Q But do you understand that to be a
4 summary of internal survey results that XM
5 performed?

6 A Yes, it would seem to be.

7 Q Do you know if those survey
8 results had been conveyed to you?

9 A Yes.

10 Q And is it fair to say then that it
11 is the conclusion of the people who conduct
12 surveys at XM that music programming is the
13 most important for nearly all satellite radio
14 listeners?

15 MR. RICH: May I hear the question
16 read back, please?

17 CHIEF JUDGE SLEDGE: No, sir. We
18 generally don't read back questions. It's too
19 difficult.

20 BY MR. HANDZO:

21 Q Is it fair to say, Mr. Parsons,
22 that the people who conduct survey research at

1 communicated.

2 CHIEF JUDGE SLEDGE: That doesn't
3 respond to the question.

4 THE WITNESS: I don't have any
5 specific reason to disagree with that
6 sentence.

7 Would Your Honor like me to expand on that?

8 CHIEF JUDGE SLEDGE: No, sir.

9 THE WITNESS: I do have something
10 clear in mind when I say that.

11 CHIEF JUDGE SLEDGE: Just answer
12 the question.

13 THE WITNESS: Okay.

14 BY MR. HANDZO:

15 Q Mr. Parsons, let me ask you to
16 turn to page 24. Do you see there in the
17 first paragraph where it says both XM and
18 Sirius subscribers state that music is by far
19 the most important type of programming for
20 them?

21 A Yes.

22 Q You don't have any reasons to

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1 disagree with that statement, do you?
 2 A No.
 3 Q Let me ask you to turn to page 27.
 4 There in the first bullet point, do you see
 5 where it says "music is the most important
 6 type of programming for all demographic
 7 groups"?
 8 A Correct.
 9 Q Again, you have no reason to
 10 disagree with that, do you?
 11 A No.
 12 Q Lastly, if you would turn to page
 13 40. Let me just ask you to take a minute to
 14 look at that page.
 15 (Pause.)
 16 Have you had a chance to look at
 17 it?
 18 A Yes.
 19 Q Do you understand that to be a
 20 survey that is focussing on XM sports fans?
 21 A Correct.
 22 Q And what it is showing is that

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1 even for XM sports fans, music programming is
 2 far more important than sports programming?
 3 A Yes.
 4 Q You have no reason to disagree
 5 with that conclusion either, do you?
 6 A No.
 7 Q Mr. Parsons, I've handed you what
 8 we've marked as Sound Exchange Exhibit Number
 9 2.
 10 (Whereupon, the above-referred to
 11 document was marked as SX Exhibit
 12 No. 2 for identification.)
 13 Have you seen that document
 14 before?
 15 A Yes, I have seen this one.
 16 Q And you received that in the
 17 ordinary course of business?
 18 A Yes.
 19 Q Let me ask you to turn to page 13.
 20 Do you see there there is a discussion of
 21 center lane and shoulder programming?
 22 A Correct.

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1 Q And what center lane programming
 2 refers to programming that reaches a mass
 3 market, correct?
 4 A Yes.
 5 Q And shoulder programming is
 6 programming that reaches more of a niche kind
 7 of market?
 8 A I guess you could phrase it that
 9 way. We believe that clearly certain types of
 10 programming attract the vast preponderance of
 11 people, but most people are not simply
 12 satisfied with only hearing that. They want
 13 to hear and have broader experiences or else
 14 it loses value to them to only hear the
 15 mainstream.
 16 Q Okay, it says "it is XM's content
 17 strategy to have both the center lane
 18 programming and the shoulder programming"?
 19 A That is correct.
 20 Q Okay, and you need to have the
 21 center lane programming because you are a mass
 22 market service. You need to appeal to a lot

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1 of people, right?
 2 A Right. If we designed a business
 3 plan to only hit niche type of areas with a
 4 much less expensive infrastructure, we could
 5 have done so with only niche capabilities.
 6 Q But with the kind of
 7 infrastructure that you had, satellites and
 8 terrestrial repeaters, you need to be a mass
 9 market service?
 10 A It is important to be a mass
 11 market service.
 12 Q And you also want to be a service
 13 that has the shoulder programming, because
 14 that does differentiate you from competitors,
 15 right?
 16 A Clearly. It is, in fact -- I
 17 mean, the answer that I gave originally on
 18 music being the most individually important,
 19 it is, in fact, swamped by the appeal for the
 20 wide diversity. That is what we continue to
 21 hear as what attracts people to the service,
 22 not any particular piece of programming.

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1 Q Well, music, something like
 2 classic rock, is part of your center lane
 3 programming, right?
 4 A Yes.
 5 Q But music, something like Celtic
 6 music, is also part of your shoulder
 7 programming, right?
 8 A That would be correct.
 9 Q So it is throughout your
 10 programming strategy, isn't it?
 11 A It's about the music programming
 12 strategy, yes.
 13 Q That was inarticulately phrased,
 14 but music is part of your center --
 15 A It is part of the overall
 16 programming strategy and the overall
 17 programming strategy wants to bring people to
 18 experience a large number, even if they
 19 gravitate to only four, six, seven channels
 20 that they end up listening to most of the
 21 time, you can retain that customer for a
 22 longer period if in fact they listen to a

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1 larger number of channels.
 2 We understand sometimes that a
 3 very unique service is what is necessary to
 4 acquire the customer. So we have on this
 5 particular page that you called my attention
 6 to, we have both an acquisition strategy,
 7 content that in many cases will be more
 8 helpful in acquiring a customer, getting them
 9 to buy into the service. And then a retention
 10 strategy, if they find it appealing over a
 11 broader basis that you retain them longer.
 12 Q So the center lane programming is
 13 part of what brings people in in the first
 14 place?
 15 A That is correct.
 16 Q And music is part of that, right?
 17 A Music -- well, certain music
 18 channels could be part of that. Certain talk
 19 channels and certain sports channels would be
 20 part of the center lane and then more PGA Golf
 21 is not our central sports strategy, but it is
 22 a separate channel. That's more of a niche,

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1 but it is not the center lane.
 2 Q And music is also part of the
 3 shoulder programming that keeps people
 4 interested once they have gone to XM?
 5 A Correct. There is a spread across
 6 that as well.
 7 MR. HANDZO: Your Honor, I move
 8 the admission of Sound Exchange Trial Exhibit
 9 No. 2.
 10 MR. RICH: No objection.
 11 CHIEF JUDGE SLEDGE: Without
 12 objection, Exhibit No. 2 is admitted.
 13 (The document, having been marked
 14 previously for identification as
 15 SX Exhibit 2, was received in
 16 evidence.)
 17 MR. RICH: Can we have it admitted
 18 along with SX 1, Your Honor?
 19 CHIEF JUDGE SLEDGE: No, sir. Not
 20 without a showing and establishing that it is
 21 restricted. The fact that you designated it
 22 doesn't mean anything.

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1 MR. RICH: Actually, if I may be
 2 heard on that, Your Honor, SX 2 is on its face
 3 is a corporate strategy and planning document,
 4 which are in nature sensitive documents.
 5 These are marketing plans in order to position
 6 the company vis-a-vis its principal
 7 competitor, Sirius, as well as in the
 8 marketplace more broadly. By their nature --
 9 CHIEF JUDGE SLEDGE: Competitor
 10 Sirius?
 11 MR. RICH: Sirius.
 12 CHIEF JUDGE SLEDGE: All your
 13 testimony is that your principal competitor is
 14 terrestrial radio.
 15 MR. RICH: Principal competitor in
 16 the satellite radio space, Your Honor, is
 17 Sirius, and obviously, as well to complete the
 18 answer with respect to competing in the
 19 broader marketplace, vis-a-vis, you know,
 20 others. Without question, I do not think that
 21 anyone would deny that in the satellite radio
 22 sphere there are two competitors -- XM and

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1 Sirius, and they compete for similarly from
2 the range of terrestrial radio listeners, they
3 compete for those who would come over to this
4 platform.

5 CHIEF JUDGE SLEDGE: I think that
6 is the first time that has been said in that
7 proceeding. Certainly there are parts of your
8 direct statement that refer to that, but it
9 hadn't been part of your testimony so far.

10 MR. RICH: To be fair, Your Honor,
11 if we didn't elicit it it's only because it is
12 already embedded in Mr. Parsons' testimony and
13 you will certainly hear it from others. There
14 are varying levels of competition within the
15 satellite radio sphere. There are only two
16 competitors, and they again do compete for
17 attracting subscribers to this business
18 platform.

19 CHIEF JUDGE SLEDGE: What in here
20 fits what you've just described?

21 MR. RICH: Well, this is broadly
22 speaking a strategy for how to develop

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1 content, how to devote bandwidth to various
2 programming genres, where to make advancements
3 in programming.

4 CHIEF JUDGE SLEDGE: You need to
5 be specific. Broadly speaking doesn't
6 persuade us.

7 MR. RICH: Well, Your Honor,
8 literally each page of this, Mr. Parsons and
9 others are the experts proposes what the
10 internal marketing and planning team indicate
11 based on all of their listenership and other
12 marketing efforts. I'm trying to be
13 responsive. I'm not trying to be in any way
14 nonresponsive and perhaps Mr. Parsons himself
15 would be the best expert, Your Honor, to
16 indicate how a document like this is
17 developed.

18 (Pause.)

19 CHIEF JUDGE SLEDGE: Anything
20 else, Mr. Rich?

21 MR. RICH: Well, Your Honor,
22 again, unless the Court would like to hear

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1 from Mr. Parsons about how the corporation --
2 what its practices are with respect to
3 treating these documents as confidential which
4 may be useful since I suspect he may be seeing
5 a series of these survey documents. I'd be
6 happy on the voir dire to ask a few questions
7 if the Court would find it useful.

8 CHIEF JUDGE SLEDGE: I'd feel very
9 inadequate advising on what you should ask,
10 but please do whatever you think is
11 appropriate.

12 MR. RICH: Thank you.

13 VOIR DIRE

14 BY MR. RICH:

15 Q Mr. Parsons, is the type of
16 information contained in SX Exhibit 2,
17 SoundExchange Exhibit 2 shared with the public
18 by XM?

19 A No, sir. It is not. Well, excuse
20 me. In the broadest generalities our overall
21 programming concepts, that's publicly
22 available FD disclosure, full disclosure

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1 information, specifics relative to what they
2 account as associated with what genres -- how
3 much of our bandwidth allocation from our
4 satellites are allocated to each type of
5 programming, the percent, exact percent of our
6 subscriber base, that is African-American,
7 exact percent that is Hispanic, female, male,
8 other targeting of that is clearly not public
9 and quite frankly and sensitive to be -- maybe
10 we could -- we clearly don't have any idea of
11 what each other's numbers are on those fronts
12 and so we would have a Reg. FD disclosure
13 issue on some of this stuff from an SEC --
14 needing to put out an 8(K) or something I
15 would presume.

16 Q So I take it that you would regard
17 it to be harmful and potentially bumping up
18 against SEC concerns --

19 A Correct --

20 Q -- If materials were put on the
21 public record?

22 A Correct.

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1 Q Thank you.
 2 CHIEF JUDGE SLEDGE: Hearing
 3 nothing further the Court finds that only
 4 small parts of this exhibit fit the
 5 description of Mr. Parsons, most of the
 6 exhibit is common sense or general knowledge.
 7 Page nine has the information as he described.
 8 Page 10, page 11, page 14, page 16, and the
 9 appendix, the motion is denied except for
 10 those designated pages.

11 MR. RICH: Thank you, Your Honor.

12 JUDGE WISNIEWSKI: Before you
 13 begin, Mr. Handzo, there may have been a
 14 little bit of misperception. I think I heard
 15 Mr. Rich say or intimate that he thought that
 16 SX 1 had been admitted. It had not.

17 CHIEF JUDGE SLEDGE: Correct.

18 JUDGE WISNIEWSKI: It caused to
 19 remind me that to remind all of counsel when
 20 you have such documents and they're not
 21 admitted, we'd like to take them up
 22 afterwards.

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1 MR. RICH: I do stand corrected.
 2 It wasn't offered into evidence. Thank you.

3 CHIEF JUDGE SLEDGE: The parties
 4 are responsible for keeping and providing us
 5 with the admitted documents. And so we're not
 6 interested in keeping any of the documents
 7 that -- and you will provide us and the ones
 8 that are admitted.

9 BY MR. HANDZO:

10 Q Mr. Parsons, let me ask you to
 11 turn to page 13 of your written direct
 12 testimony.

13 A Page or paragraph?

14 Q I believe page. I will direct
 15 your attention to paragraph 32.

16 (Pause.)

17 You'll see in paragraph 32,
 18 there's a line that begins "XM subscribers
 19 appreciate the differences in music
 20 programming between XM and terrestrial radio."
 21 It goes on from there. Do you see that?

22 A Correct.

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1 Q Now I notice that you do not
 2 attach any survey evidence as an exhibit to
 3 your written testimony, right?

4 A I don't believe we did.

5 Q And as you sit here today, you
 6 can't point me to or identify any particular
 7 survey evidence that supports that statement,
 8 can you?

9 A Well, I actually think portions of
 10 that statement are supported by one of the
 11 documents you referred me to earlier.

12 Q Okay. Tell me where in that
 13 document you think it's supported?

14 A Page 6.

15 Q I'm sorry, which document are you
 16 looking at?

17 A Exhibit 1. Customer satisfaction
 18 surveys. In fact, the satisfaction levels
 19 here, as we note, are primarily driven by the
 20 diversity of programming. So the statement
 21 where I say the breadth and depth of these
 22 offerings would seem to be buttressed by the

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1 fact that when asked consumers given an
 2 indication that they more appreciate the
 3 variety and breadth than they do anything in
 4 particular.

5 I would note page four, most
 6 specifically. The first item you pointed,
 7 well, you showed me actually, page four, but
 8 page four, where it says programming. Like
 9 the music, 10 percent. But like the -- like
 10 and are satisfied overall, 18 percent. Like
 11 the variety and choice of stations, 17
 12 percent. So clearly, the consumer is
 13 reflecting that he's nearly twice as satisfied
 14 or finds twice as much value in the variety
 15 and breadth and depth than in the music.

16 Q So what I understand you to be
 17 saying is the fact that XM can offer a lot of
 18 different music is a big advantage?

19 A A lot of different programming,
 20 which I think is reflected here.

21 Q What these surveys is showing is
 22 that consumers like the diversity of music,

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1 right?

2 A Well, I guess this is fairly --

3 like variety and choice of stations.

4 Seventeen percent, that's the highest number

5 on the page.

6 Q And variety and choice of stations

7 may be a reference to variety and choice of

8 stations that play different kinds of music?

9 A Absolutely. That would be a part

10 of it.

11 Q Okay, so what is important to

12 consumers? There's certainly one thing that

13 is important to consumers is that you offer a

14 wide variety of music?

15 A That would be correct.

16 Q Mr. Parsons, turning to page

17 sixteen of your written direct testimony and

18 in particular paragraph 35, you'll see a line

19 there that says "our internal survey showed

20 that many subscribers buy music downloads and

21 CDs after hearing a specific artist or song on

22 XM"?

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1 A Yes.

2 Q In fact, XM doesn't have any

3 formal surveys that show that, does it?

4 A I don't know that to be true.

5 This is my understanding based on the

6 programmers. I think that the next witness is

7 probably better able to address that.

8 Q Okay, but you haven't an internal

9 survey that shows what this line states?

10 A No, I've seen significant

11 characterizations and evidence of that, but

12 not a particular survey that I remember.

13 Q So again, you can't point me to a

14 survey which supports this statement, can you?

15 A No, in this case I cannot.

16 Q Let me show you, Mr. Parsons, what

17 we have marked as Sound Exchange Exhibit 3.

18 (Whereupon, the above-referred to

19 document was marked as SX Exhibit

20 3 for identification.)

21 A I am not sure I have.

22 Q I'm sorry. You may or may not?

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1 A I may or may not have seen this.

2 It doesn't jump to mind immediately.

3 Q Let me direct your attention to

4 page 35 of this document?

5 (Pause.)

6 A Correct.

7 Q Have you seen previously the

8 information conveyed on this page?

9 A I think the general information

10 somewhat, but not necessarily the specific.

11 Q And what this shows, does it not,

12 is percentage of time that people spend

13 listening to radio or CDs and cassettes or

14 MP3s before they got XM versus after they got

15 XM, right?

16 A Yes.

17 Q And what this shows is that after

18 people get XM, they spend significantly less

19 time listening to CDs and cassettes, right?

20 MR. RICH: I object. The witness

21 said he may or may not have seen this

22 document. He professes no familiarity with

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1 its contents and I would suggest that Mr.

2 Handzo asking this witness to report what's

3 reported here could be done as easily with

4 Your Honor or with me as with this witness,

5 because it appears this may be the first time

6 he is looking at the document. He is not an

7 author of it, did not sponsor its contents,

8 and so as far as we know is unfamiliar with

9 what it represents other than what is written

10 on the page here. So I don't think he is

11 qualified to characterize its contents in

12 response to Mr. Handzo, unless he has

13 established he is familiar with it in prior

14 time.

15 CHIEF JUDGE SLEDGE: Sustained.

16 BY MR. HANDZO:

17 Q Mr. Parsons, have you previously

18 seen information, whether or not you have seen

19 this particular page -- have you previously

20 seen information from XM which indicates to

21 you that after people get XM, they spend

22 significantly less time listening to CDs and

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1 cassettes?
 2 A I can at least respond by saying
 3 that I know that I have both heard or seen
 4 surveys that say once someone gets XM, they
 5 tend to like it and listen to it a lot. And
 6 that does principally reduce AM/FM
 7 listenership and I would presume time spent on
 8 the cell phone and time with cassettes or
 9 anything else that would use time you put in
 10 place something that is hopefully appealing
 11 and they are using that time listening, at
 12 least in the automobile.

13 Q Specifically with respect to CDs
 14 and cassettes, have you received information
 15 which indicates to you that people spend less
 16 time listening to CDs and cassettes after they
 17 get XM?

18 A Other than an anecdotal
 19 information on that, I can't say that I have
 20 seen specific surveys to that affect.

21 Q But you have received anecdotal
 22 information to that effect?

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1 A I have received anecdotal
 2 information as I have just answered that
 3 people tend to spend a lot of time listening
 4 and actually the preponderance of their time
 5 in the car, they tend to listen to XM rather
 6 than whatever it was they were listening to or
 7 doing before. I mean, the reason I say or
 8 doing is it does cut down a lot on cell phone
 9 conversations.

10 Q But you agree with me that this
 11 page 35 that I showed you appears to indicate
 12 that in fact survey research shows that people
 13 spend less time listening to CDs and cassettes
 14 after they get XM?

15 MR. RICH: Same objection.

16 CHIEF JUDGE SLEDGE: Sustained.

17 BY MR. HANDZO:

18 Q I take it then, Mr. Parsons, in
 19 formulating the opinions you have expressed in
 20 your written testimony that you did not take
 21 this survey evidence into account?

22 A No, my own personal experience.

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1 Q Isn't it true, Mr. Parsons, that
 2 XM has actually promoted XM by suggesting to
 3 consumers that they won't need to buy CDs
 4 anymore?

5 A I don't believe that is part of
 6 our overall advertising campaigns.

7 Q Mr. Parsons, let me show you what
 8 we have marked as Exhibit No. 4.

9 (Whereupon, the above-referred to
 10 document was marked as SX Exhibit
 11 No. 4 for identification.)

12 (Pause.)

13 Do you recognize this, Mr.

14 Parsons, as an XM webpage?

15 A It appears to be.

16 Q And this is an XM webpage that
 17 features testimonials by XM subscribers?

18 A Yes.

19 Q And the point of putting
 20 subscriber testimonials on XM's webpage is to
 21 encourage other people to subscribe, correct?

22 A Or at least to give them a view of

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1 what people's views of the services were.

2 Q In the hopes that once they have
 3 those views, they become subscribers, right?

4 A That's correct.

5 Q And one of the testimonials that
 6 XM put on this webpage is the one at the
 7 bottom which says, in part, "since I activated
 8 my service two weeks ago, I have yet to listen
 9 to anything other than the XM format,
 10 unbelievable sound quality, content and
 11 selection. No need to ever buy another CD."
 12 Do you see that?

13 A Yes.

14 Q And that's one of the things that
 15 XM decided to put on its website to promote
 16 itself to consumers, right?

17 A Yes, apparently along with
 18 somebody recommending you spend more time in
 19 traffic because it gives you time to listen to
 20 the radio more.

21 It's obviously a very excited
 22 person two weeks with the service and I'm

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1 happy they're happy with the service.
 2 Q Let me make sure I got an answer
 3 to my question.
 4 A Okay.
 5 Q This particular testimony that I
 6 wrote to you is one that XM chose to put on
 7 its website in order to attract new
 8 subscribers, right?
 9 A Yes.
 10 MR. HANDZO: Your Honor, I would
 11 move the admission of Exhibit 4.
 12 CHIEF JUDGE SLEDGE: Any objection
 13 to Exhibit 4?
 14 MR. RICH: No objection.
 15 CHIEF JUDGE SLEDGE: Without
 16 objection, Exhibit 4 is admitted.
 17 (The document, having been marked
 18 previously for identification as
 19 SX Exhibit No. 4, was received in
 20 evidence.)
 21 MR. HANDZO: Your Honor, I do have
 22 actually not much more. I was looking at the

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1 clock, but it is probably not another four or
 2 five minutes.
 3 CHIEF JUDGE SLEDGE: Please.
 4 BY MR. HANDZO:
 5 Q Mr. Parsons, I've handed you what
 6 we've marked ask SoundExchange Exhibit 5.
 7 (Whereupon, the above-referred to
 8 document was marked as SX Exhibit
 9 5 for identification.)
 10 Do you recognize that document?
 11 A Yes, I do.
 12 Q Can you tell us what it is?
 13 A It is a joint presentation that
 14 myself and Mel Karmazin of Sirius Satellite
 15 Radio made in February of this year to the
 16 investment community following the
 17 announcement of a proposed merger.
 18 Q And that is a proposed merger
 19 between XM and Sirius?
 20 A That is correct.
 21 Q And that merger is still in the
 22 works?

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1 A It is still proposed.
 2 Q But it is still moving forward?
 3 A It is going through a governmental
 4 work in process which is likely to take
 5 extensive period of time?
 6 Q And if the merger is approved, you
 7 expect it to close in 2008, is that correct?
 8 A Either late 2007 or early 2008,
 9 the merger agreement terminates in March of
 10 2008, so yes, it would -- if it is to be
 11 approved, it would have to be approved by
 12 that timeframe.
 13 Q Now let me ask you to turn to page
 14 nine of the document. You will see a heading
 15 there that says "Wall Street analysts estimate
 16 \$3 to \$7 billion in capitalized cost savings"?
 17 A Yes.
 18 Q And that -- cost savings is
 19 expected as a result of the merger?
 20 A That is correct.
 21 Q And that number represents the
 22 present net value of the anticipated cost

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1 savings?
 2 A Yes. Rather than look at it on an
 3 annual basis of expenses that are saved, you
 4 take them all out to the end of time and then
 5 bring them back to well, the current value
 6 that might be.
 7 Q And are those Wall Street analyst
 8 estimates in line with what XM expects?
 9 A I believe we are on record
 10 publicly as being comfortable at least with
 11 the lower end of that range.
 12 MR. HANDZO: Your Honor, I move
 13 the admission of Sound Exchange Exhibit 5?
 14 CHIEF JUDGE SLEDGE: No objection
 15 to Exhibit no. 5?
 16 MR. RICH: No objection.
 17 (The document, having been marked
 18 previously for identification as
 19 SX Exhibit 5, was received in
 20 evidence.)
 21 MR. HANDZO: Your Honor, that
 22 concludes my examination.

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1 MR. RICH: I have a very brief
2 redirect.
3 CHIEF JUDGE SLEDGE: We will
4 recess ten minutes.
5 (Whereupon, the foregoing matter
6 went off the record at 11:08 a.m.
7 and went back on the record at
8 11:23 a.m.)
9 CHIEF JUDGE SLEDGE: Thank you.
10 We'll come to order.
11 Mr. Rich?
12 MR. RICH: I have very few
13 questions on redirect.
14 REDIRECT EXAMINATION
15 BY MR. RICH:
16 Q Mr. Parsons, if you could put
17 before you the exhibit that was marked as
18 SoundExchange 1 please?
19 A All right.
20 Q And I'd ask you to turn to page
21 six of that document. And if you would look
22 at the data that is reported there, my

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1 question to you is could you state for the
2 record what this document shows with respect
3 to under reason for initial subscription, the
4 reported importance of music versus other
5 content elements?
6 A Right. This particular page
7 relates to why the person subscribed in the
8 first place.
9 Q Yes.
10 A It was what attracted them to
11 that. And if you will look across the board
12 both for Sirius and ourselves through this
13 testing, those that are identified having come
14 for the music would be four percent.
15 Those that, you know, identified
16 themselves coming or having acquired it for
17 some other exclusive or particular content, in
18 the case of Sirius, Howard Stern, that number
19 was 18 percent, more than four times as great
20 for football. It was 18 percent -- in XM's
21 case, either NASCAR was the same as music.
22 Baseball was much larger than music.

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1 So there were a number -- this was
2 to differentiate what the study was
3 determining why people chose, not what they
4 actually listened to on a daily basis and what
5 they were satisfied with.
6 Q This was, I take it, a
7 determination of whether to plunk down that
8 \$12.95 a month for the service in the first
9 place, correct?
10 A And generally actually more
11 important than that because that is the
12 ongoing. It is the paying the 100 to 150
13 dollars to go buy a radio and put it in their
14 vehicle or to subscribe for that reason.
15 Q What significance do you ascribe
16 to the commentary on the left side, "Sirius
17 AM," which I take to mean after market?
18 A That is after market.
19 Q "Our subscribers are more than
20 twice as likely to have initially subscribed
21 for specific programming content, mainly
22 Howard Stern or football." What is that

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1 conveying, as you understand it?
2 A That is conveying that those two
3 pieces of programming content appeared to be
4 much stronger than the other content, even
5 much stronger than some of XM's content
6 relative to having attracted a particular set
7 of customers.
8 Q I put in front of you what is now
9 in evidence, I believe, as SoundExchange
10 Exhibit 5.
11 A Yes.
12 Q And if you would turn to the page
13 Mr. Handzo asked you a couple of questions
14 about, page nine.
15 A Yes.
16 Q With respect to the time frame
17 involved in this proceeding, 2007 to 2012, can
18 you assist us in understanding what is
19 reported to be the Wall Street analyst
20 estimate of three to seven billion dollars in
21 capitalized cost savings. How does that
22 relate to the time frame of this proceeding?

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1 A I probably can't, you know, do the
2 net present value in my head on that. But it
3 is clear that if, in fact, the merger is
4 approved, and if it is able to go forward
5 which is, we still hope will occur, it will
6 likely be in the 2008 time frame.

7 Your first year of savings tend to
8 be lost because of the integration cost,
9 paying either severance payments or other
10 things like that to get out of leases or to
11 layoff employees and severance.

12 And so then you begin bringing in
13 those savings over time. Some of the largest
14 single savings items are the ones that occur
15 with consolidation of the terrestrial repeater
16 network into a singular network or changes in
17 the satellite architecture to be able to share
18 a common satellite.

19 And those tend to occur many years
20 out in the future before you are able to
21 capture those.

22 Q Now Mr. Handzo asked you several

1 experience nor history in having this sort of
2 a very high-powered, concentrated payload.

3 Therefore, we could not use Boeing
4 for that. We commissioned Alcatel and
5 encouraged the two to work together.

6 In fact, this was the first time
7 in history that Boeing had ever worked
8 collaboratively with Alcatel to create a
9 combined -- the bus is the wing -- essentially
10 the solar panels in the wings that fly the
11 system. The payload is, in fact, actually the
12 complex payload that broadcasts the signal.

13 Q It was more than a trivial set of
14 adaptations to the 702 platform I take, is
15 that correct?

16 A That is correct. As I say not
17 only was it the first time that that was done
18 but this was, you know, in essence the first
19 time in the world that you had combined
20 satellites together with a terrestrial
21 infrastructure to deliver it. So the
22 integration of a satellite and terrestrial-

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1 questions about the use of the 702 class of
2 Boeing satellites, do you recall?

3 A Yes.

4 Q He suggested to you that that was
5 a preexisting model for lack of a better term
6 -- pardon my lack of precision -- and that, in
7 fact, one or more other entities actually
8 launched 702 satellites before XM's was
9 launched, correct?

10 A Yes.

11 Q My question to you is was this, in
12 fact, an off-the-shelf available platform for
13 XM? And if not, could you advise the Court
14 what modifications were required to it?

15 A No, it was not an off-the-shelf
16 satellite. In fact, no existing satellite or
17 ever launched or designed satellite before
18 would fulfil this mission.

19 It was Boeing's first experience
20 at designing this satellite in the S-band,
21 which is in the 2.3 gigahertz frequency range
22 that we utilize. Also, Boeing had not

1 based repeater network is the first time ever
2 done.

3 Q Now finally Mr. Handzo asked you
4 whether it was not the case that you and XM
5 learned from the generally failed experiences
6 of other entities in a number of areas, do you
7 recall that testimony?

8 A Yes.

9 Q Was the billion dollars or so that
10 XM invested pre-launch substantially spent
11 figuring out what others did wrong or figuring
12 out what XM needed to do right to get
13 launched?

14 A The capital expenditures were
15 obviously pointed on implementing, designing,
16 and deploying our approach, an approach that
17 we felt would work. An approach that had
18 never been tried before but one that we felt
19 would cure some of the problems that existed
20 in what was unfortunately a very much failing
21 commercial satellite industry at that point in
22 time in the mobile satellite services phase.

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1 But which did, in fact, turn out from a
 2 technology standpoint to work.
 3 MR. RICH: Thank you. That
 4 completes my redirect.
 5 CHIEF JUDGE SLEDGE: Mr. Joseph,
 6 any questions?
 7 MR. JOSEPH: I may, Your Honor.
 8 May I have a minute?
 9 CHIEF JUDGE SLEDGE: Yes, sir.
 10 MR. JOSEPH: Just a few questions,
 11 Your Honor.
 12 CHIEF JUDGE SLEDGE: All right,
 13 sir.
 14 RE-CROSS EXAMINATION
 15 BY MR. JOSEPH:
 16 Q Mr. Parsons, I would ask you to
 17 turn back to SoundExchange Trial Exhibit 1 and
 18 take a look back at page six.
 19 A That's page six again?
 20 Q Page six again, yes, sir.
 21 A Okay.
 22 Q I just want to make sure as to

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1 Sirius that we've got these numbers correct in
 2 the record. For the reasons for initial
 3 subscription, the percentage of people who
 4 gave for the music was four percent. Is that
 5 correct?
 6 A That is correct.
 7 Q And for the variety of music was
 8 also four percent. Is that correct?
 9 A That is correct.
 10 Q And for Howard Stern was 18
 11 percent. Is that correct?
 12 A That is correct.
 13 Q And for football on Sirius was 18
 14 percent. Correct?
 15 A That is correct.
 16 Q And for sports programming
 17 generally on Sirius was 20 percent. Is that
 18 correct? It would be an even number. Let's
 19 see here. If you see the football, if you go
 20 up four numbers.
 21 A Yes, oh, yes. I see it, yes.
 22 Sports programs and other reasons, yes.

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1 Q That was 20 percent?
 2 A Twenty percent.
 3 Q Now I'd ask you to take a look
 4 because I don't think SoundExchange got the
 5 timing of this survey. And if you take a look
 6 at page 58 and 59 of the SoundExchange Trial
 7 Exhibit 1, does that indicate to you when this
 8 survey was done?
 9 A Yes, back in October of 2005.
 10 MR. JOSEPH: Nothing further, Your
 11 Honors. Thank you.
 12 CHIEF JUDGE SLEDGE: Music Choice?
 13 MR. FAKLER: No, Your Honor.
 14 Thank you.
 15 CHIEF JUDGE SLEDGE: Any further
 16 cross for the SoundExchange?
 17 MR. HANDZO: Yes, Your Honor.
 18 BY MR. HANDZO:
 19 Q Mr. Parsons, going back to Exhibit
 20 1 on page six, I think you mentioned in
 21 response to Mr. Rich's question that you saw
 22 four percent of people who said they

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1 subscribed for the music for XM?
 2 A Correct.
 3 Q But then there is another four
 4 percent who say for the variety of music,
 5 right?
 6 A That is correct.
 7 Q And there is another six percent
 8 who say no commercials, right?
 9 A That's correct.
 10 Q And it is the music channels that
 11 are commercial free on XM, right?
 12 A There is other commercial-free
 13 programming as well.
 14 Q But all the music channels are
 15 commercial free?
 16 A No.
 17 Q Okay.
 18 A XM has commercially-sponsored
 19 music channels as well.
 20 Q Well, I should say all but the
 21 Clear Channel programmed stations are
 22 commercial free, right?

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1 A The majority of XM's music
2 programming is commercial free.
3 Q Well, something like 65 out of 69
4 stations are commercial free for music?
5 A I think 65 out of 70. But very
6 close.
7 Q Okay. I'm sorry, 65 music
8 stations out of 70 are commercial free for XM?
9 A Correct.
10 Q Okay. So people when they say no
11 commercials were probably referring to the
12 music stations, right?
13 MR. RICH: Objection.
14 Speculating.
15 CHIEF JUDGE SLEDGE: Sustained.
16 BY MR. HANDZO:
17 Q Now eight percent said variety of
18 programming, right?
19 A That is correct.
20 Q And that may also have been a
21 reference to music.
22 A It would be a reference to

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1 programming.
2 Q All right. A lot of which is
3 music.
4 A Correct.
5 Q All right. And what you have
6 indicated earlier is that what a lot of
7 people like is a diversity of music, right?
8 A I think I said a diversity of
9 programming. But --
10 Q And ten percent said preferred
11 programming, better stations. Do you see
12 that?
13 A No, I don't.
14 Q That is the top one.
15 A Point me to it. Oh, yes. Better
16 stations.
17 Q Okay. That may also be a
18 reference to music?
19 A It certainly would include better
20 programming which subsumes the music.
21 Q Okay. Now let me ask you to flip
22 to page 24. Now I think Mr. Rich asked you a

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1 question about whether you understood some of
2 the data in the survey to be addressing how
3 much people listened to particular types of
4 content. But this page asks subscribers how
5 important content is to them, correct?
6 A That is correct.
7 Q Not how much they listen but how
8 important it is.
9 A I don't know the specifics of the
10 questions that were asked. The
11 characterization says important. I don't know
12 how they determined that.
13 Q Let me ask you to look at the
14 bottom of the page.
15 A Oh, this was the question, okay.
16 Q That's the question, isn't it?
17 And the question, just so we have it in the
18 record is in general how important to you are
19 each of the following types of programming?
20 Right? So -- I'm sorry, you have to say yes
21 or no.
22 A Correct. And a top three box

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1 would be stated importance.
2 Q Right. And 92 percent of people
3 said music programming was the most important
4 to them.
5 A Yes, I think that is consistent.
6 And obviously the others add up to far greater
7 than that.
8 Q Well, these numbers don't sum to
9 100 percent, right?
10 A I understand. I'm just using the
11 same technique that you used in the prior
12 slide.
13 Q Nothing further. Thank you.
14 A Thank you.
15 MR. RICH: Nothing further either.
16 CHIEF JUDGE SLEDGE: Any questions
17 from the Bench?
18 JUDGE ROBERTS: Yes, I have one.
19 Mr. Parsons, if you would look at
20 page 16 of your testimony, in paragraph 34,
21 the third sentence says support from XM has a
22 significant impact on whether a record can

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1 reach number one on the charts.
 2 THE WITNESS: Yes, sir.
 3 JUDGE ROBERTS: Who measures that?
 4 THE WITNESS: I think that is
 5 "Billboard Magazine." Eric Logan, our head of
 6 programming will do that but there are a
 7 variety of industry organizations, radio and
 8 records, but I think "Billboard Magazine" is
 9 the one that predominantly does the judging of
 10 what a number one, number two, number three
 11 record is.
 12 JUDGE ROBERTS: And you said Mr.
 13 Logan will be addressing that?
 14 THE WITNESS: He will have far
 15 greater knowledge to exactly how that is --
 16 how you come up with it.
 17 JUDGE ROBERTS: Thank you.
 18 MR. HANDZO: Your Honor, I'm
 19 sorry, there was one question I neglected to
 20 ask if I may?
 21 CHIEF JUDGE SLEDGE: No, sir.
 22 Judge Wisniewski?

1 -- you only actually talked about the initial
 2 capitalization.
 3 THE WITNESS: Yes.
 4 JUDGE WISNIEWSKI: And those
 5 initial capitalization costs. Will that
 6 expert be talking about ongoing capitalization
 7 costs?
 8 THE WITNESS: In the future going
 9 forward? Or -- I mean obviously you are
 10 correct in --
 11 JUDGE WISNIEWSKI: Well, you have
 12 your initial bursts of costs.
 13 THE WITNESS: Yes.
 14 JUDGE WISNIEWSKI: But there have
 15 been other costs since then.
 16 THE WITNESS: There have been
 17 massive costs since then. And, in fact, we
 18 only really discussed the initial cash
 19 infusions that American Mobile Satellite made.
 20 And then the quarter of a billion dollars that
 21 those initial plunderers, the strategic
 22 partners brought in.

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1 JUDGE WISNIEWSKI: Well, I just
 2 brought up -- Judge Roberts' question prompts
 3 --
 4 CHIEF JUDGE SLEDGE: Another
 5 question.
 6 JUDGE WISNIEWSKI: It is a general
 7 question for you. You have financial expert
 8 coming also to testify later, I believe.
 9 THE WITNESS: Yes.
 10 JUDGE WISNIEWSKI: Should I
 11 reserve questions with respect to how the
 12 capitalization you talked about this morning
 13 was actually financed for that expert?
 14 THE WITNESS: No, I would probably
 15 be able to address particularly the fund
 16 raisings and the capitalization that we came
 17 up with over the history. Maybe better than
 18 him.
 19 JUDGE WISNIEWSKI: Okay. Great.
 20 Well then I'll ask you.
 21 THE WITNESS: Okay.
 22 JUDGE WISNIEWSKI: In terms of the

1 We have, in fact, raised over four
 2 billion dollars -- four and a half billion
 3 dollars or so over these. And essentially not
 4 three or four months went by without another
 5 offering of some sort.
 6 So once we went -- we went public
 7 in September of 1999 at 12 dollars per share.
 8 At that point in time, we were then able to
 9 access the public equity markets as well as
 10 the public debt markets.
 11 We alternated between -- when the
 12 public was available and the stock market was
 13 doing well, we were able to avail ourselves
 14 there. When the stock market became bubbled
 15 and there were really two points where we
 16 approached bankruptcy. The one was right
 17 before the strategic investment in 1999 when
 18 we were out of gas. And the other was in late
 19 2002.
 20 Sirius also nearly went bankrupt
 21 at that point in time. And that was because
 22 of retraction in the capital market that

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1 occurred in the 2002 time frame, the Global
2 Star bankruptcies and other mobile satellite
3 services going bankrupt.

4 At that point in time, we turned
5 back to private equity, high dilutive,
6 devastated the equity holdings. Essentially
7 we offered convertible notes that not only got
8 a ten percent return, we are in a debt-like
9 senior secured position in the capital
10 structure but converted into equity at \$3.18
11 a share, which was obviously a fraction of
12 what the initial public offering was.

13 But that --

14 JUDGE WISNIEWSKI: But you haven't
15 had any reverse stock splits or anything.

16 THE WITNESS: We haven't had any
17 reverse stock splits. So I can say
18 categorically that the money that I have
19 invested in this -- all of these -- on a
20 personal basis all of these years is
21 unfortunately underwater. All of it.

22 JUDGE WISNIEWSKI: But what it

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1 brings me to is actually the core of what I'm
2 interested in.

3 THE WITNESS: Yes.

4 JUDGE WISNIEWSKI: And that is
5 over the course of this license that is at
6 issue in this proceeding, what sort of debt
7 repayment costs do you have?

8 THE WITNESS: During this term we,
9 in fact, have a billion four or so of debt.

10 The earliest debt comes due --

11 JUDGE WISNIEWSKI: I'm not asking
12 you what you have. I'm asking what your
13 payments are.

14 THE WITNESS: It all comes due
15 during that period of time. We did refinance
16 some last year that may have moved it right
17 towards the end of it. But we have some large
18 amounts coming due in 2009.

19 So the real issue there is we
20 believe strongly that we have the sufficient
21 capital at this point in time if our business
22 plan is not disrupted to become positive cash

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1 flow. We do not have sufficient resources,
2 obviously, to pay for that debt as it comes
3 due.

4 So the real crisis point that we
5 would reach in the event there were a
6 disruption of the business plan in any sense -
7 - because frankly in 2009, when our first
8 large tranche of debt would come due and you
9 have no way of rolling it over, and you
10 certainly don't have the cash resources if, in
11 fact, the business plan is question at that
12 point.

13 JUDGE WISNIEWSKI: Well, at that
14 point it becomes a question of whether you
15 could refinance or not.

16 THE WITNESS: That is right. And
17 so simply having the cash right now to sustain
18 ongoing operations if we are able to turn cash
19 flow positive in 2008, which would be the
20 hope, still have to have some promise of
21 future positive or you won't be able to
22 refinance the debt as it comes due. And

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1 that's when we reach that crisis point.

2 MR. RICH: Your Honor, there will
3 be significant additional testimony on that
4 subject from Mr. Vendetti.

5 CHIEF JUDGE SLEDGE: Vendetti?

6 MR. RICH: Yes.

7 CHIEF JUDGE SLEDGE: Mr. Parsons,
8 those generalities are informative but for our
9 purposes of writing rates and regulations, we
10 need specifics on that. And we'll get that
11 from Mr. Vendetti?

12 THE WITNESS: Yes.

13 CHIEF JUDGE SLEDGE: And he will
14 tell us each year how much your debt repayment
15 is?

16 THE WITNESS: Yes.

17 CHIEF JUDGE SLEDGE: And your
18 capital cost expenditures are?

19 THE WITNESS: He will have that
20 information, yes.

21 CHIEF JUDGE SLEDGE: Good.

22 Mr. Handzo, what is the question

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1 you wanted to go back to?

2 MR. HANDZO: Your Honor, I just

3 had one last question on page six of Exhibit

4 1.

5 CHIEF JUDGE SLEDGE: What is the

6 question?

7 MR. HANDZO: The question was just

8 looking at the particular question that was

9 asked, which was recited at the bottom,

10 thinking back to the time that you initially

11 subscribed to XM Sirius Satellite Radio, what

12 was the main reason you chose this service?

13 And my question for Mr. Parsons

14 was whether he understood that to be a

15 question that asked people to decide to

16 explain why they chose XM versus Sirius as

17 opposed to asking why they subscribed to

18 satellite radio.

19 CHIEF JUDGE SLEDGE: All right.

20 We will not reopen for that question.

21 Thank you, sir.

22 THE WITNESS: Thank you, Your

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1 Honor.

2 MR. MEYER: Your Honor, with the

3 Court's permission, XM calls as its next

4 witness Eric Logan. I just need a moment to

5 fetch him.

6 CHIEF JUDGE SLEDGE: Okay.

7 MR. MEYER: I am Bruce Meyer from

8 the Law Firm of Weil Gotshal & Manges,

9 representing XM.

10 CHIEF JUDGE SLEDGE: Thank you.

11 (Witness sworn.)

12 MR. MEYER: If I may ask the

13 Panel's indulgence about one matter. I have

14 rather serious back problems. But usually

15 they only kick in when I'm standing for more

16 than five minutes or so. So if from time to

17 time while he is answering a question if I sit

18 like this, I hope that is okay.

19 CHIEF JUDGE SLEDGE: Please feel

20 free. Would it better if we bring a chair?

21 MR. MEYER: That's okay. No, I

22 prefer to do it this way if that is okay. But

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1 I didn't want the Panel to think I was showing

2 any disrespect or being overly casual.

3 CHIEF JUDGE SLEDGE: I hope we're

4 not that sensitive.

5 MR. MEYER: Thank you.

6 WHEREUPON,

7 ERIC LOGAN

8 was called as a witness by Counsel for XM

9 Satellite Radio I&C., having been first duly

10 sworn, assumed the witness stand, was examined

11 and testified as follows:

12 DIRECT EXAMINATION

13 BY MR. MEYER:

14 Q Please state your name for the

15 record.

16 A My name is Eric Logan.

17 Q And how are you currently

18 employed?

19 A I'm employed by XM Satellite Radio

20 as the Head of Programming.

21 Q What is your official title?

22 A Executive Vice President of

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1 Programming.

2 Q Okay. And in terms of your role

3 as Executive Vice President of Programming,

4 can you describe generally for us your

5 responsibilities?

6 A Sure. I oversee two distinct

7 parts of our business. I oversee the content

8 creation of our channels and oversee the

9 rights, if you will, of management of those

10 channels.

11 And I also oversee the bandwidth

12 management or the infrastructure that provides

13 our content given to our uplink. So I have

14 two distinct different roles as the Head of

15 Programming.

16 Q Now I'm going to touch briefly on

17 your employment history without going through

18 it in extreme detail. But I do have a

19 question I want to bring out the most

20 embarrassing aspect of it which is your first

21 job in radio. Can you describe that for us.

22 A Yes. My first job in radio was I

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**Before the
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LIBRARY OF CONGRESS
Washington, D.C.**

In the Matter of)	
)	
)	
)	Docket No. 2006-1 CRB DSTRA
Adjustment of Rates and Terms for)	
Preexisting Subscription and Satellite)	
Digital Audio Radio Services)	
)	

WRITTEN DIRECT TESTIMONY OF TERENCE SMITH

(On behalf of Sirius)

Background and Experience

1. I am Senior Vice President, Engineering of Sirius Satellite Radio Inc. ("Sirius"). I joined Sirius in February 2002, just as we were commencing broadcast operations. I submit this statement in support of Sirius' direct case in this matter to describe the extraordinary innovation and continuing technological effort needed to make the Sirius service a reality.

2. I have been involved in digital technology for approximately 27 years. Prior to joining Sirius, I was employed at RCA Labs and at Sarnoff Labs, where I was involved in pioneering work with High Definition Television and the development of digital satellite television service launched by DIRECTV. I hold a Bachelor of Science in Electrical Engineering degree from the University of Notre Dame and a Master of Science in Electrical Engineering degree from Drexel University. I am a named inventor or co-inventor on 18 United States Patents.

3. At Sirius, I direct all of our engineering activities and technology developments. These include our system design and development; our broadcast studios; our satellite uplink; our satellite design, development and operations; our ground repeater design, development and operations; our digital compression technologies, our chipset and antenna design and development; our product design and development; and testing and quality control. I am also personally involved in securing the necessary licenses for our devices and operations from the Federal Communications Commission (“FCC”) and other governmental entities. I have a team of 200 employees that reports to me, including dozens of engineers with advanced degrees in systems engineering, communication systems, orbital dynamics, and digital compression systems. As Senior Vice President, Engineering, I am familiar with the engineering challenges that have confronted Sirius since its inception and the solutions that have been developed and implemented. I base this testimony on my experience and information I have learned through my work at Sirius.

Sirius’ Technical Contributions

4. The difficulty of the technical challenge that faced Sirius at its inception can hardly be overstated. Sirius took on the enormous task of designing and building from scratch a reliable, practical and affordable satellite digital audio radio service. At the time that Sirius (then operating under the name Satellite CD Radio, Inc.) was founded, the technology existed to send a basic stream of audio data to a fixed point on the earth via satellite, but no one had ever succeeded in developing – or to my knowledge, had even attempted to develop – a satellite system for distribution of audio content on a seamless nationwide basis to moving vehicles. Among other issues, commercial satellite antennae capable of capturing the relatively weak signal from a satellite were generally large and expensive dishes, which are not practical for use

with vehicles. Even DirectTV-type dishes were far too large to mount on a family vehicle. Sirius also had to engineer around issues of blockage so that service to moving vehicles would be seamless even in crowded urban areas. Thus, in addition to dedicated satellites, Sirius simultaneously pioneered the development of highly advanced yet small and affordable antennae, the use of advanced audio compression techniques, and the construction of an advanced chipset and receiver. In 1990, Sirius was the first company to apply to the FCC to construct, launch, and operate a satellite system to provide digital audio radio programming to users across the continental United States. However, the system did not become operational, and even limited service did not begin, until February 2002. This decade-long gestation period reflects the technological and regulatory hurdles that were required to be overcome in order to make Sirius a reality. Moreover, the technical challenges posed by digital satellite audio stand in stark contrast to traditional terrestrial radio, where the underlying technology has been established for many years.

5. It is very important to note that, even with the satellites in orbit and a fully operational system, Sirius has had to continue to invest in intensive technological innovation. We are constantly upgrading our chipset and antenna designs to provide better sound quality with smaller size using less power. We are also constantly improving our compression technology, so we can provide higher fidelity sound and greater diversity from the available bandwidth. Finally, in addition to the constant enhancement updating of our technology on the ground, we will be required in the future to replace our satellites, at significant cost and risk.

6. A pictorial representation of the Sirius system is included as SIR Ex. 10. From our broadcast studios in New York the more than 130 channels of content are aggregated, individually compressed, and multiplexed into a single, encrypted digital signal that is

transmitted via fiber optic cable to our satellite uplink facility in Vernon, New Jersey. There the signal is uplinked to the two satellites that are then above the equator ("live" over the United States as described below) and then retransmitted back down to Earth. For subscribers in certain urban areas where a signal from the satellite might be difficult to receive directly due to blockages from building clutter, there are terrestrial repeaters that also broadcast the same signal. Each subscriber's radio includes a very small, specially designed antenna to receive the signal from the satellite, a proprietary chipset that permits the signal to be processed, service to be provisioned for each subscriber, and typical control and amplification functions. Through our satellite signal, entitlement messages are also sent that enable (or disable) individual receivers' ability to decrypt the subscribed services. This system is described in greater detail below.

The Satellites

7. Sirius uses a constellation of three dedicated satellites owned and controlled exclusively by Sirius to provide a very high quality of service throughout the continental United States. The satellites are deployed in inclined, elliptical, geosynchronous orbits, on three different planes, as illustrated by SIR Ex. 11. Each satellite's orbit has a period equal to the earth's rotational period. This unique configuration ensures that there is always at least one satellite at a high elevation relative to any given point in the continental United States at any given time. This helps to provide continuous coverage and minimize blockage, which significantly reduces Sirius' reliance on terrestrial repeaters. Sirius is the world's first commercial satellite broadcast system using non-geostationary orbits. The initial decision to use inclined, elliptical orbits rather than geostationary orbits (fixed in orbit over the equator) drove many of the engineering decisions.

8. The three-satellite geosynchronous approach required that the satellites be launched on three different planes, 120° apart. This allows each satellite to spend 16 hours north of the equator transmitting to the continental United States, and 8 hours south of the equator at “rest.” At any given moment, two of the satellites are above the equator, providing signal throughout the continental United States. The two active satellites transmit the same signal at slightly different frequencies with a 4 second delay between them. A matching four second delay in the receiver allows the streams to be matched up in time. This architecture permits receivers to find the best signal at any given moment and create a seamless listening experience. So, for example, if a driver goes through a tunnel, the four second delay helps ensure that once the obstruction of the tunnel is removed, the receiver still has a complete and seamless programming stream for the listener.

9. The development of this three-satellite system was more than ten years in the making. The designs needed to be constantly updated to accommodate changing payload requirements, as well as other technological advances, all while maintaining the integrity of the overall system quality. Our engineers had to take into account dozens of orbit-specific requirements, as well as operational requirements. Each decision was critical to the creation of a functional and affordable commercial service. While Sirius’ geosynchronous orbits ensure broad signal coverage on the ground, they created many engineering challenges to the design of the satellites themselves.

10. For example, by choosing a geosynchronous orbit rather than a geostationary orbit, Sirius had to engineer around the problem of orbital disturbance caused by its satellites’ relative location to the sun, moon, and earth. In a geostationary orbit scenario, the satellite is in relatively the same plane as the sun and moon, so most tidal disturbances cancel each other out.

Sirius' orbits, however, are prone to much greater orbital disturbances, resulting in notable differences in fuel requirements amongst the three satellites. Having an elliptical geosynchronous orbit also means that the satellites have a variable orbital rate, rather than the fixed orbital rate of a geostationary satellite. The satellites therefore had to be designed to include an on-board system to provide constant reference information to allow the satellites to compensate for their varying orbital rates and apparent variations in earth size.

11. Similarly, the satellites had to be designed to constantly correct for sun-moon intrusions. For geostationary orbits, sun-moon intrusions occur at regular, predictable points in a satellite's orbit, and can be programmed to regularly inhibit earth sensor scans during intrusion periods to prevent the satellite from losing its lock on the earth. Satellites in geosynchronous orbits experience a much larger number of intrusions, often in rapid succession. The Sirius satellites are therefore programmed to constantly calculate sun and moon intrusions and automatically disable and re-enable earth sensor scans as necessary to ensure that the satellite does not lose communications with the Earth.

12. Moreover, although the high elevation of the chosen orbits ensures the fullest possible ground coverage, such high elevation can block the satellites' access to solar power, resulting in an unacceptable near total loss of array power generation. Sirius solved this problem by employing "yaw steering" for its satellites. The satellite body rotates about its yaw (earth-pointing) axis, which helps keep the body of the satellite properly perpendicular to the sun at all times, maximizing the efficiency of the solar panels. This is done only during certain months out of the year; at other times, the satellite follows a normal orbit path to maximize solar exposure. The flexibility of yaw steering allows Sirius' satellites to best take advantage of solar power

without affecting signal quality. This steering choice also helped ensure that the satellites do not experience too great of a fluctuation in temperature.

13. Taking into account commercial considerations, the satellites lower their signals while in the southern hemisphere, so as to avoid interference with services licensed to operate below the equator. To ensure signal accuracy while minimizing disruptions to service, the satellites thrusters and antennae are reoriented daily while the satellites are below the equator. The satellites are steered using antennae beam steering, which allows control of both the yaw steering and normal orbit modes of operation. To keep the elliptical orbit pattern aligned with the continental U.S. while in yaw steering mode, the antenna subreflector mechanically rotates in the opposite direction of the rest of the satellite. The satellites also employ compensation heaters to ensure that the communications panels maintain stable temperatures during their cold trip through the southern hemisphere.

14. The satellites receive signals from our satellite uplink facility in New Jersey at the 7.1 GHz frequency, then send the signals to subscribers throughout the continental United States at the 2.3 GHz frequency. The satellite antenna that receives the signal from the ground is a mere .75 meters in diameter, and is steered on two axes to ensure that it always receives the signal. The main reflector of the sending antenna is 2.4 meters in diameter. The subreflector is continuously rotated to maintain the elliptical coverage pattern even when the satellite's body is rotated in yaw. In order to amplify the signal sufficiently, Sirius uses a unique single transponder design which combines 32 Traveling Wave Tube Amplifiers to feed our single digital stream to the antenna. The satellites also carry redundant control electronics, receivers for tracking, telemetry and command (TT&C), a propulsion subsystem, an attitude control system, a thermal subsystem, a power subsystem, and a mechanism subsystem. All of these systems must

work flawlessly together to ensure that the satellites remain in orbit and properly send and receive the programming data.

15. The antennae used for ground tracking, telemetry, and command (TT&C) of the satellites are more complex for Sirius' inclined elliptical orbits than those that would be required to run geostationary satellites. Sirius' ground antennae are full-motion, continuously tracking antennae, located near the equator in Quito, Ecuador and Utiwe, Panama. These tracking stations are required to ensure communication with the satellites while they traverse both the northern and southern hemispheres.

Launching the Satellites

16. Even after Sirius completed the satellite designs, Sirius still faced an enormous hurdle in launching the satellites successfully. The selection of the vehicles to launch the satellites also reflect the enormous risks, costs, and capital investments Sirius has taken on in order to provide its service. The highly inclined elliptical orbits of the Sirius satellites required a heavy lift launch vehicle capable of injecting the 3800 kg separated mass satellites into the chosen orbit. Only two commercially available launch vehicles could possibly have met these requirements. Sirius chose to launch its satellites using the Proton K/Block DM launcher. The first of Sirius' satellites, dubbed Sirius-1, was launched in June 2000 from the Baikonur Cosmodrome in Kazakhstan. The remaining two satellites, Sirius-2 and Sirius-3, were launched in September 2000 and November 2000, respectively, also from Kazakhstan.

17. Designing, building and launching a satellite is an enormously lengthy, costly, and risky proposition. Launch vehicles are extremely complex and fail on a regular basis. Moreover, even when a satellite is in orbit, it is required to function in extremely difficult

conditions and is subject to complete or partial failure at any time. If a serious failure occurs, commercial satellites are for all practical purposes unreparable once in orbit. For this reason, Sirius designed and built Sirius-4, a backup satellite that has never been launched and that remains in storage in Palo Alto, California.

18. In the near future, Sirius will be required to update the existing satellite constellations. Although it is impossible to predict with any degree of certainty how long the existing satellites will continue to function, all three are showing various signs of aging. Accordingly, beginning in 2008, Sirius will begin replacing them. Sirius has commissioned Space Systems/Loral to construct a new, powerful satellite that is intended to be launched in 2008. This new satellite will be placed into a geostationary position to augment the existing satellites in their highly inclined elliptical orbits. Subsequently, Sirius will launch additional satellites to replace those currently in the inclined elliptical orbits by 2012.

Sending the Programming to the Satellites

19. In order to deliver a compelling service offering, Sirius also had to pioneer substantial breakthroughs in the area of audio compression. Because the bandwidth available to Sirius is severely constrained, Sirius faces an inherent trade-off between the number of channels it can broadcast and the quality of the sound on those channels. The challenge is to provide acceptable quality for each audio application while using the fewest number of bits. Through the advanced digital compression technologies that Sirius has developed and funded, which reduce the number of bits required to provide equivalent sound quality, Sirius is now able to deliver more channels simultaneously with better sound quality. Sirius continues to invest heavily in basic research into how the human brain and audio system perceive sound, which ultimately will lead to further advances in the quality of the Sirius service.

20. To further enhance the efficiency of our audio compression system, Sirius has also pioneered the use of statistical multiplexing for audio applications. The fundamental basis of statistical multiplexing is the simultaneous analysis of multiple audio channels and reliance on the probability that not all audio passages will be equally difficult to code at high quality. For example, silence is often found in passages of both voice and music channels. Since silence does not represent a very complex audio signal, fewer bits can be assigned to a channel during those moments of silence. The bits that are saved from the temporarily silent channel can be dedicated to another channel that currently represents a complex audio passage. While statistical multiplexing is common in video systems, Sirius is unique in its investments to apply these concepts to audio compression schemes.

Terrestrial Repeaters

21. While Sirius' pioneering geosynchronous inclined, elliptical orbits greatly reduced the need for an extensive network of terrestrial repeaters, even Sirius' advanced system requires terrestrial repeaters in the densest urban areas to ensure continuous coverage. Sirius has drawn from the lessons of AM/FM transmission, cellular telephone transmission, and satellite television services such as DirecTV to design a unique system that provides maximal coverage.

22. At present, Sirius' system employs approximately 140 terrestrial repeaters nationwide. These repeaters receive the Sirius signal not from the main Sirius satellites, but rather through a VSAT service delivered via a geostationary satellite on which a transponder is leased by Sirius. This leasing arrangement provides significant cost savings to Sirius as compared to launching a fourth satellite specifically to feed the repeaters. Because the signal is relayed by this third-party satellite, however, the repeaters receive the signal at a frequency that is not within the range at which Sirius is licensed to transmit its signals to subscribers. Sirius'

repeaters must therefore first translate the signals they receive into the correct frequency to be transmitted to the receivers. The repeaters send the signal out at a modulation that allows for better transmission in dense urban areas. At the same time, the repeaters had to be designed with sophisticated filtering to ensure that they did not interfere with the signals from our own satellites, or with our rival XM's service.

23. In the future, Sirius will likely employ even more repeaters, to help fill in coverage gaps. However, each additional repeater imposes a significant financial and legal burden on Sirius. For each repeater Sirius places, it must first determine, from an engineering standpoint, the best possible location that will allow for maximal ground coverage while still receiving the signal from the VSAT satellite. When possible, Sirius prefers to place the repeaters on top of tall buildings in order to maximize the coverage of each transmitter. Once the optimal location is identified, Sirius must obtain placement permission from the landowner, as well as obtaining the required state and local building permits, state communications permits, and FCC approval. Often, Sirius is forced to settle for a less-than-optimal location for a given repeater because of permitting issues. Navigating this bureaucracy can take a year or more for each additional repeater, and requires the steady attention of a team of lawyers and engineers.

The Sirius Chipset and Receivers

24. To complete the delivery of the Sirius service to subscribers and turn the signal sent out by Sirius' satellites and terrestrial repeaters into an enjoyable consumer listening experience, Sirius also had to develop a system to receive, decode, and decompress the satellite signals. Working intensively with Lucent and their microelectronics division (now Agere Systems), Sirius created the proprietary set of application specific integrated circuits, or chipset.

The chipset is the core technology in every Sirius radio, no matter what the interface looks like. In creating such a system, Sirius was ever mindful of two primary factors: size and pricing.

25. Sirius' first generation chipset technology was pioneering in many respects. Sirius developed technology to allow the radio to choose the strongest signal from any of the two currently transmitting satellites or a terrestrial repeater at any given time. The radios also buffer the signals so that, even if the signals of all of the satellites are momentarily blocked, the user hears only seamless programming.

26. Perhaps one of the greatest achievements of Sirius' technology is the small, extraordinarily sensitive antennae used by the system. Whereas the Digital Satellite Services (DSS) such as DirecTV to this day require a relatively large antennae between 18 and 24 inches in diameter with a fixed aim to receive the service signal, the original Sirius antenna was a mere four inches by two inches by one inch and could operate in any direction. With further development, the antenna has now been reduced in size to 47mm x 40mm x 12mm. The tear drop-shaped antenna is installed on the roof of a vehicle. Despite its small size, the Sirius antenna is able to discern the very low-power signal that Sirius transmits, which is just a few decibels above the cosmic background radiation. Before Sirius developed this small antenna, only the military used such low-powered signals. By creating this small antenna, Sirius pioneered the commercial use of low power signals.

27. Sirius has continued to innovate with respect to chipset development as well. In February 2003, Sirius announced that it would begin shipping a second-generation chipset technology. The newer chipset utilized Agere's COM2H process technology to integrate all digital portions of the receiver circuitry, excluding memory, into a single chip. This reduced the

receiver design dimensions to the size of a credit card, from that of a videocassette in the first generation commercial products. In addition to a dramatic reduction in size, the second generation chipset reduced required power by 50 percent and provided improved thermal performance. In 2004, we introduced a Generation 2.5 chipset that further reduced the size, cost and electrical requirements of the chipset. Most recently, in 2005, we rolled out our Generation 3 chipset from ST Microelectronics, representing a significant further advance in all major design parameters. A pictorial representation of our chipset advances is shown in SIR Ex. 12. As with our other technologies, chipset development is an area that requires constant, substantial investment in order to remain competitive.

28. Consumer electronics companies, with the aid of Sirius engineers and substantial monetary subsidies from Sirius, have developed a wide variety of radios for factory installation into new vehicles, installation into existing vehicles in the after market, and home and mobile use. The user interface of the Sirius system presents many innovations beyond traditional terrestrial radios. Foremost, the interface allows easy transition between the more than 130 channels of programming Sirius provides. In addition to consumer electronics products, Sirius works closely with our automotive partners and their suppliers in order to integrate our service into new automobiles as they roll off the manufacturing line. This effort requires significant investment to ensure the high quality standards of the automotive industry are consistently met.

Public Recognition of Sirius' Technological Contributions

29. The satellite and engineering industries have extensively recognized Sirius' enormous technological contributions. On April 11, 2002, Sirius was inducted into the Space Foundation's Space Technology Hall of Fame. The honor recognizes innovators who transform technology originally developed for space use into commercial products. Inductees are selected

by a team that includes input from NASA, the Departments of Defense, Commerce, and Transportation, and commercial aerospace and technology companies. Sirius joined an elite group of fewer than 40 technologies to be so honored, including DirectTV, the Debakey heart pump and the Global Positioning System (GPS).

30. In December 2001, *Popular Science* magazine honored Sirius as the Grand Prize winner of its "Best of What's New" award in its electronics category. *Popular Science* is the world's largest science and technology magazine, with a circulation of more than half a million. Each year in its Best of What's New issue, *Popular Science* features 100 winners in ten different categories honoring product innovation. Among these 100 winners, the magazine also selects ten Grand Prize award winners that represent a significant step forward in each category. In recognizing the Grand Prize recipients, the magazine's editors look for products that must in some way improve the quality of life.

31. The technologies developed by Sirius have resulted in the granting of twelve United States Patents. Many of these innovative technologies are embodied in the Sirius system as it operates today. Moreover, my team continues to file new patent applications as new technology is developed. In addition to these filed patents, many technological advances are held as trade secrets to preserve our competitive advantages and service security.

Conclusion

32. For more than fifteen years, Sirius has been a major innovator of all aspects of satellite radio. From its pioneering three-satellite geosynchronous orbital system to its audio compression technology, from its terrestrial repeaters to its amazingly small antenna and innovative receiver technology, Sirius has invested more than fifteen years of engineering know-

how and hundreds of millions of dollars to develop a commercially viable subscription service to deliver cutting-edge programming. These innovations allow a broad variety of music to reach listeners who otherwise might not be reached by traditional music distribution channels.

Before the
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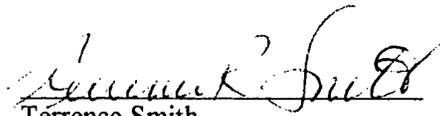
In the Matter of)
)
)

Adjustment of Rates and Terms for)
Preexisting Subscription and Satellite)
Digital Audio Radio Services)
_____)

Docket No. 2006-1 CRB DSTRA

DECLARATION OF TERRENCE SMITH

I, Terrence Smith, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 30th day of October 2006 at New York, New York.


Terrence Smith

Before the
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Washington, D.C.

APPEARANCES: (CONT.)
On Behalf of Music Choice
PAUL M. FAKLER, ESQ
Moses & Singer LLP
406 Lexington Avenue
New York, New York 10174-1299
(212) 554-7800
pfakler@mosessinger.com

In the matter of:)
)
Adjustment of Rates and Terms)
for Preexisting Subscriptions) Docket No.
Services,) 2006-1
and) CRB DSTR
Satellite Digital Audio Radio)
Services)
)

Room LM-408
Library of Congress
First and Independence
Avenue, S.E.
Washington, D.C. 20540
Thursday,
June 7, 2007

The above-entitled matter came on for hearing,
pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES
On Behalf of SoundExchange
DAVID A. HANDZO, ESQ
MICHAEL B. DeSANCTIS, ESQ
JARED O. FREDMAN, ESQ
THOMAS J. PERRELLI, ESQ
MARK D. SCHNEIDER, ESQ
Jenner & Block
601 Thirteenth Street, N.W.
Suite 1200 South
Washington, D.C. 20005
(202) 639-6060
dhandzo@jenner.com
On Behalf of XM Satellite Radio Inc.
BRUCE RICH, ESQ
JONATHAN BLOOM, ESQ
TODD LARSON, ESQ
BRUCE S. MEYER, ESQ
RALPH MILLER, ESQ
Weil Gotshal & Manges
567 5th Avenue
New York, New York 10016
(212) 310-8238
On Behalf of Sirius Satellite Radio Inc.
BRUCE G. JOSEPH, ESQ
KARYN K. ABLIN, ESQ
MATT J. ASTLE, ESQ
JENNIFER L. ELGIN, ESQ
THOMAS W. KIRBY, ESQ
MICHAEL L. STURM, ESQ
JOHN WYSS, ESQ
Wiley Rein
1776 K Street, N.W.
Washington, D.C. 20006
(202) 719-7528
bjoseph@wileyrein.com

WITNESS	DIR	CROSS	REDIR	RECCROSS
Mel Karmazin				
By Mr. Wyss			29	
Terrence Smith				
By Mr. Kirby	36		130	
By Mr. DeSanctis		90		
Doug Wilsterman				
By Mr. Sturm	143			
Jeremy Coleman				
By Mr. Sturm	197		285	
By Mr. DeSanctis	226		305	
Steve Cohen				
By Ms. Elgin	333			
EXHIBIT NO.	DESCRIPTION	MARK	RECD	
24	Sirius contract with NBA			withdrawn
26	Sirius contract with NBA with 2 Amendments	6	8	
27	Sirius contract with 112 (Stern)	9	10	
28	5/1/07 Sirius Earnings Guidance	14	15	
29	12/08/04 email Ryan to Karmazin	23	26	
30	Satellite Orbit		90	
31	Satellite Update Report	103	108	
32	Martha Stewart Agreement	227	230	
33	Fox News Study	243	244	
34	June 2006 Sirius Satellite Radio Listener Study	251	253	
35	August 2006 Customer Satisfaction Survey		262	
Sirius				
32	Written testimony of T. Smith	39	40	
33	August 2005 Sirius News Channel Evaluation	144	144	
34	June 2006 Sirius Satellite Radio Listener Study	199	199	

1 regulatory agency approvals. We need the
2 Justice Department to make sure the merger is
3 not anticompetitive, and we need the FCC to
4 determine that not only is it not
5 anticompetitive, but the merger is in the
6 public interest.

7 So we are in the process of going
8 through a second request with the Justice
9 Department. The FCC has not yet accepted our
10 application, has not put out a public notice
11 yet. So we have a long process. We're very
12 early in the game. I had our annual
13 shareholders meeting right before Memorial
14 Day, so I guess it must have been about two
15 weeks ago, and I told our shareholders that I
16 believe though the merger should be approved
17 that we have an uphill battle to get it done.

18 So there is certainly no certainty
19 to it. I'm optimistic about it, but there is
20 no certainty.

21 Q Is there a drop dead date in the
22 merger agreement?

1 that you need to turn profitable?

2 WITNESS: We have not come to a
3 pure number that says once you get over a
4 certain amount you become profitable. Because
5 right now we are counting subscribers two
6 ways. One is that if you pay \$12.95 you are
7 a subscriber, and if you pay \$6.99 to get a
8 second receiver, you are a subscriber. So
9 that - the way the accounting works, that
10 counts as two.

11 So the revenue is really the key
12 number that drives whether or not we will be
13 profitable. So if you work backwards to where
14 we are today with our cost structure the way
15 it is today, is that we believe that we will
16 need somewhere at least 10 million, maybe 11
17 million subscribers, to where we could be in
18 this area of EBITDA profitable. If you are
19 getting into profit in the GAAP term of
20 profit, we might need to have a number
21 significantly north of that.

22 JUDGE WISNIEWSKI: Thank you, sir.

1 A I believe - yes, there is a drop
2 dead date. And I don't think -

3 Q Do you know approximately when
4 that is?

5 A I think it's in the first quarter
6 of next year.

7 MR. WYSS: No further questions,
8 thank you, Your Honor.

9 CHIEF JUDGE SLEDGE: Any further
10 cross by XM?

11 MR. RICH: No, Your Honor.

12 CHIEF JUDGE SLEDGE: Anything else
13 by Music Choice?

14 MR. FAKLER: No, Your Honor.

15 CHIEF JUDGE SLEDGE: Anything else
16 by Sound Exchange?

17 MR. HANDZO: No, Your Honor.

18 CHIEF JUDGE SLEDGE: Any questions
19 from the bench?

20 JUDGE WISNIEWSKI: I have one.

21 Mr. Karmazin, has your firm
22 identified some critical mass of subscribers

1 CHIEF JUDGE SLEDGE: All right,
2 thank you, sir.

3 Mr. Joseph.

4 MR. JOSEPH: Your Honor, my
5 partner, Mr. Kirby, will call our next witness
6 and examine our next witness.

7 CHIEF JUDGE SLEDGE: All right.

8 MR. KIRBY: Your Honor, Sirius

9 calls Mr. Terrence Smith.

10 Whereupon,

11 TERRENCE SMITH

12 was called as a witness by counsel for Sirius
13 and, after having been first duly sworn, was
14 examined and testified as follows:

15 CHIEF JUDGE SLEDGE: Thank you,
16 please be seated.

17 MR. KIRBY: May I proceed, Your
18 Honor?

19 CHIEF JUDGE SLEDGE: Yes.

20 DIRECT EXAMINATION

21 BY MR. KIRBY:

22 Q Good morning, Mr. Smith.

1 A Good morning.
 2 Q What is your full name?
 3 A My full name is Terrence Raymond
 4 Smith, though I am commonly known in the
 5 industry as Terry Smith.
 6 Q I'll probably call you Mr. Smith.
 7 Where are you employed, Mr. Smith?
 8 A I'm employed by Sirius Satellite
 9 Radio.

10 Q And what is your position?
 11 A My position is senior vice
 12 president of engineering.
 13 Q And in that position, what are
 14 your responsibilities?
 15 A I have responsibilities for all of
 16 the engineering operations in technology
 17 development that feeds Sirius Satellite
 18 Radio's enterprise, with one exception being
 19 information technologies.
 20 So I have responsibilities for the
 21 satellites, their designs, their operations,
 22 our terrestrial network, the integrated

1 MR. KIRBY: Your Honor, if I could
 2 ask that copies of the witness' statement be
 3 passed out, and I believe they should be
 4 designed Exhibit 32.

5 (Whereupon the aforementioned
 6 document was marked for
 7 identification as Sirius Exhibit
 8 No. SIR 32)

9 BY MR. KIRBY:
 10 Q Mr. Smith, since we have mentioned
 11 Exhibit 32, would you examine that. Is that
 12 your written direct testimony in this case?

13 (Witness examines document)
 14 WITNESS: Yes, it is.

15 BY MR. KIRBY:
 16 Q And you signed that testimony
 17 under penalty of perjury?

18 A Yes.
 19 Q And it was true when you signed
 20 it?

21 A Yes, it is.
 22 MR. KIRBY: Your Honor, I would

1 circuits and research that goes into antennas
 2 and receivers and so on.
 3 Q And when did you become employed
 4 by Sirius?
 5 A I joined Sirius in February of
 6 2002, just actually a week prior to the
 7 commencement of the commercial operations of
 8 Sirius.
 9 Q How would you describe your
 10 professional field?
 11 A I feel I belong in the field of
 12 digital communications systems, digital
 13 broadcast systems.
 14 Q And how long have you worked as a
 15 professional in that field?
 16 A I have been - since graduating
 17 college in 1979. So my math is 28 years I
 18 guess.
 19 Q I think maybe your direct
 20 statement said 27, but I guess time marches
 21 on.
 22 A That's correct.

1 move the admission of Exhibit 32.
 2 CHIEF JUDGE SLEDGE: Objection?
 3 MR. DeSANCTIS: No objection.
 4 CHIEF JUDGE SLEDGE: Without
 5 objection it's admitted.

6 (Whereupon the aforementioned
 7 document previously marked Sirius
 8 Exhibit No. 32 for identification
 9 was received into evidence)

10 MR. KIRBY: Now what led us to this
 11 was the statement that you had worked for 28
 12 years in digital communications technology.

13 BY MR. KIRBY:
 14 Q Describe for us your professional
 15 background in that field. Where have you been
 16 employed in that field?

17 A Prior to joining Sirius I was, for
 18 22 - 23 years at the RCA Laboratories, which
 19 later became the Sarnoff Corporation,
 20 following the acquisition of RCA by General
 21 Electric.

22 Q And what were you doing while you

1 were there?

2 A In that capacity I was responsible
3 for technology development and the management
4 of teams that developed, what became the HDTV
5 television standard, as well as worked with
6 Thompson Consumer Electronics and used to
7 create the Direct TV system.

8 Q Did you have a managerial role in
9 those operations?

10 A I had what I would consider a
11 technical management role. Early in my
12 career, I was an engineer developing a lot of
13 the technology. As I grew in my
14 responsibilities, I started managing other
15 engineers, but still kept my hand in a whole
16 lot of engineering aspects as well.

17 Q And did you do any inventing?

18 A Yes, I did.

19 Q And what is the result of that?

20 A I believe I'm the inventor or
21 coinventor of 18 U.S. patents, and a number of
22 those have also been filed internationally.

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1 Q Mr. Smith, I want you to now think
2 about the situation as you found Sirius when
3 you joined it. Let me simply ask that. When
4 you joined Sirius, you said they were just
5 getting ready to begin commercial operations;
6 is that right?

7 A That's correct.

8 Q Was it necessary for you to
9 acquaint yourself with the technological steps
10 that had led Sirius to that point?

11 A Yes, it was. The responsibilities
12 that I had undertaken initially as their chief
13 technology officer, but with the understanding
14 that I would take over the entire engineering
15 department's responsibilities, I quickly had
16 to become familiar with all the aspects of the
17 Sirius system.

18 Q And let me ask you, when you were
19 with Sarnoff Labs working on HDTV and
20 DirectTV, were you aware of what Sirius radio
21 was doing - of what Sirius was doing during
22 that time?

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1 A I had a high level understanding
2 of what satellite radio was doing, and what
3 was going on at Sirius and XM, and in the
4 months that led up to my joining Sirius, I had
5 actually initiated engagements of consulting
6 exercise for Sarnoff to assist Sirius in
7 getting to their commercial launch. And so I
8 had some due diligence associated with that.

9 Q Now at the time Sirius was ramping
10 up, DirectTV was already offering a
11 subscription service broadcast from satellite;
12 is that correct?

13 A That's correct. It would be
14 called direct-to-home broadcasting is the
15 acronym that I think we typically spoke about.
16 Obviously that has a lot - there are some
17 commonalities with the Sirius system in that
18 they take advantage of having satellites to
19 broadcast across a wide footprint of the
20 United States and Canada, the difference
21 obviously being that DirectTV has the good
22 fortune of just having to broadcast to

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1 stationary targets, the homes.

2 Q Well, what was your understanding
3 of the fundamental technological challenge
4 that Sirius faced to move from existing
5 technology to its own successful service?

6 A So the mission that I believe that
7 Sirius had at that time and continues to have
8 is to provide a very high quality digital
9 audio experience to consumers in mobile
10 vehicles across the entire nation with a
11 system that provides coverage that is
12 continuous and seamless and also importantly
13 is affordable; and they have to do that with
14 what I would consider a fairly modest
15 amount of spectrum in order to be able to
16 transmit the necessary signals.

17 Q Now when you say a high quality
18 signal, what do you mean by that?

19 A Because this is a subscription
20 service, we need to be able to provide the
21 fidelity of audio that customers will feel
22 matches the subscription price that they are

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1 paying. It needs to be free from a lot of
2 interruptions, and I think that was one of the
3 primary challenges that we had. Because the
4 environment of transmitting to mobile
5 vehicles, you encounter many disruptions to
6 the signals.

7 Q Was there any benchmark of quality
8 that you had to equal or beat for Sirius to be
9 successful?

10 A Well, certainly because we assume
11 that we aspire to being in all radios and AM
12 button and FM button and a satellite button,
13 a Sirius satellite button, that clearly you
14 need to be able to exceed the level of
15 performance they expect from their AM and FM
16 transmissions.

17 Why I say exceed is because,
18 again, we're seamless from market to market,
19 and we charge a subscription fee.

20 Q Now you indicate in your written
21 testimony that the first thing you have to do
22 to maintain a broadcast system like Sirius is

1 through them.

2 One is what we would call spatial
3 diversity, meaning that we have multiple
4 satellites that are now beaming the same
5 content to the signals.

6 And by doing that if you are
7 blocked from one satellite the likelihood is
8 that you might not be blocked from another
9 satellite if you are one side of the building
10 versus the other.

11 The second is frequency
12 diversities. Because we have some amount of
13 spectrum, we separate our two satellite
14 signals to the extreme ends of our spectrum so
15 that if there were any disruptions that may
16 happen to the signal to cause degradation in
17 certain frequencies, it might not affect the
18 other frequencies, so as long as you get one
19 of those signals we are in good shape.

20 And we've also created what we
21 call time diversity, and it's a mechanism that
22 allows us to be blocked temporarily from a

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1 to deliver the signal. What was Sirius'
2 approach to delivering a signal to these
3 mobile receivers?

4 A So the first thing we did was
5 recognize that unlike a DirectTV system where
6 you can orient an antenna to find a perfect
7 view of the satellite once and always have it
8 set in that fashion, that our vehicles and our
9 receivers would always have to deal with the
10 fact that the vehicles move; they move at
11 various rates of speed; they pass by trees,
12 buildings and other things that block the
13 signal from the satellite reaching down to the
14 vehicles.

15 So what we devised was a system
16 that allowed us to deliver the signal through
17 a diverse number of means to elevate the
18 likelihood that you'll get the signal.

19 Q What do you mean when you say
20 diversity in this context?

21 A We look at there being three types
22 of diversity, and I'll try to quickly go

1 view of both of the satellites at the same
2 time but still to provide a seamless
3 experience for customers by being able to play
4 out of memory.

5 Q Let's look at each of those forms
6 of diversity in a little more detail.

7 First, elaborate on how you
8 achieve spatial diversity.

9 A So the - I guess the advantage
10 that DirectTV has is that they can beam
11 channels from a single satellite and know that
12 the person is going to be able to set up their
13 antenna to be able to receive that. And once
14 they get past clipping whatever tree limbs and
15 things like that they need to do, that view of
16 the southern sky, it allows them to be able to
17 deal with that.

18 I do know that there are certain
19 people that they don't have access to the
20 southern sky because of their building or
21 whatever, DirectTV can't provide that service.
22 And I think of that in the same way that

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1 Sirius has. If you are driving on the wrong
2 side of the building, and you are blocked from
3 a particular satellite, you are not going to
4 be able to receive that signal.

5 And so by creating a redundancy or
6 diverse path for the same content to go from
7 two separate satellites, we are able to
8 increase the likelihood that the receiver will
9 be able to see at least one of those two.

10 Q So you use multiple satellites; is
11 that right?

12 A We use multiple satellites. And I
13 would say that there is a third piece that I
14 didn't mention previously, and that is,
15 despite all fo our efforts to provide that
16 spatial diversity there are certain areas in
17 urban areas that we won't be able to get view
18 of the satellites because of the height of the
19 buildings.

20 So in those areas we have also
21 dedicated about a third of our spectrum to
22 having terrestrial transmitters repeat our

1 I believe it's captured in one of
2 my exhibits here. So it may be easy for me to
3 point to it.

4 Sirius employees what's called -
5 JUDGE WISNIEWSKI: Which exhibit
6 are we looking at here?

7 WITNESS: I guess this would be
8 Exhibit C. It's basically a map.

9 MR. KIRBY: So this is Exhibit C,
10 Your Honor, to Exhibit 32 that the witness is
11 referring to.

12 JUDGE WISNIEWSKI: All right.

13 WITNESS: So it's basically a map
14 of the world, and you will see that there is
15 a figure eight - so this represents the ground
16 track.

17 Most typical satellites including
18 those of Direct TV, those communication
19 satellites are in what's called a
20 geostationary orbit, so they basically reside
21 on the equator at a fixed point in the sky.
22 So they contribute their orbit at the same

1 signals as well.

2 So there are basically three
3 different ways a receiver could possibly get
4 our signal: from one satellite; from another
5 satellite; or from a terrestrial repeater if
6 it is available in that service area at the
7 time.

8 Q So how many satellites do you have
9 operating at this time?

10 A So we have three satellites that
11 operate. We broadcast from two of them at a
12 time, and it's a fairly unique constellation
13 and very unique orbits that we have developed
14 for this purpose.

15 Q Could you describe how those
16 orbits work? I see that, every time I come to
17 your office, I see that figure eight on top of
18 the building. What is that all about?

19 A What that represents is the ground
20 track of what the satellites provide. If you
21 were on the ground, that's basically where the
22 satellites are traversing our signal path.

1 speed and same height and position relative as
2 the earth rotates, and they complete their
3 orbit in exactly 24 hours just as the earth
4 rotates.

5 MR. KIRBY: That was too simple for
6 Sirius?

7 WITNESS: What we were concerned
8 about is that - so what I'll explain is these
9 orbits that we chose allowed us to get a much
10 higher look angle for the satellites down into
11 the CONUS of the United States.

12 And if you think about operating
13 DirectTV dishes on your home, I'm in New
14 Jersey, so I think ours are kind of around 30
15 degrees to the horizon, 35 degrees to the
16 horizon. And if - so as long as I can find a
17 spot for us to get to that point in the sky,
18 then I'm okay.

19 If you start driving around, and
20 you are trying to have that kind of a look
21 angle, then you start running into a lot of
22 things - trees, buildings, semi trucks that

1 are driving past you on highways, that can
2 start to block you if you are just at that
3 type of an angle.

4 If the orbits that we chose, and
5 having a constellation of three satellites
6 orbiting in those fashions, allowed us to
7 always have one satellite that no matter where
8 you were in the United States, rather than
9 being at 30 degrees, you have a minimum of
10 about 60 degrees. And so we removed an
11 extraordinary number of blockages we might
12 otherwise have to create to fill in with gap
13 filling terrestrial repeaters.

14 BY MR. KIRBY:

15 Q But with only three satellites,
16 how do you keep one always in that little
17 loop?

18 A So the orbits that we developed,
19 and our technical founder, Rob Briskman, is
20 the inventor, holds patents in actually using
21 these orbits, the orbits are what are called
22 highly inclined elliptical orbits.

1 By doing that we create this
2 pattern. And what that does is, it allows
3 there to be one satellite that will come and
4 be in this high elevation loop always, and so
5 I just traced one satellite as an example.
6 You could start it at the equator, and you can
7 see that it is over the Caribbean as it rises.
8 And at that point in time, there is a second
9 satellite that is descending at the equator,
10 that will be going down into the Southern
11 hemisphere.

12 So we don't have the ability for
13 that satellite to see the United States, there
14 is no sense in broadcasting a signal from that
15 point. So we turn off the signal for the
16 satellite going into the Southern hemisphere,
17 and we now turn on the signal and broadcast
18 from the satellite that is now ascending into
19 the Northern hemisphere.

20 And that satellite rises, and it
21 takes about four hours to get to a point that
22 is above Kansas, and that starts the top loop

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1 And the inclination allows it to
2 be over the United States so that it's not
3 over the equator, but actually is able to
4 move. And the ellipse is such that it allows
5 it to spend more of its time over the Northern
6 hemisphere than over the Southern hemisphere.

7 And because it's an inclination
8 and tipped, it means that it will have an
9 apogee and a perigee, and those are, the
10 apogee is the highest point of the orbit, the
11 furthest away from earth, and the perigee is
12 the closest to earth.

13 So what that results in each of
14 these satellites follows the same ground
15 track, but we offset them in their launch so
16 that they are traversing this ground track
17 apart from one another in about eight hours.

18 And this figure eight loop is
19 performed in exactly 24 hours just like a
20 geostationary satellite, so everyday it keeps
21 pace with the earth, so it's synchronous with
22 the earth's rotation.

1 of the figure eight. And then it spends eight
2 hours in this high elevation loop, and then it
3 takes another four hours to descend back down
4 to the equator, where it will be turned off
5 and another satellite will be up.

6 Q So as it's rising, and begins
7 broadcasting, there is already a satellite up
8 in the high altitude loop that also is
9 broadcasting?

10 A That's right. By having three,
11 there is always one that will be below the
12 equator; there will always be one that is
13 above in the high elevation loop; and the
14 other one will be somewhere on the rising arms
15 of the figure eight.

16 Q Now is that configuration of
17 satellites anything new for communications
18 technology, civilian communications
19 technology?

20 A Absolutely.

21 Q Not something that was used by
22 Direct TV?

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1 A It is not.

2 Q And did I hear you say that Sirius
3 holds patents with respect to this?

4 A That is correct.

5 Q Now you mentioned the terrestrial
6 array. If you've got these three satellites,
7 and one of them is always essentially like the
8 sun at noon, and another one coming in from
9 the side, why do you need repeaters?

10 JUDGE ROBERTS: Before we go on to
11 the repeaters, Mr. Smith, three satellites, is
12 that the ideal number for that figure eight
13 orbit?

14 WITNESS: We have looked at a
15 variety of different things, particularly with
16 what we might do in terms of putting a fourth
17 satellite into orbit.

18 And we believe it is the optimum
19 choice in terms of trading off costs of
20 satellites and providing the type of coverage
21 that we are able to do.

22 You could create constellations of

1 particular satellite.

2 But we have recently contracted
3 with Space Systems Loral to build us a fifth
4 satellite which we intend to launch in 2008
5 and place that into a geostationary orbit to
6 complement the three satellites that we
7 currently have.

8 Q Now why is that a good idea? You
9 have these three satellites that you don't
10 need in geostationary orbit, and now you are
11 going to use one. Was Direct TV right, is
12 that what you are telling us?

13 A No, there are a couple of reasons
14 we have chosen to do this. Number one,
15 particularly when as our subscribers have
16 grown we want to make sure that we are able to
17 deal with any potential failure mechanism we
18 might have with the satellites.

19 And so we want to make sure that
20 we are able to place - basically have an in
21 orbit spare if you will. It's difficult with
22 our particular orbits, since you would have to

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1 four or more. But if you only have two
2 satellites you can't keep both of them above
3 the equator and able to broadcast at the same
4 time.

5 So as long as we are looking for
6 having this spatial diversity of being able to
7 broadcast from two different satellites at a
8 time, there is a minimum of three that you
9 need.

10 BY MR. KIRBY:

11 Q Now as long as this issue has
12 arisen, Sirius is planning to launch a fourth
13 satellite into a somewhat different orbit;
14 isn't that right?

15 A That's correct. I should say that
16 we have constructed a fourth satellite that is
17 held in storage as a ground spare, so that if
18 we were to have an in orbit failure, and I
19 wish this was wood of some sort, but if we
20 were to have an in orbit failure, we would
21 rush that satellite into a launch vehicle, and
22 place that into orbit to replace that

1 basically guess which of the three satellites
2 is going to fail. And I'm not a particular
3 gambling man, so it's difficult to try to
4 launch something in there hoping that that is
5 the satellite that is going to fail, and find
6 that it is significantly out of its orbit, and
7 you would have to, in order to rectify that,
8 consume a tremendous amount of fuel in order
9 to reorient the other satellites to balance
10 the constellation.

11 By now placing a high powered
12 satellite - and this will be the highest
13 powered satellite built for commercial
14 enterprise - by placing that in a
15 geostationary orbit, we can always broadcast
16 from that particular spot. We will always be
17 broadcasting from whatever satellite is in
18 that high elevation loop. So that we get the
19 greatest spatial diversity.

20 So we believe it will enhance our
21 coverage already. It will also provide us
22 with basically better in orbit sparing as well

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1 should there be a failure of one of the other
2 satellites.

3 Q And is there an effect on
4 satellite life?

5 A It will actually allow us to use
6 the existing three satellites for a longer
7 period of time as well.

8 Q That's because one of them is
9 turned off when it's not in high altitude?

10 A The operation that we have for our
11 three satellites is, in the normal course of
12 a day, they end up broadcasting for 16 hours
13 a day and then turned off for eight hours a
14 day. One of the unique aspects of this is
15 that we are able to use the batteries that are
16 on board for times where we may need to be
17 able to increase the power, if it's not
18 available from our solar arrays.

19 Since we won't be broadcasting for
20 16 hours a day now from those satellites, they
21 have a greater amount of time to recharge
22 batteries.

1 frequency; that was the second area of
2 diversity.

3 Very quickly, why and how does
4 Sirius achieve diversity and frequency?

5 A So as I mentioned, we have a
6 fairly modest amount of spectrum that we are
7 licensed to broadcast in, 12-1/2 Megahertz,
8 and we basically carve that up into thirds.
9 And in the lower third of the band of
10 frequencies we broadcast from one satellite.
11 At the upper band of the spectrum, we transmit
12 from the second satellite. And the middle is
13 used for any of the terrestrial repeaters,
14 should they be turned on in that particular
15 area.

16 By having the frequencies
17 broadcasted at different ends of the band, you
18 often run into problems with signals being
19 reflected off of buildings, and having
20 potential interference from other carriers.
21 Those are typically things that are relatively
22 localized within particular bands of

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1 Q Now to the terrestrial repeaters,
2 why do you need terrestrial repeaters if
3 you've got one satellite up high all the time?

4 A It is just the fact that you end
5 up having blockages that regardless of high
6 elevation a satellite, unless I have something
7 that is directly overhead I can't combat the
8 shadows cast by buildings.

9 Q How many terrestrial repeaters
10 does Sirius presently have?

11 A Sirius is currently operating 128
12 repeaters.

13 Q Do you know how many terrestrial
14 repeaters XM has?

15 A I believe they are operating
16 somewhere in the order of 850 repeaters.

17 Q And is the difference between
18 those two related to this satellite array?

19 A It is absolutely related to the
20 fact that we have far fewer gaps that need to
21 be filled; far fewer shadows to fill in.

22 Q Let's talk about now diversity of

1 frequencies.

2 So the statistics are that if it's
3 attacking one of our signals, it's not likely
4 to be attacking the others. So all we care
5 about is that one of those three signal paths
6 is still available to our subscribers.

7 Q Talk about diversity of time.

8 A Sure. So I think this was - and
9 again this is a patented technology and
10 approach that I thought was very clever.

11 So the issue is that if you are
12 driving along on highways, and you are away
13 from urban areas so you don't have shadows
14 being cast by large buildings and things, you
15 may not be very near a large population
16 center, so it's not an area where we would
17 target with terrestrial repeaters to fill in
18 the gap, you often encounter overpasses.

19 And if you are under an overpass
20 with your vehicle, for the period of time that
21 you are under there, you are blocked from view
22 of both of the satellites. And so it creates

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1 a thing where if we didn't have time
2 diversity, every time you went under an
3 overpass you would get a disruption of the
4 signal. Basically your signal would cut out
5 and be very choppy. And that is obviously
6 something that is not an acceptable listening
7 environment for any of our subscribers.

8 Q So how does the time diversity
9 solve that problem?

10 A So what the time diversity does
11 is, we basically in some ways create an echo
12 of our own signal. For the one satellite that
13 we would transmit, we immediately transmit
14 that signal up to the satellite. For the
15 paths that then feed the terrestrial repeater
16 and the second satellite, we create an echo.
17 We basically delay on the ground by four
18 seconds that same signal, that same content,
19 and then it proceeds on a pass for the
20 terrestrial repeaters and the second
21 satellite.

22 In our receivers, we use memory in

1 signal like that?

2 A So again the challenge that we
3 have that are somewhat unique is that it's a
4 signal that is very weak. We have very - I
5 mentioned that we have very high power
6 satellite that is being constructed, but when
7 that satellite is 30,000 miles away from the
8 earth, then we end up having a very weak
9 signal by the time that it reaches the
10 vehicle.

11 The first element in receiving the
12 signal is an antenna. And if you were to
13 compare this to the DirectTV signals, they
14 have the advantage of having a reflector dish
15 that is able to catch a lot of the signal and
16 be able to concentrate on the receiving
17 element.

18 Now much like my voice dies away
19 the further away you get from it, I often find
20 myself cupping my ear to be able to hear a
21 person as they catch more of the sound in my
22 ear. In that fashion we don't have the

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1 the receiver so that the signal that was not
2 delayed on the ground is now delayed in the
3 receiver by four seconds. And if you are - as
4 you drive under that overpass, you are not
5 receiving either one of those signals, but you
6 still have this four seconds of memory of what
7 was broadcast previously, that now you can
8 seamlessly play out of the device.

9 And so as long as you are able to
10 reacquire a view of the sky and a view of the
11 satellites, then it becomes a very seamless
12 operation for us.

13 Q And as long as you have any one of
14 these signals coming through your set, you
15 have the programming, is that right?

16 A That's correct.

17 Q Now you are delivering a very
18 complex signal through these moving targets.
19 It's coming from different directions, if
20 we're moving at different speeds and at
21 different frequencies in offsetting times.

22 How do you possibly detect a

1 ability to put such a concentrator on our
2 vehicles.

3 Q Why not?

4 A Well, if you are driving them
5 along at 80 miles an hour, then the wind shear
6 itself would just rip it off the vehicle.

7 Q Any other reason?

8 A Sure, the other reason is that
9 because our signals come from a variety of
10 directions, elevations, and azimuth, it
11 becomes difficult to try to figure out where
12 am I orienting my concentrator.

13 Q Were there any considerations
14 relating to consumers that dictated what sort
15 of antenna would work?

16 A So there are a couple of factors
17 that did go into that. Number one is that it
18 has to be small and aesthetically pleasing.
19 We have both selling things in retail markets,
20 as well as convincing car manufacturers to
21 include this as an option that they include in
22 their vehicles, if it's a very large element

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1 that they are sticking on a roof top there is
2 an awful lot of resistance that they have
3 because they feel that it clutters things or
4 creates a less of a streamlined fashion that
5 the car designers had intended for there to
6 be.

7 Q And what about from a retail
8 perspective?

9 A The other element is that it needs
10 to be very affordable as well. So if it's
11 mass produced, it has to be small enough and
12 low cost enough that it's able to do its job
13 effectively but not cost a fortune to install.

14 Q Now I had meant to get to this
15 before I got to the antenna, but I'm going to
16 back up one step.

17 You describe the satellite array
18 that Sirius uses, but I neglected to ask you
19 where the satellite is coming from.

20 A The satellites were constructed by
21 Space Systems Loral, based on our own
22 specifications.

1 amplifier, and direct a number of channels
2 they've got. They've got 500 channels, maybe
3 they take 20 or 50 of those channels and
4 direct it from one particular amplifier or set
5 of amplifiers.

6 And because they have wider
7 bandwidth and spectrum to be able to do that,
8 they can offer that type of capability to only
9 use a portion of the power for one part of the
10 signal to be transmitted. That's called a
11 transponder.

12 In our case, we have to combine
13 all of the outputs from those amplifiers into
14 a single signal that then gets directed down.
15 And if we had chosen to only send from one
16 amplifier at a time, it would require us to
17 create a less efficient use of that spectrum.
18 And we would get less bits to be able to
19 create fewer channels to the customer.

20 So it requires us to do a
21 tremendous amount. The fact that we have to
22 combine all those amplifiers together required

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1 Q You say based on your
2 specifications, did Sirius develop those
3 specifications in house?

4 A I believe that we also
5 incorporated a number of consultants in
6 addition to the in house staff that we had.

7 Q How are these satellites different
8 from other broadcasting satellites?

9 A So there are couple of things that
10 make them different. And perhaps the first
11 thing I'll start with is the power that needs
12 to be concentrated.

13 The physical - the guts of the
14 satellite itself have common missions with
15 other programs. There are a number of things
16 that had to be done to them to customize them
17 to our application to make them unique.

18 As I mentioned before, we have a
19 fairly modest amount of spectrum in order to
20 be able to broadcast our signal.

21 In DirectTV's case, they are able
22 to take a few amplifiers, perhaps one

1 a few things to happen. It meant that there
2 were certain components that had to be
3 developed by Space Systems Loral, tested and
4 known that they would work at these higher
5 temperatures, and higher output values.

6 And so that's one piece that is
7 different about the satellites.

8 The other piece about the
9 satellites is that because they are moving in
10 these orbits, there are a number of things
11 that change, and primarily on the on board
12 electronics, they have to go through a much
13 more sophisticated algorithm to make sure that
14 the space ship is properly oriented both to
15 the earth as well as to the sun; and it also
16 requires there to be additional and more
17 extensive gyroscopes that are able to make
18 this spacecraft move in directions that it
19 typically doesn't have to move if it were just
20 a geostationary satellite.

21 Q And are all of these elements that
22 you described, do all of them have to be

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1 working for that satellite to function well?
 2 A Absolutely.
 3 Q And if one of them ceases to
 4 function, is it easily repaired?
 5 A Well, we certainly can't send any
 6 repairmen up to work on that. There are
 7 redundancies that are included on each of
 8 these, but as soon as you lose one part of
 9 your redundancy then you are obviously at
 10 risk. And it also requires an awful lot of
 11 engineering effort to manage the satellite, if
 12 you have lost some of your redundancy as well.
 13 So it increases the complexity, increases the
 14 risk, and increases my lack of sleep.
 15 JUDGE ROBERTS: Mr. Smith, I note
 16 that it says in your testimony that you are
 17 the inventor or coinventor of 18 United States
 18 patents.
 19 WITNESS: Yes, sir.
 20 JUDGE ROBERTS: How many of those
 21 are during your work with Sirius?
 22 WITNESS: None are associated with

1 that it's able to find that warmth, orient
 2 itself, find that warmth and know that it's
 3 not pointing at the moon, know that it's not
 4 pointing at the sun or some other planet.
 5 If you had the same view of the
 6 earth all the time, then it's a much easier
 7 task to be able to do. In our case, because
 8 the satellites are changing in altitude as
 9 they climb into this figure eight, the earth
 10 recedes, it's going around things differently,
 11 and it gets different views of the sun and
 12 moon as well that cause it some additional
 13 concerns about how it's able to maintain that
 14 lock.
 15 At the same time it also would
 16 have to make sure that the spacecraft is
 17 always pointing, when it's broadcasting, at
 18 the center of the United States, so that the
 19 pattern is always centered around the United
 20 States, and doesn't drift off one way or the
 21 other.
 22 So there are a lot of maneuvers

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1 Sirius. They are all predated, sir.
 2 BY MR. KIRBY:
 3 Q I don't want to spend a lot of
 4 time on this, because it makes my brain hurt.
 5 But did the satellites have particular demands
 6 placed on them because of the unique orbital
 7 arrays that Sirius has?
 8 A Yes, so I'll just talk about two
 9 elements.
 10 One is making sure that you are
 11 pointing at the earth. So one of the failure
 12 mechanisms that has happened to a number of
 13 satellites is that they lose their lock on the
 14 earth for whatever reason.
 15 If you are at a geostationary
 16 orbit, where you are always flying at the same
 17 spot in the sky, same height, then you always
 18 have the same view of the earth. And the
 19 satellites use infrared sensors in order to
 20 find warmth from a planet as opposed to the
 21 coldness of space.
 22 So what has to be important is

1 that have to happen as part of its orbit to
 2 make sure the spacecraft is not disoriented.
 3 And the final piece is that
 4 because we have solar arrays that capture the
 5 sun's energy, to power the satellite, to power
 6 the transmission, the satellites also have to
 7 not only be pointing at the earth the right
 8 way, but they also have to orient the solar
 9 panels to have the most efficient use of the
 10 sun's - the most efficient use of the view of
 11 the sun. And so that creates yet another
 12 issue that the spacecraft has to deal with in
 13 these types of orbits.
 14 Q I'm a little still on the uptake,
 15 but does Sirius hold any U.S. patents relating
 16 to its systems?
 17 A Sirius I believe we currently hold
 18 about 16 patents. There are a number of
 19 additional patents that we have in the works
 20 that are pending.
 21 Q Don't go into details on those.
 22 So you said 16?

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1 A I believe that's the number.
 2 JUDGE WISNIEWSKI: All these
 3 satellites were launched in 2000 before you
 4 joined?

5 WITNESS: Yes, that's correct.

6 BY MR. KIRBY:

7 Q Now, you have got this signal
 8 coming in from different places, and at
 9 different times, and how many channels of
 10 programming does Sirius provide?

11 A We currently provide 135 channels
 12 of audio and data services.

13 Q Was it a challenge to get 135
 14 channels out of a single radio beam like
 15 you've been describing?

16 A It was a tremendous challenge. So
 17 apart from the challenges that I mentioned
 18 about combining all the power amplifiers into
 19 a single signal, now the challenge shifts to
 20 how efficiently can I manage the amount of
 21 bits that I am able to get. So that gets into
 22 how well we compress the audio information so

1 had primarily focused on say dedicating
 2 128,000 bits per second for providing an audio
 3 service associated with good programming. In
 4 some cases they would go higher than that if
 5 they wanted to have better stereo sound, if
 6 they wanted to have surround sound, they may
 7 go as high as 350 kilobits, with my experience
 8 in digital television and DirectTV.

9 And there the focus was going to
 10 be more on how do I increase quality of that,
 11 and not have to drive the bit rate further
 12 down.

13 So if we had relied on the rest of
 14 the industry to be able to deal with this type
 15 of compression technique, I think we really
 16 would have been stalled in our efforts to
 17 increase the number of channels.

18 We had worked extensively with a
 19 company called Ibiqity to improve our audio
 20 codecs, and Ibiqity is the company that is
 21 providing the technologies for the transition
 22 of AM and FM radio to transition to digital

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1 that we can represent faithfully to a high
 2 degree of quality as many audio channels as we
 3 possibly can.

4 And Sirius has invested tremendous
 5 amounts over the years in order to be able to
 6 increase those number of channels from what
 7 may have early have been the inception of
 8 somewhere on the order of 30 to 40 channels up
 9 to the 135 channels that we now have.

10 Q Well, you say that originally the
 11 30 to 40 seemed feasible. Was that because
 12 compression technology was already known?

13 A Yeah, I don't claim that we
 14 invented audio compression. Obviously it's
 15 used in many many roles.

16 Q It's used with DirectTV for
 17 example?

18 A Absolutely.

19 Q Well, what did Sirius do with
 20 compression audio?

21 A So what we viewed was that the
 22 industry particularly for broadcast services

1 broadcasting.

2 And what we found was that even
 3 with all of their efforts, they weren't able
 4 to really focus on technologies that broke
 5 down to the bit rates and held the qualities
 6 that we needed, while still maintaining their
 7 efforts to try to provide something that hit
 8 the target bit rates that the radio broadcast,
 9 terrestrial radio broadcast hits.

10 Q is there a particular technique
 11 that Sirius applied to its compression
 12 technology that allowed it to achieve what
 13 it's achieved?

14 A In addition to - there are a
 15 couple of things. One is that all audio
 16 compression technologies basically use a model
 17 of how the brain and the ear and the auditory
 18 system understands and processes the audio
 19 information that is received.

20 And so we've had a lot of ongoing
 21 research into understanding how that operates;
 22 what types of information might be redundant

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1 or useless to the brain for these types of
2 signals that we are broadcasting; and if you
3 can find something that is redundant, you
4 choose not to broadcast that, because it is
5 just taking up space in your bitstream.

6 An example of that is if I have
7 somebody whispering in my ear, and next to me
8 somebody sets off a firecracker, when that
9 firecracker comes along, that sound of that is
10 going to mask anything that this person
11 whispering to me does. So I am clearly not
12 going to have to bother to send the whisper
13 along in that fashion, because it just would
14 be redundant information that the frame
15 wouldn't be able to process anyway.

16 So we continue to find ways of
17 improving our algorithms in ways that is the
18 most efficient use of bits to provide high
19 quality audio.

20 The second thing we did is use
21 what's called statistical multiplexing. And
22 it's the - the term multiplexing really is

1 were sampling this.

2 A So the multiplexing is basically
3 sampling all these 100 channels that are
4 simultaneously being broadcast and putting
5 them into a single stream.

6 And in our process we have to
7 compress and encode each of these 135 channels
8 simultaneously. The statistical nature comes
9 in in recognizing that the complexity of
10 compressing each of those 135 channels is not
11 going to be identical at any particular point
12 in time.

13 So an easy way of thinking about
14 that is that in talk channels, in
15 conversations, there are often lulls in
16 conversations, silence. So silence is a very
17 easy thing to encode. You just basically say,
18 nothing happens.

19 So the statistics would say that
20 if I don't need to use all the average bits
21 that I would typically use for this one
22 particular channel, I could steal those bits

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1 just how you mix a number of different
2 channels and signals together onto a single
3 signal.

4 So in our transmissions, if you
5 will, having 100 channels that you mix all
6 those 100 channels together so that you take
7 one second of one channel, a second of the
8 second channel, a second from the third
9 channel and so on.

10 Q When you say a second, you don't
11 literally mean a second?

12 A I don't literally mean a second.
13 I was trying to piece these together.

14 And by sampling each one of these
15 and putting it on to a single stream which you
16 would be dealing with, then it provides -

17 Q Let me interrupt you for a second
18 while Mr. Joseph mops up the water. I think
19 we are all being distracted by the drama
20 there.

21 A Sorry about that.

22 Q You didn't do it. All right, you

1 to apply to a channel that maybe is having
2 music passages that goes through a crescendo
3 at that particular time.

4 And so the statistics basically
5 say I can rely on the fact that not all of
6 these things are unique and commonly
7 challenging all at the same time, and allow me
8 to dynamically allocate the bits across all
9 these channels.

10 Q Now statistical multiplexing as a
11 concept was known before Sirius; wasn't that
12 right?

13 A Absolutely. It's actually an area
14 that I worked with Direct TV on is they used
15 that for their video encoding and compression
16 systems as well.

17 Q But if I understand your testimony
18 the application of it to audio was something
19 new; is that correct?

20 A Yes, it was.

21 Q And in your view was that
22 significantly challenging?

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1 A It was a significant challenge,
2 and we found that it had significant impact
3 for us as well. We may be in somewhat of a
4 unique situation because we have lots of
5 channels that are being broadcast and
6 compressed simultaneously, whereas there
7 aren't a number of other applications that
8 have that type of a challenge that they have
9 to face.

10 Q Now I don't want to spend a lot of
11 time on this, but most of the equipment that
12 you describe is subject to regulation by the
13 Federal Communications Commission and even
14 internationally; isn't that true?

15 A That's correct.

16 Q Have you had involvement in that
17 aspect of the Sirius operation?

18 A Yes.

19 Q Has that been a significant
20 challenge for Sirius?

21 A Quite a bit. So I wasn't involved
22 in it, but the very first part of it is just

1 challenges?

2 A Well, number one, we continuously
3 look to improve the quality of our services,
4 so that the audio fidelity continues to
5 improve as much as we possibly can.

6 We continue to recognize that
7 there are more interests that our subscribers
8 have that we'd like to serve, and that drives
9 the cause for more channels to be created.

10 We obviously have to continue to
11 drive on costs, so we make ongoing investments
12 in our proprietary chip sets, into our antenna
13 development to drive down the costs, make it
14 much more appealing type of a factor that we
15 could possibly do.

16 And then there are obviously the
17 challenges of maintaining a satellite network.
18 And for those that are in the satellite
19 industry it's one where you don't rest very
20 easily.

21 Q And how many employees did you say
22 are involved under you in this effort at

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1 getting the spectrum allocated for satellite
2 radio services, and that was a very diligent
3 effort that the founders of Sirius undertook
4 just to create the system.

5 And I think Sirius and Rob Briskin
6 in particular who was our technical founder
7 has been recognized for a lot fo that
8 pioneering effort.

9 But we are always needing to
10 address any concerns that there are for
11 interference or other issues that the FCC may
12 ask.

13 Q I think every one in the room
14 appreciates the joys of dealing with federal
15 regulation.

16 So you've described this wonderful
17 technology and the technological advances
18 Sirius made to get on the market. So you're
19 home free, right?

20 A No, there are still plenty of
21 challenges.

22 Q Just in a nutshell what are those

1 Sirius?

2 A I have approximately 200 employees
3 that work on all these different aspects of
4 operating, maintaining and engineering the
5 next generation of infrastructures.

6 Q Has there been any third party
7 recognition of what Sirius has achieved in the
8 technology area?

9 A Yeah, we have been inducted into a
10 number of halls of fame, including the Space
11 Foundation, which gets a lot of its inputs
12 from NASA, Department of Commerce and
13 Transportation and others.

14 We have been identified as hot
15 products in a number of publications. We are
16 frequently cited for the innovations that we
17 bring to the industry.

18 So there has been a tremendous
19 amount of recognition for the service.

20 Q If I recall your direct testimony
21 you indicated that only fewer than 40
22 technologies had been inducted into the space

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1 hall of fame; is that correct?
 2 A That's my understanding, yes.
 3 Q And with the Popular Science, you
 4 mentioned you were the grand prize winner
 5 12/01 and the best of what's new; right?
 6 A Correct.
 7 Q And then ending with something
 8 that we actually touched on before, the Sirius
 9 technology program has led to how many
 10 patents?
 11 A I believe 16 have already been
 12 earned.
 13 MR. KIRBY: Your Honor, that
 14 concludes my direct exam.
 15 CHIEF JUDGE SLEDGE: We will recess
 16 for 10 minutes.
 17 (Whereupon at 11:01 a.m. the
 18 proceeding in the above-entitled matter went
 19 off the record to return on the record at
 20 11:16 a.m.)
 21 CHIEF JUDGE SLEDGE: We will come
 22 to order. Any questions by XM?

1 Q You testified on direct a moment
 2 ago that your predecessor at Sirius has a
 3 patent on the elliptical orbit. Is that
 4 right?
 5 A The technical founder of Sirius
 6 has such a patent.
 7 Q But you are not the first to use
 8 elliptical orbits, are you?
 9 A Well, they have certainly been
 10 used in, as I understand it, spy satellites
 11 and the like, but they have very different
 12 orbits. So this is a unique orbit, and I
 13 think that is reflected in the fact that it
 14 was able to be patented.
 15 Q But it is called the Molniya type
 16 orbit. Right?
 17 A I believe it is based upon a
 18 Molniya orbit.
 19 Q Or a Tundra type orbit?
 20 A Correct. It's a family of orbits,
 21 I would guess it is called.
 22 Q And it has been practiced since at

1 MR. JOSEPH: No, Your Honor.
 2 CHIEF JUDGE SLEDGE: Music Choice?
 3 MR. FAKLER: No, Your Honor.
 4 CHIEF JUDGE SLEDGE: Cross by
 5 Sound.
 6 MR. DeSANCTIS: Thank you, Your
 7 Honor. I would like to begin by handing out
 8 what has been marked as Sirius Trial Exhibit
 9 30.
 10 CHIEF JUDGE SLEDGE: This is
 11 SoundExchange Exhibit 30, not Sirius.
 12 MR. DeSANCTIS: I apologize if I
 13 said Sirius -- SoundExchange Exhibit 30.
 14 (WHEREUPON, THE DOCUMENT
 15 REFERRED TO WAS MARKED
 16 AS SOUNDEXCHANGE EXHIBIT
 17 NO. 30 FOR
 18 IDENTIFICATION.)
 19 CROSS-EXAMINATION
 20 BY MR. DeSANCTIS:
 21 Q Good morning, Mr. Smith.
 22 A Good morning.

1 least the 1960s in Russia and elsewhere?
 2 A For war missions that -- Yes, but
 3 not for the types of full broadcasting for the
 4 types of applications that Sirius is using it.
 5 Q I direct your attention to the
 6 document marked as SX Trial Exhibit 30 that I
 7 just handed out. I think you had a moment to
 8 look through it earlier.
 9 Are you familiar with this
 10 document?
 11 A I am not intimately familiar with
 12 it. I have seen similar types of --
 13 Q Do you know if this was created by
 14 someone in your department at Sirius?
 15 A It would appear to be one of the
 16 people that works in our Detroit office.
 17 Q Are these kinds of documents
 18 typically created by your department at
 19 Sirius?
 20 A We have -- We try to provide a
 21 document that we use to acquaint people,
 22 either as new partners that we might be

1 bringing on or potentially new employees that
 2 are in engineering departments, to give them
 3 a brief overview of the company.
 4 Q And this is the type of document
 5 that would be created for that purpose?
 6 A I believe this had a fairly
 7 limited use that was done just for the Detroit
 8 offices. This was not something that was
 9 embraced by corporate or anything like that to
 10 do any specific training, if I would.
 11 Q You know that this one was made
 12 for a specific office?
 13 A Yes. My sense is that Erik
 14 Streeter, who works in our Detroit office, put
 15 this together and is one of the people that
 16 would go through this with a new employee out
 17 in the Detroit office.
 18 MR. DeSANCTIS: Your Honor, I
 19 would like to move for the admission of
 20 SoundExchange Trial Exhibit 30 at this time.
 21 CHIEF JUDGE SLEDGE: Any objection
 22 to Exhibit 30?

1 point out what the witness said.
 2 With the foundation that has been
 3 laid, the objection is sustained.
 4 MR. DeSANCTIS: Thank you, Your
 5 Honor.
 6 BY MR. DeSANCTIS:
 7 Q Mr. Smith, are you familiar with
 8 a company called Satellite Data System, also
 9 known as SDS?
 10 A I am not sure I am familiar with
 11 them.
 12 Q Then you wouldn't be aware of the
 13 fact that they launched a satellite system in
 14 the 1970s in this country using an elliptical
 15 Molniya type orbit?
 16 A I'm not familiar with that.
 17 Q You testified on direct, Mr.
 18 Smith, that it sounded to me like what was
 19 primarily unique about your satellite system
 20 is that the three satellites are
 21 geosynchronous and not geostationary. Is
 22 that--

1 MR. KIRBY: Yes, Your Honor. I
 2 will object on the grounds that there is no
 3 adequate foundation. This is not a corporate
 4 level document, and it is not a document that
 5 this witness is familiar with.
 6 CHIEF JUDGE SLEDGE: Mr.
 7 DeSanctis?
 8 MR. DeSANCTIS: Yes. Your Honor,
 9 the witness has stated that it was created by
 10 people in his department, that they are
 11 regularly created for various purposes, and he
 12 also knew the purpose for which this document
 13 has been created, and he further testified
 14 that he is familiar with various slides that
 15 he was able to identify just quickly flipping
 16 through the document.
 17 CHIEF JUDGE SLEDGE: Mr. Kirby,
 18 you are standing?
 19 MR. KIRBY: Yes. I just -- If I
 20 could reply briefly.
 21 CHIEF JUDGE SLEDGE: Well, I heard
 22 what the witness said. You don't need to

1 A I think that's one of the things
 2 that I testified as being somewhat unique.
 3 Q One of the things is fine. And I
 4 think you also testified that the
 5 geosynchronous system created a lot of
 6 complexities from an engineering standpoint
 7 and a maintenance standpoint that wouldn't
 8 have been present in a geostationary system.
 9 Is that right?
 10 A It added to the challenges, yes.
 11 Q Did it add expense?
 12 A Absolutely.
 13 Q And you could have used a
 14 geostationary system. Right?
 15 A In fact, I believe that initially
 16 we had looked at using a geostationary system,
 17 but after doing further studies, we determined
 18 that for the power that the satellites were
 19 able to deliver, we needed to get them into a
 20 higher inclination orbit and look at the --
 21 improve the look angle so that we would not --
 22 our signals would not be degraded sa much by

1 foliage.

2 Q But XM uses a geostationary

3 system. Correct?

4 A That's my understanding, yes.

5 Q But you determined that you

6 couldn't?

7 A Not with the class of satellites

8 that were available to us at the time that we

9 began.

10 Q Was that after or before XM

11 launched?

12 A We began our construction of

13 satellites prior to XM engaging their

14 satellites.

15 Q How much prior? Do you know?

16 A I don't.

17 Q And it is your testimony that

18 geostationary satellites weren't available

19 when Sirius began developing its satellites?

20 A I don't believe that's what I

21 said. They were certainly available. The

22 power levels of the geostationary satellites

1 satellites.

2 Q That's in-house at Sirius?

3 A That's correct.

4 Q Let me direct your attention to

5 Sirius Exhibit 32, which is your written

6 direct testimony. This is something you

7 didn't actually testify to on direct, but

8 since this statement has been admitted into

9 evidence, I would like to ask some questions.

10 In the second sentence of

11 paragraph 16, you state, "The selection of

12 vehicles to launch the satellites also reflect

13 the enormous" --

14 JUDGE ROBERTS: That is page 8.

15 MR. DeSANCTIS: I apologize, Your

16 Honor. That's right, Your Honor.

17 BY MR. DeSANCTIS:

18 Q This is where you are discussing

19 launching satellites and the risks involved in

20 launching satellites.

21 The second sentence of paragraph

22 16 reads: The selection of the vehicles to

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1 that were being constructed did not provide

2 sufficient power to the ground for us to be

3 able to reliably deliver the signals that we

4 needed to.

5 Q That was a judgment that Sirius --

6 that was made by the Sirius engineering

7 department?

8 A That's my understanding, yes.

9 That preceded me, but that is my

10 understanding.

11 Q You testified also that Sirius

12 didn't build its satellites. It contracted

13 them out to Belleau. Is that correct?

14 A Well, there are only a few

15 companies that actually construct satellites.

16 Yes.

17 Q And who manages -- who maintains

18 them in the air? I think the common phrase is

19 "flying" them. Who flies the Sirius

20 satellites?

21 A In our case, we have a team of

22 engineers that are dedicated to flying the

1 launch the satellites also reflect the

2 enormous risks, costs, and capital investments

3 Sirius has taken on in order to provide its

4 service..

5 Do you see that?

6 A Yes.

7 Q Now let's look at the second

8 sentence in paragraph 17 down below: Launch

9 vehicles are extremely complex and fail on a

10 regular basis.

11 Do you see that?

12 A Yes.

13 Q None of Sirius' launches have

14 failed, have they?

15 A We are very fortunate that all

16 three of our launches to date was successful.

17 Q And you contracted your launching

18 services out to a company called Proton

19 Systems. Is that right?

20 A I believe that's correct.

21 Q Do you know -- Are you aware of

22 the fact that Proton has launched 200

98

100

1 satellites since 1980?

2 A I don't know the exact number. I

3 know that they have had a number of successful

4 launches, yes.

5 Q Well, actually, do you know if

6 their success rate is 94 percent?

7 A I didn't know that, but I guess I

8 would not be surprised. Just fortunate we are

9 not on the six percent of that.

10 Q Let's keep reading in Paragraph

11 17, the third sentence. It reads: Moreover,

12 even when a satellite is in orbit, it is

13 required to function in extremely difficult

14 conditions and is subject to complete and

15 partial failure at anytime.

16 This is the part in your testimony

17 where you are talking about risks, once the

18 satellite is already launched. Is that right?

19 A Correct.

20 Q And isn't it true that Sirius'

21 first three satellites have exhibited

22 excellent in-orbit reliability?

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1 A They -- We have experienced some

2 component failures, and it has increased the

3 complexity with which we have had to operate.

4 I think we have -- I think we discussed that.

5 Q You've never had even a second of

6 outage, have you?

7 A I believe that, through our

8 diligent team, I think we have kept it to 100

9 percent availability, and I would say,

10 however, you know, we are fortunate with the

11 choice of orbits that we have; because there

12 are eight hours a day where we are not

13 broadcasting from a particular satellite, and

14 that has afforded us on a number of occasions

15 to address potential anomalies by going

16 through software updates and the like.

17 So it was very fortunate that we

18 chose the orbits that we did, from that

19 perspective.

20 Q And do you expect that the

21 satellites you launch in the future will be

22 even more reliable and better, having been

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1 improved from your satellites -- I think they

2 are named FM-1, FM-2 and FM-3?

3 A Well, I would certainly believe

4 and hope that all engineering enterprises go

5 through a learning process and don't tend to

6 repeat mistakes, but I don't kid myself to

7 believe that this will be completely a

8 bulletproof design either.

9 MR. DeSANCTIS: Your Honor, I

10 would like to show the witness what has been

11 pre-marked as SoundExchange Trial Exhibit 31,

12 please.

13 (WHEREUPON, THE DOCUMENT

14 REFERRED TO WAS MARKED

15 AS SOUNDEXCHANGE TRIAL

16 EXHIBIT NO. 31 FOR

17 IDENTIFICATION.)

18 BY MR. DeSANCTIS:

19 Q Mr. Smith, have you seen this

20 document before?

21 A I believe this is a document that

22 was meant to provide a management update to

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1 where we are with our satellites.

2 Q Could you describe what you mean

3 by management -- who you mean, in particular?

4 A Because there is not an

5 attribution as to whether this is part of a

6 larger package, I don't know the particular

7 occasion upon which this was done, but from

8 the context and the level of detail that we go

9 into, it could be a briefing that we were

10 giving to my boss or to Mr. Karmazin or to

11 someone else.

12 Q Is this something that is done on

13 a routine basis, preparing these reports for

14 management, including Mr. Karmazin and your

15 boss?

16 A There are times where we give

17 verbal updates on status of things on a more

18 regular basis, and there are occasions where

19 we may be requested to provide an update. I

20 don't believe we have a routine of providing

21 a satellite update as prescribed.

22 Q Provide them whenever they are

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1 requested by Mr. Karmazin or your direct
 2 supervisor?
 3 A Absolutely.
 4 Q And would this have been prepared
 5 -- If asked by Mr. Karmazin or your
 6 supervisor, for such an update in writing,
 7 that would be prepared by someone in your
 8 department?
 9 A Correct.
 10 Q Are you ever involved in making
 11 those updates?
 12 A I would typically review those. I
 13 pay people that have far greater expertise in
 14 these types of things to actually prepare
 15 them.
 16 Q Do you review them before it is
 17 presented to Mr. Karmazin or your boss?
 18 A Yes.
 19 Q Are you involved in presenting
 20 them ever to Mr. Karmazin and your boss?
 21 A I typically allow the people that
 22 are more expert in the particular device to be

1 this.
 2 Q There is no attribution on it?
 3 A That's correct.
 4 Q Do you actually recall having seen
 5 this particular document before?
 6 A I don't have a specific
 7 recollection of this particular document.
 8 Q Do you have any personal knowledge
 9 as to why this document was prepared?
 10 A I couldn't say specifically why it
 11 was prepared.
 12 MR. KIRBY: That's all I have,
 13 Your Honor, and I would object to the
 14 admission of the document for lack of
 15 foundation.
 16 CHIEF JUDGE SLEDGE: Mr. Smith,
 17 are you the technical witness for Sirius?
 18 THE WITNESS: Yes, sir.
 19 CHIEF JUDGE SLEDGE: The objection
 20 is overruled. The exhibit is admitted. Mr.
 21 DeSanctis.
 22 (WHEREUPON, THE DOCUMENT

1 able to be the ones that present it, and give
 2 them a little bit more visibility. So i don't
 3 feel I need to be the guy in the spotlight all
 4 the time.
 5 MR. DeSANCTIS: Your Honor, at
 6 this time, I would like to move for the
 7 admission of SoundExchange Trial Exhibit 31.
 8 CHIEF JUDGE SLEDGE: Any objection
 9 to Exhibit 31?
 10 MR. KIRBY: Yes, Your Honor, and I
 11 would like to voir dire, if I may
 12 CHIEF JUDGE SLEDGE: Yes.
 13 MR. KIRBY: I haven't seen this
 14 done. Do I go to the podium?
 15 CHIEF JUDGE SLEDGE: Yes.
 16 VOIR DIRE
 17 BY MR. KIRBY:
 18 Q Mr. Smith, did you prepare this
 19 Exhibit 31?
 20 A I did not.
 21 Q Do you know who prepared it?
 22 A I don't know for sure who prepared

1 REFERRED TO, PREVIOUSLY
 2 MARKED AS SOUNDEXCHANGE
 3 TRIAL EXHIBIT NO. 31 FOR
 4 IDENTIFICATION, WAS
 5 RECEIVED INTO EVIDENCE.)
 6 MR. KIRBY: Your Honor, I then
 7 would move for the protection of this as a
 8 confidential Sirius document or the Court's
 9 orders. As the Court will see, this is a
 10 recent document. It talks about the status of
 11 ongoing Sirius projects that are fairly
 12 central to our operations and to our
 13 competitive position.
 14 This is the kind of information,
 15 for example, Your Honor, that would not be
 16 shared with XM, despite the pending merger
 17 CHIEF JUDGE SLEDGE: Page 2 would
 18 be publicly disclosed.
 19 Mr. Smith, is the information on
 20 page 3 identified as Risk Issues matters that
 21 are included in the disclosures to investors
 22 or in your 10-5, if you know?

1 THE WITNESS: I believe this goes
2 into greater detail than we would disclose.

3 CHIEF JUDGE SLEDGE: Give me an
4 example.

5 THE WITNESS: Getting into any
6 particular issues about the risks associated
7 with the solar arrays themselves, anything
8 that -- the control system.

9 CHIEF JUDGE SLEDGE: You don't say
10 anything about the control system except that
11 there are many issues. What's private about
12 that?

13 THE WITNESS: Well, to the degree
14 that it goes to the potential for any schedule
15 slips, I think that is something that we
16 wouldn't necessarily be disclosing at this
17 time.

18 CHIEF JUDGE SLEDGE: It doesn't go
19 into schedule status. Why are you raising
20 that possibility?

21 THE WITNESS: It talks about risks
22 and how we have to manage the risks in certain

1 decisions that need to be made and information
2 we need to be able to --

3 CHIEF JUDGE SLEDGE: You are
4 characterizing something that's not on this
5 page. Satellite control system, the ground
6 system: There are many issues, but all are
7 close to resolution. Period.

8 THE WITNESS: But not resolved at
9 that particular time.

10 CHIEF JUDGE SLEDGE: That's not on
11 here. That has nothing to do with what you
12 were just saying a minute ago.

13 THE WITNESS: I'm putting it in
14 the context of the overall document that's
15 giving a briefing about schedule and the risks
16 associated with maintaining that schedule. So
17 I believe, to the degree that technical risks
18 are involved, it is speaking to my -- where
19 there may be risks on schedule.

20 CHIEF JUDGE SLEDGE: You are not
21 responding to our conversation. You said
22 satellite control system, and then you started

1 talking about areas of satellite control
2 system that are not stated on this page.

3 THE WITNESS; Your Honor, I
4 apologize for it not being responsive, but
5 where I looked at this was to say that, at the
6 time of this writing, there were open issues
7 related to the control system that needed to
8 be resolved, and at that time represented
9 risks to the schedule. This is supporting to
10 the previous page that talks about schedule.

11 CHIEF JUDGE SLEDGE: There is
12 nothing on here on the control system that
13 would be subject to the protective order.
14 What else is private?

15 THE WITNESS: You're just talking
16 about page 3 at this point?

17 CHIEF JUDGE SLEDGE: Yes.
18 Technical risk issues. I don't see anything
19 else in this document that could possibly fit
20 within the definition.

21 THE WITNESS: To the degree that
22 the solar array cell selection discusses

1 potential reduction in capacity and the
2 selection of the technical decisions being
3 made as to that, that basically then allows
4 someone to better understand the capabilities
5 of -- the technical capabilities of our
6 satellite that we are procuring, and we
7 typically don't go into technical detail that
8 would allow some of those levels of details to
9 come to the public.

10 CHIEF JUDGE SLEDGE: Has this
11 information under the heading "Solar Array
12 Cell Selection" been disclosed outside of
13 Sirius?

14 THE WITNESS: I don't -- Other
15 than with our vendor, I don't believe it has.

16 CHIEF JUDGE SLEDGE: All right.
17 That's the only part of this document that
18 would fit in a -- for protection under the
19 order. As it is part of the document, the
20 motion is granted.

21 MR. DeSANCTIS: Your Honor, I am
22 going to refer the witness to page 3.

1 However, I don't believe I am going to go into
2 any of the technical information. So just
3 letting counsel know, if they still feel the
4 need to clear the courtroom.

5 CHIEF JUDGE SLEDGE: He will
6 respond to the questions. Go ahead.

7 BY MR. DeSANCTIS:

8 Q Mr. Smith, I would like to turn
9 your -- First of all, what would be the
10 purpose of preparing this document for
11 presentation to management?

12 MR. KIRBY: Objection, Your Honor.
13 That asks the witness to speculate. He's
14 testified he doesn't know who prepared this or
15 why it was prepared.

16 CHIEF JUDGE SLEDGE: Overruled.

17 THE WITNESS: Sorry. Could you
18 repeat the question?

19 BY MR. DeSANCTIS:

20 Q What would be the purpose of
21 presenting this document to management, such
22 as Mr. Karmazin or your direct supervisor?

1 model 5. It is the fifth satellite that we
2 are having constructed and the one that I
3 mentioned would be launched into a
4 geostationary orbit, hopefully, in 2008.

5 Q So you have three in the air right
6 now. You have one on the ground that you
7 don't intend to launch, because it is a --

8 A We hope we don't.

9 Q -- a back-up. You hope not to.
10 So FM-5, the one that is discussed here, is
11 going to be the next one you launch.

12 A If the fleet remains intact until
13 that point, that would be the next one we
14 would launch.

15 Q Okay. And it lays out a number of
16 technical risks, as they are referred to in
17 the document. Is that right?

18 A Correct.

19 Q And are these many of the kinds of
20 risks that you make reference to, either in
21 specific or general terms, in your written
22 direct statement?

1 A Depending upon the timing -- and I
2 am not clear on the timeline of this
3 presentation relative to decisions -- it could
4 be that this was trying to give a status
5 update of where the program is, so that any
6 concerns over the procurement of that
7 satellite might be made known.

8 It could have been potentially
9 looking for decisions on proceeding with any
10 future satellites.

11 Q Let me direct your attention to
12 the first page of the document. It is dated
13 September 22, 2006. Does that help
14 contextualize the purpose for you at all?

15 A Not to a specific event, no.

16 Q Okay. Well, let me direct your
17 attention to page 3 of the -- or the third
18 page of the document. The pages are not
19 numbered in the document itself.

20 This page is entitled "FM-5."

21 What is FM-5 ?

22 A FM-5 is referred to as flight

1 A I think these are very much
2 focused on understanding the risks that have
3 been presented to us as part of program
4 reviews from the Loral identifying what needs
5 to be resolved in order to deliver the
6 satellite and potentially any schedule risks
7 that we may have or tradeoffs that we need to
8 make in order to balance the capabilities, the
9 technical risks, and the schedule.

10 Q I'm not sure that answered the
11 question. The question was whether these are
12 specific examples of the kinds of risks that
13 you discuss in your direct testimony.

14 A So I believe in the risks that I
15 referred to in my direct testimony focused an
16 awful lot on the issues of creating satellites
17 that could fly in the special orbits that we
18 had, and then we talked about risks associated
19 with how there may be component failures in
20 normal operation of the satellites.

21 I think this gets into an area of
22 managing the construction of the satellite and

1 the choices that are made with this particular
2 satellite, which is a different satellite than
3 FM-1, 2 and 3.

4 Q So this is a new area for Sirius,
5 I think you have testified, because this is
6 geostationary as opposed to geosynchronous.
7 Is that right?

8 A Correct.

9 Q So even though it is in the area,
10 as the document reads with the first bullet
11 point, all hardware issues are understood and
12 are being managed proactively. Is that right?

13 A That's what it says.

14 Q Do you believe that?

15 A I believe -- I believe that all
16 the high risk issues we do understand, and we
17 are addressing. We are paying a lot of money
18 to make sure that not only we have our own
19 team but Loral is managing these issues as
20 well.

21 Q Mr. Smith, your satellites are
22 insured, aren't they?

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1 A Our satellite -- We do not carry
2 in-orbit insurance on our satellites. I
3 believe that's disclosed in our 10K.

4 Q You mentioned bandwidth in your
5 direct testimony.

6 A Yes.

7 Q You described it as limited.
8 Limited, if I understood correctly, in the
9 sense that you can't just add bandwidth
10 anytime you wish, day to day. Is that
11 correct?

12 A So I just want to make sure I'm
13 clear about which bandwidth you are reflecting
14 to. So I talked about the bandwidth of
15 spectrum that we've been licensed, and that is
16 a limited amount of spectrum that we have been
17 licensed by the FCC, and there is -- So we
18 have 12.5 megahertz, and there's 12.5
19 megahertz adjacent to us that XM has been
20 licensed in, and that is the only spectrum
21 that has been licensed for satellite digital
22 audio radio services.

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1 Q Okay. And Sirius paid a lot of
2 money for its spectrum, didn't it?

3 A Yes, we did.

4 Q Would you consider it a
5 significant asset of the company?

6 A The CFO is probably a better
7 person to ask that question.

8 Q Okay. Are you aware of the fact
9 that music channels occupy roughly double the
10 bandwidth of non-music channels?

11 A So in this instance, are you
12 talking about their uncompressed bandwidth or
13 their compressed bandwidth?

14 Q Let's take their compressed
15 bandwidth for the moment.

16 A So I know in our system, we are
17 able to deliver in much lower bandwidth talk
18 channels than music channels, primarily
19 because they are mono and are not carried in
20 stereo.

21 Q And they don't need the high
22 quality -- the high bandwidth that music

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1 requires to deliver the high quality sound.
2 Is that correct?

3 A They both require high fidelity.
4 There are differences in the content
5 themselves that create different challenges,
6 but our need to faithfully deliver the
7 fidelity that our customers anticipate for
8 both services is demanding.

9 Q So is it true that the music
10 channels compressed occupy -- Each music
11 channel would occupy twice the bandwidth of a
12 non-music channel?

13 A I just need to do some math here,
14 because -- In some instances, yes.

15 Q In most instances?

16 A In many instances.

17 Q But not most?

18 A I'm trying to --

19 Q Is it your testimony that it is
20 most or that you don't know?

21 A I don't know. I would have to try
22 to go through the math of our line-ups, and my

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1 current understanding of how we allocated
2 targets, that's through many different
3 channels.

4 Q Let me just go back for a minute.
5 You are aware that other companies do have
6 insurance on their satellites, aren't you?

7 A As I understand it, yes.

8 Q You testified, Mr. Smith that one
9 of the primary challenges you faced was
10 sending your satellite signals to moving
11 vehicles. Is that right?

12 A That's correct.

13 Q And that's because the antenna
14 isn't stationary. Is that why it's a
15 challenge?

16 A That is certainly a challenge,
17 yes.

18 Q Were you -- You weren't the first
19 service to send satellite signals to non-
20 stationary antennas, were you?

21 A I'm sure there were -- there are
22 instances of, certainly, government

1 say it's probably a minimum of four inches,
2 maybe more like six, six inches it telescopes
3 up.

4 BY MR. DeSANCTIS:

5 Q And you are aware of the fact that
6 omni-directional antennas were described in
7 satellite literature as early as the 1960s and
8 '70s. Correct?

9 A I'm sure omni-directional antennas
10 have been used in many cases.

11 Q Are they used in GPS receivers?
12 Sorry, that's global positioning systems.

13 A Yes, I'm familiar with that. Yes.
14 Yes, they are. It's not a continuous service,
15 however. It does not require a continuous
16 reception in order for the application to
17 work.

18 Q But it's omni-directional?

19 A It is an omni-directional antenna.
20 I don't know that it has, however, the
21 characteristics that our antennas require in
22 terms of having sufficient gain both to the

1 communication systems that communicate to
2 moving vehicles.

3 Q Right. Are you familiar with a
4 company named Iridium?

5 A Yes.

6 Q In the 1990s, didn't they have a
7 handheld, keyway voice and data satellite
8 service where the antenna was in the handheld
9 device that could be carried all around?

10 A Very -- Yes. Very expensive
11 device and one that I don't believe has
12 achieved very high degree of acceptance.

13 Q But it existed, and it was small,
14 and it predated Sirius. Correct?

15 A I wouldn't necessarily call it
16 small with respect to our antenna.

17 Q It's the size of a phone?

18 A It typically has an extension on
19 it so that the antenna is basically a mast
20 about this large that sticks up.

21 CHIEF JUDGE SLEDGE: How large?

22 THE WITNESS: I'm sorry. I would

1 horizon as well as directly overhead. So I
2 don't -- We certainly can't simply plug a GPS
3 antenna into our radios and have them work.

4 Q Okay. Let me go back to something
5 we discussed earlier. Your decision, decision
6 of the Sirius engineering team to use
7 geosynchronous as opposed to geostationary
8 satellites was because it would yield better
9 reception for the subscribers. Is that right?

10 A That's correct.

11 Q Are you aware of the fact that
12 Sirius regularly surveys its subscribers and
13 asks various questions about their views of
14 the service?

15 A I was aware of some surveys, yes.

16 Q So you are aware of the fact that
17 Sirius surveys its subscribers?

18 A I am aware of surveys that have
19 been taken in the distant past. I have not
20 been involved in any market research
21 associated with those.

22 Q Okay. Are you aware of the fact

1 that one of the questions that Sirius asked in
2 its most recent customer satisfaction survey,
3 at least the most recent one produced here,
4 was what is your number one complaint about
5 Sirius satellite radio, and by far the largest
6 answer, 37 percent of Sirius subscribers, said
7 that their number one complaint about Sirius
8 satellite radio was the reception. Were you
9 aware of that?

10 A So the most recent survey that you
11 are referring to is when?

12 Q Is August 28, 2006. Subscribers
13 were asked what is their number one complaint
14 about Sirius satellite radio, and far and away
15 the largest number one complaint -- in fact,
16 37 percent of those polled -- said that their
17 number one complaint was the reception. I'm
18 asking if you are aware of that?

19 A So I'm aware that we asked about
20 reception issues, and I don't recall what the
21 percentage was. We do know that reception in
22 some of these instances is -- as asked, is

1 station that may interfere with the broadcast
2 of our audio signal from our receiver to their
3 FM radio in their vehicle.

4 These are for retail subscribers.
5 This is the typically the way that they
6 connect our receivers to their radios.

7 Q You're talking about after market
8 subscribers in the car?

9 A Yes.

10 Q Not OEM subscribers?

11 A OEM subscribers would have it
12 fully integrated into their vehicle. So if
13 this were information that was localized to
14 OEM subscribers, then I think we would
15 understand what they meant by reception. If
16 it is from a retail subscriber, then I think
17 there is some ambiguity. That's all I'm
18 cautioning.

19 Q And I appreciate that. And you
20 are not talking about plug and play devices?

21 A A plug and play device is one of
22 the retail type of devices that is typically -

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1 somewhat ambiguous between whether it's
2 talking about the reception of the service by
3 the radio -- of our receiver, I should say, or
4 the reception of the automobile's FM radio of
5 our audio signal being rebroadcast from our
6 receiver. If I could describe that a little
7 bit?

8 Q So that the ambiguity -- What you
9 are saying is that there is an ambiguity as to
10 whether it's from the receipt of the signals
11 or the broadcast of the signals through the
12 radio?

13 A Yes. I believe the ambiguity
14 comes from -- It's purposely made as a very
15 open question to try to elicit people to tell
16 us what their complaint is. By having it
17 being that the customers refer to as reception
18 issues, to me, it is unclear that we have been
19 able to identify that they find gaps in our
20 services delivery of the transmitted signal or
21 whether they are experiencing interference on
22 their car radios because of driving near an FM

1 - sorry. The plug and play devices themselves
2 are one of many products that we have that
3 retail customers will select and put into
4 their vehicles, and they hear the audio
5 through a wireless FM link from our plug and
6 play radio through the car antenna into their
7 FM radio.

8 Q So are you also aware of the fact
9 that one of the next largest complaints in the
10 survey was the hardware?

11 A I believe I've been told that
12 hardware was another issue that we were
13 looking into. I should also say that -- So
14 since you've mentioned that the survey was in
15 2006, we have made a significant improvement
16 in reception by our investment in chipsets
17 that are phasing in now; and, certainly, they
18 are phasing in more rapidly in our retail
19 products than they are in our OEM products.

20 It takes a very long time for new
21 technology to get into a vehicle. So we do
22 know that there were much better reception

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1 capabilities by our newer chipsets than our
2 older chipsets.

3 Q So you did have chipsets in the
4 past? Chipsets aren't new.

5 A We have a proprietary system that
6 we designed chipsets --

7 Q Mr. Smith, the question was you
8 had chipsets in the past. Correct?

9 A We had a -- We have now introduced
10 four generations of chipsets, proprietary
11 chipsets, for reception of the Sirius
12 satellite signal.

13 MR. DeSANCTIS: Okay. Thank you.
14 No further questions.

15 JUDGE ROBERTS: Mr. Smith, did I
16 hear you saying that your receivers, at least
17 the mobile ones that you can hook up inside
18 your car, are capable of getting better
19 reception than some of the older generation
20 receivers?

21 THE WITNESS: Absolutely, sir.

22 JUDGE ROBERTS: I only asked

1 Q Mr. Smith, this issue of getting
2 your signal from the after market receiver
3 into the radio and out that we have just been
4 talking about -- is that one of the continuing
5 technological issues that your team is dealing
6 with?

7 A Yes, it is.

8 Q And do you expect further
9 improvements in that area?

10 A We certainly hope so.

11 Q And is it correct that your
12 efforts in that area have to operate within
13 constraints imposed by the Federal
14 Communications Commission?

15 A They do.

16 Q And those regulatory risks -- is
17 that a continuing problem for Sirius?

18 A Yes, it is.

19 Q You were asked early on if Sirius
20 could have used geostationary orbits, and you
21 talked about one problem dealing with the
22 available satellites.

1 that, a because I'm a Sirius satellite
2 subscriber, and have been so for three years.
3 That's interesting to know.

4 THE WITNESS: Sir, I would tell
5 you that one of the major reasons I was
6 brought to Sirius was to bring and develop a
7 team in-house that would focus our efforts on
8 improving the reception through our chipsets,
9 and that I am very proud of the effort that
10 that team has done. So I hope you purchase a
11 new vehicle in model year '08 or pick up a
12 recent retail receiver.

13 JUDGE ROBERTS: Well, I will have
14 to let Santa Claus know that.

15 CHIEF JUDGE SLEDGE: If you don't
16 mind talking to the Congress Appropriations
17 Committee, we would appreciate that.

18 THE WITNESS: Yes, sir.

19 CHIEF JUDGE SLEDGE: Any redirect?

20 MR. KIRBY: Yes, sir.

21 REDIRECT EXAMINATION

22 BY MR. KIRBY:

1 Secondly, would the use of a
2 geostationary configuration have affected the
3 quality of the signal that Sirius was able to
4 deliver to the automobiles?

5 A With -- I just want to make sure I
6 understand the question. With the available
7 satellites that we had appropriated at that
8 time, it would have been a weaker signal;
9 because it would have been -- after attenuated
10 by foliage. It would have affected the
11 reception of the signal.

12 Q Would it also have required
13 additional repeaters?

14 A We would certainly have many more
15 gaps, and we would have to have expanded our
16 terrestrial repeater network somewhere on the
17 order that XM has deployed, around 850
18 repeaters.

19 Q And you have about 150. Is that
20 right?

21 A About that, yes.

22 Q And each terrestrial repeater is

1 in essence a little radio station regulated by
 2 the FCC. Is that right?
 3 A That is correct.
 4 Q And have there been regulatory
 5 issues with the FCC coming out of some of
 6 those terrestrial repeaters?
 7 A Yes. We operate under a special
 8 temporary authority and, therefore, we need
 9 permission from the FCC for each and every
 10 site that we operate.
 11 Q Now, Mr. Smith, I am going to draw
 12 on your statistical -- the statistical part of
 13 your professional expertise.
 14 You were told during questioning
 15 that the launch service that Sirius used -- I
 16 think Proton was the name -- had about a six
 17 percent failure rate. Do you remember that?
 18 A Yes.
 19 Q And in a statistical sense, I
 20 would assume that each launch is pretty much
 21 an independent event, isn't it? Is that a
 22 fair assumption?

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1 A I think it's a fair assumption,
 2 yes.
 3 Q And I believe you answered one of
 4 the Judges by saying that Sirius really needed
 5 all three of its satellites to maintain a high
 6 quality service. Is that right?
 7 A In 2000 we needed a successful
 8 launch of every single one of those satellites
 9 in order to start our service.
 10 Q And if I remember my math
 11 correctly, and you are -- Well, let me simply
 12 ask. If you have a six percent chance of
 13 failure on each of three independent launches,
 14 what was the risk that one of those three
 15 satellites wouldn't make it to orbit?
 16 A Now you're really taxing me. It
 17 certainly grows each time.
 18 Q Well, it's in the range of 18
 19 percent. Right?
 20 A Yes.
 21 Q Six percent, six percent, six
 22 percent, eighteen percent. Right?

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1 A Correct.
 2 Q Okay. And if one of those
 3 satellites had failed, Sirius didn't have a
 4 back-up, did it?
 5 A We still had a unit that was under
 6 construction, but it was certainly not ready
 7 in that time frame.
 8 Q And once it was completed, you
 9 would have to get a launch date?
 10 A That's correct.
 11 Q And then you would run another six
 12 percent chance that it might not make it to
 13 orbit. Right?
 14 A That's correct.
 15 Q You were asked if the Sirius
 16 satellites had performed well in orbit. Do
 17 you remember those questions?
 18 A That's correct.
 19 Q And you said, yes, they had
 20 performed well.
 21 A They have.
 22 Q Was it a foregone conclusion that

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1 they were going to perform well?
 2 A Absolutely not. I mean, that's
 3 one of the reasons that we continue to fly our
 4 own satellites and have people that are well
 5 skilled in our particular orbits and our
 6 particular satellites.
 7 Q I have only one further question.
 8 If you would find your SX Trial Exhibit 31 and
 9 turn to the third page of that exhibit that
 10 has the title "FM-5 Technical Risk Issues."
 11 Do you see that page?
 12 A Yes, I do.
 13 Q Now I believe you indicated that,
 14 although you didn't know, you suspected that
 15 this document was prepared for some sort of
 16 internal briefing purpose. Is that right?
 17 A That would be my speculation, yes.
 18 Q You don't think it was prepared
 19 for purposes of this case?
 20 A No, certainly not.
 21 Q And I just direct your attention
 22 to the first bullet point on this page, and

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1 the first words on this page are "All high
 2 risk issues are understood." Do you see that?
 3 A Yes, I do.
 4 Q So this document is telling us, in
 5 internal Sirius discussions, that Sirius is
 6 facing high risk issues. Is that right?
 7 A Correct. I mean, just because we
 8 understand them and we have action plans
 9 doesn't minimize the fact that they remain
 10 high risk.
 11 MR. KIRBY: That is all I have,
 12 Your Honor.
 13 CHIEF JUDGE SLEDGE: Any questions
 14 from the bench?
 15 JUDGE ROBERTS: I have one
 16 question.
 17 Mr. Smith, in looking at SX Trial
 18 Exhibit 31, the last page, there is mention of
 19 a Sirius FM-6 and a Sirius FM-7. I assume
 20 that these are additional satellites that are
 21 on the drawing board?
 22 THE WITNESS: That is correct.

1 eventually. And I believe we have indicated
 2 that we are likely needing to replace
 3 satellites -- I believe it's in 2013 and 2015.
 4 JUDGE WISNIEWSKI: You say 2013
 5 and 2015?
 6 THE WITNESS: Yes, sir.
 7 JUDGE WISNIEWSKI: But your
 8 testimony in here said 2012.
 9 THE WITNESS: I apologize. I'm
 10 sure my written testimony is correct. I was
 11 just trying to recall what we had in our 10K.
 12 JUDGE WISNIEWSKI: That is an
 13 interesting statement.
 14 CHIEF JUDGE SLEDGE: 2012 would be
 15 one of the years that you have indicated.
 16 Which was the other year?
 17 THE WITNESS: I believe 2015.
 18 CHIEF JUDGE SLEDGE: Fifteen.
 19 THE WITNESS: I would say that we
 20 continuously monitor the health of our
 21 satellites, and that the balancing act that we
 22 have --

1 JUDGE ROBERTS: Can you tell us
 2 approximately when they may launch and what
 3 their purpose is?
 4 THE WITNESS: So for FM-6 we will
 5 likely start construction soon on that, simply
 6 because we need to guard against the potential
 7 launch failure for FM-5. But the current plan
 8 would be to construct FM-6 and FM-7 and
 9 operate those in a highly inclined elliptical
 10 orbit. And since we would be operating the
 11 geostationary satellite, FM-5, on a continuous
 12 basis, we only need one other satellite to be
 13 broadcasting at a time.
 14 So we can create orbits now that
 15 just have two satellites flying in those
 16 highly inclined elliptical orbits, and they
 17 would still maintain high elevation angles and
 18 be able to broadcast to the CONUS.
 19 JUDGE ROBERTS: So are these two
 20 satellites replacements for 1, 2 and 3
 21 eventually?
 22 THE WITNESS: They would be,

1 JUDGE WISNIEWSKI: I want to come
 2 back to this question of timing here, because
 3 I am looking at your testimony. I am looking
 4 at paragraph 18. This is your written direct
 5 testimony, and the last sentence of it says,
 6 "Subsequently, Sirius will launch additional
 7 satellites to replace those currently in the
 8 inclined elliptical orbits by 2012."
 9 Could you please clarify whether
 10 that is the case or we are talking about one
 11 in 2013 and one in 2015 or, as you just
 12 responded to Judge Sledge, one of these would
 13 be in 2012? Which is it?
 14 THE WITNESS: At this point in
 15 time, I would say 2012.
 16 JUDGE WISNIEWSKI: All of them
 17 would be up by 2012?
 18 THE WITNESS: That would be our
 19 current plan.
 20 JUDGE ROBERTS: I am afraid I am
 21 still a little confused then. In 2012 what is
 22 projected to be flying at that time?

1 THE WITNESS: Flying at that time
2 would be FM-5, FM-6 and FM-7. What we also
3 believe is that, by launching FM-5, FM-1, 2
4 and 3 would still have useful life, and so our
5 ability to manage at that time in the future
6 exactly when to launch would be a decision
7 that we could make based upon the current
8 health of those satellites.

9 JUDGE ROBERTS: So there is
10 nothing planned for 2013 or 2015?

11 THE WITNESS: No. I believe that
12 reflects what we believe the useful -- the
13 current useful life of those satellites are.
14 I believe that is what I am recalling from our
15 10K.

16 JUDGE ROBERTS: Of 1, 2 and 3?

17 THE WITNESS: Yes, sir.

18 JUDGE ROBERTS: Thank you for
19 clarifying that.

20 CHIEF JUDGE SLEDGE: Judge
21 Wisniewski, anything else? Any other comments
22 in response to the Judges' comments?

1 Questions?

2 Thank you, sir.

3 THE WITNESS: Thank you.

4 CHIEF JUDGE SLEDGE: Would it
5 interrupt anyone's schedule to change our
6 break, now as opposed to 15 minutes from now?

7 MR. JOSEPH: No, Your Honor. That
8 would be fine with Sirius.

9 CHIEF JUDGE SLEDGE: All right.
10 We will recess for an hour.

11 (Whereupon, the foregoing matter
12 went off the record at 12:15 p.m.)

13 CHIEF JUDGE SLEDGE: Thank you.
14 We'll come to order.

15 All right, Mr. Joseph.

16 MR. JOSEPH: Your Honor, I'd like
17 to introduce my partner, Michael Sturm, whom
18 I actually introduced earlier, who will be
19 calling our net witness.

20 CHIEF JUDGE SLEDGE: Thank you.

21 MR. STURM: Your Honor, Sirius
22 calls Doug Wilsterman.

1 CHIEF JUDGE SLEDGE: Mr.
2 Wilsterman, will you please raise your right
3 hand?

4 Whereupon,

5 DOUG WILSTERMAN
6 was called as a witness by counsel for the
7 Sirius Satellite Radio, Inc., and, having been
8 first duly sworn, was examined and testified
9 as follows:

10 CHIEF JUDGE SLEDGE: Thank you.
11 Please be seated.

12 DIRECT EXAMINATION

13 BY MR. STURM:

14 Q Will you state your name, please?

15 A Doug Wilsterman.

16 Q You have in front of you Exhibit
17 33, which is your written direct testimony.

18 Can you identify that as your testimony?

19 A Yes, this is my testimony.

20 Q Right. Have you reviewed that
21 testimony again recently?

22 A Yes, I have.

1 Q Okay, and do the statements you
2 made there remain true to the best of your
3 knowledge, sir?

4 A Yes, to the best of my knowledge
5 they remain true.

6 MR. STURM: I would move the
7 admission of Sirius Exhibit 33, Your Honor.

8 CHIEF JUDGE SLEDGE: Any objection
9 to Exhibit 33?

10 MR. DeSANCTIS: No objection, Your
11 Honor.

12 CHIEF JUDGE SLEDGE: Without
13 objection it's admitted.

14 (Whereupon, the document
15 referred to was marked
16 as Sirius Exhibit No. 33
17 for identification and
18 received in evidence.)

19 BY MR. STURM:

20 Q Mr. Wilsterman, before we get into
21 the meat of your testimony, just so the Judges
22 have a little bit of context, could you tell

Summary of Testimony

3. Because the hardware needed to receive the signal from the Sirius satellites is unique, Sirius is necessarily involved in the consumer electronics hardware business. This business is extremely competitive in every respect. Product design in the consumer electronics field is characterized by extremely rapid technological, functional and aesthetic advancement. When new products are introduced into the marketplace, they are already quickly on the way to becoming obsolete. Thus, constant product development is essential. Moreover, while sales volumes can be large, the industry is extremely competitive at every level and margins are very small. Indeed, the consumer electronics hardware portion of Sirius operates at a substantial loss. Sirius works closely with consumer electronics original device manufacturers (“ODMs”), with recognized consumer brands such as Kenwood, Panasonic and Sony, and with large retail chains such as RadioShack, Circuit City and Best Buy, to ensure the development, manufacture and sale of Sirius radios. As discussed below, substantial expenditures and subsidies are paid by Sirius at every step of the process in order to get Sirius radios in the hands of consumers so that they will want to subscribe to the service. I give this testimony based on my personal knowledge and information that I have learned through my work.

Product Design and Development and Manufacturing

4. One of our greatest challenges is developing compelling new products. The heart of any Sirius radio is the chipset, which is developed by the engineering group at Sirius. New Sirius radios are presently using a third generation chipset, which offers substantially improved functionality over its predecessors.

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Order in Docket No. 2006-1 CRB DSTRA**

5. My group is responsible for discerning the needs of the consumer electronics market, and defining the industrial design, features, and price points for hardware products that will be both functional and desirable in the marketplace. As a visit to any Best Buy store will confirm, the retail marketplace for consumer electronics is extremely crowded and it is difficult to stand out. Products must look good and have a “wow” factor that will cause them to stand out from competitors. SIR Ex. 11 shows a sampling of the products that we have developed to sell through the retail channel. Among other products, we have recently introduced the Stiletto 100, a new portable satellite radio. We have many additional automotive, transportable and home models with unique features and capabilities, priced in various ranges to attract the broadest mix of consumers.

6. Design and development of products as complex as satellite radios requires a substantial staff. On my in-house staff, at least 21 employees, including Engineers, Product Managers, Logistics Managers, Manufacturing Specialists and Project Managers, are involved directly in product design and development. In addition, we have contractual agreements and work closely with outside design and engineering development companies as well as our ODMs. In total, these companies employ over 200 people who are also involved in design and development of Sirius radios and accessories.

7. While developing a great product is a necessary step to a successful product launch, it is not sufficient to ensure sales. Sirius must also provide incentives at several steps along the manufacturing and distribution chain in order to sell Sirius radios.

The particular deals vary, but the patterns are similar. Sirius provides our complex and expensive chipset at no cost to the manufacturer. We then subsidize the manufacturing cost of the total receiver as required by competitive conditions and our business objectives. The product is then imported into the US by one of our distributors. The importer then wholesales the radio at a profit to retailers, which in turn also expect a profit when they sell it to a consumer. The typical gross profit margins expected at these different levels varies from 15-30% for the factory level, approximately ~~[[18%]]~~ for the wholesaler, and between 25-30% for retailers. Because the profits expected at each distribution level threaten to increase the price of the finished radio out of the pricing range that Sirius believes new subscribers would be willing to pay, Sirius is forced to provide subsidies at several levels. Each level of the distribution chain typically measures its expected profit in percentages, so Sirius tries as much as possible to concentrate its subsidies at the initial stages, where its subsidy dollar has maximum impact.

Store Level Marketing

8. In addition to these basic distribution subsidies, Sirius has enormous marketing expenses at the store level to ensure Sirius' products can be found by consumers. The competitive pressures in the retail sales arena are intense. In retail, the chains are competing head to head against each other, and are also pitting our service and product directly against other consumer electronics products and services. The leading retailers drive the business of selling aftermarket products. Because they are so large and have such enormous buying power, the leading retailers will not carry a product unless they are convinced they can sell it in mass quantities nationwide. Such large retailers do

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not promote products that will be attractive only to consumers who are early technology adaptors; they insist on products that will that are in demand from the mass retail market immediately. Sirius radios are now available in the stores of most of the largest consumer electronics retailers, including Best Buy, Sears, Target, Costco, RadioShack, WalMart and Circuit City.

9. As a further step to ensure shelf space and sales, Sirius must provide financial incentives to the retailers in order to be included in their direct-to-consumer marketing. For example, the major chains such as Circuit City consider their Sunday newspaper supplements to be a critical component of their marketing efforts. Space in those circulars is sold to the highest bidders – the manufacturers of all of the various products sold by the chain compete voraciously for space in those advertising circulars. Thus, when a Sirius radio is promoted in the Circuit City Sunday newspaper circular, Sirius has paid Circuit City for that privilege. The retailers may also participate in revenue sharing arrangements to give them further incentive to sell our product. In some instances, Sirius will pay both an activation fee and a monthly residual for each subscriber who originally purchased a Sirius radio at a retail store.

10. Sirius also provides operational point-of-sale displays for stores. Having operational Sirius radios in the retail environment so that consumers can try out the various available products and experience first-hand the excellent audio quality and programming variety offered by Sirius' service plays a significant role in convincing consumers to purchase Sirius' service. Sirius has paid to develop and install kiosks capable of playing the Sirius service live in several thousand Circuit City, Best Buy, and

other retail stores, as well as car dealerships, and even Hertz rent-a-car locations. Each time Sirius installs such a kiosk, it must also install a Sirius antenna on the roof of the store's building. All of these expenses are paid by Sirius.

11. Perhaps one of the most damaging effects of this competitive retail environment is that it leads to the rapid depression of the retail price point within months of a product's introduction, rather than over several years as consumer electronics manufacturers used to expect. The rapid decline of retail pricing means that Sirius will have to pay even more in subsidies in the near future. The retailers expect that the wholesale price offered to them will go down, so that they can sell the receivers at a cheaper retail price while still maintaining a sufficient profit margin. This exerts downward pressure on the consumer electronics manufacturers.

Before the
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LIBRARY OF CONGRESS
Washington, D.C.
In the matter of:
Adjustment of Rates and Terms) Docket No.
for Preexisting Subscriptions) 2006-1
Services,) CRB DSTRA
and)
Satellite Digital Audio Radio)
Services)

Room LM-408
Library of Congress
First and Independence Avenue, S.E.
Washington, D.C. 20540
Wednesday,
June 13, 2007

The above-entitled matter came on
for hearing, pursuant to notice, at 9:30 a.m.

BEFORE:

HONORABLE JAMES SLEDGE Chief Judge
HONORABLE WILLIAM J. ROBERTS, JR. Judge
HONORABLE STAN WISNIEWSKI Judge

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APPEARANCES

On Behalf of SoundExchange
DAVID A. HANDZO, ESQ
MICHAEL B. DESANCTIS, ESQ
JARED O. FREEDMAN, ESQ
THOMAS J. PERRELLI, ESQ
MARK D. SCHNEIDER, ESQ
Jenner & Block
601 Thirteenth Street, N.W.
Suite 1200 South
Washington, D.C. 20005
(202) 639-6060
dhandzo@jenner.com
On Behalf of XM Satellite Radio Inc.
BRUCE RICH, ESQ
JONATHAN BLOOM, ESQ
WILLIAM CRUSE, ESQ
TODD LARSON, ESQ
BRUCE S. MEYER, ESQ
RALPH MILLER, ESQ
Weil Gotshal & Manges
567 5th Avenue
New York, New York 10016
(212) 310-8238
On Behalf of Sirius Satellite Radio Inc.
BRUCE G. JOSEPH, ESQ
KARYN K. ABLIN, ESQ
MATT J. ASTLE, ESQ
JENNIFER L. ELGIN, ESQ
THOMAS W. KIRBY, ESQ
MICHAEL L. STURM, ESQ
JOHN WYSS, ESQ
Wiley Rein
1776 K Street, N.W.
Washington, D.C. 20006
(202) 719-7528
bjoseph@wileyrein.com

1 P-R-O-C-E-E-D-I-N-G-S
2 (9:32:47 a.m.)
3 CHIEF JUDGE SLEDGE: Thank you.
4 We'll come to order. Mr. Handzo.
5 MR. HANDZO: Thank you, Your
6 Honor. Good morning again, Dr. Woodbury.
7 THE WITNESS: Good morning.
8 CROSS EXAMINATION
9 BY MR. HANDZO:
10 Q Dr. Woodbury, I'm going to start
11 off again talking about your PSS rate
12 benchmark. And the PSS current rate is 7.52
13 percent of revenue. Right?
14 A Of gross revenues, yes.
15 Q Right. But you're not proposing
16 that the SDARS pay 7.25 percent of gross
17 revenues. Right?
18 A I'm not proposing that, no.
19 Q Okay. You're proposing that they
20 pay far less than that. Right?
21 A I'm proposing that they pay the
22 equivalent of that levied on their gross

1 examination testimony, but not quite in this
2 fashion. And my question to you is, why is it
3 not better for the Court to set a royalty rate
4 that is on a per-song or per-sound recording
5 basis, as opposed to a percentage of revenues?
6 Other than the fact that prior proceedings
7 have used the revenue metric, why wouldn't it
8 be appropriate for us, instead, to adopt a
9 per-performance?

10 THE WITNESS: If you're asking --
11 you mean, something like a per-listener play,
12 or per-listener song? Is that what you mean,
13 Your Honor?

14 JUDGE ROBERTS: Yes.

15 THE WITNESS: And if the data were
16 available? I mean, my understanding is the
17 data aren't available to implement that kind
18 of system.

19 JUDGE ROBERTS: Well, we wouldn't
20 necessarily have to implement that type of
21 system, per-listener. We could simply do a
22 per-performance basis, where every time XM

1 be for both XM and Sirius, if I also knew the
2 number of total plays of music, which seems,
3 at least, estimable, then I could make the
4 calculation that you suggest.

5 JUDGE ROBERTS: And do you have
6 any opinion as to whether that's superior to
7 a revenue metric? I understand that you
8 proposed a revenue metric, and I understand
9 that that is what has been used in the past
10 for this particular compulsory license, but do
11 you have any opinion as an expert as to
12 whether a per-performance metric is better,
13 perhaps because it measures the volume of
14 music actually used, as opposed to a straight
15 percentage of revenue?

16 THE WITNESS: Because there still
17 is in both cases the break between actual
18 listenership usage, or usage of listener plays
19 in both your proposal and the percentage rate
20 proposal, I'm not sure. I really would have
21 to think about that, Your Honor. I don't have
22 an answer off the top of my head to your

1 played a song, they were charged a specific
2 rate, regardless of who was listening to it.

3 THE WITNESS: Well, I was about to
4 say, that would have been my -- I understand
5 how you might think about it. I have not
6 thought about whether or not that would be
7 superior to a percentage rate. It certainly
8 is not -- like the percentage rate is not
9 directly linked to usage. But, honestly, Your
10 Honors, I really haven't thought about whether
11 or not that has an advantage over the
12 percentage rate.

13 JUDGE ROBERTS: Is there any way
14 that your particular model could be converted
15 into a per-performance metric?

16 THE WITNESS: As a mechanical
17 matter, I think the answer is sure. I mean, I
18 think I -- well, I say that, maybe I said that
19 too quickly. I think the answer is yes; that
20 is, I can determine -- suppose I took the data
21 I have here and determine, as I have, what the
22 revenues, the payment to SoundExchange would

1 question. I apologize.

2 JUDGE ROBERTS: Thank you.

3 CHIEF JUDGE SLEDGE: In answering
4 that question, have you considered the
5 precedent from prior decisions that govern
6 this decision, that percentage of revenue
7 metrics can only be used as a proxy for usage
8 metric?

9 THE WITNESS: I certainly don't
10 remember that language, but I don't think I
11 would disagree with that characterization.

12 CHIEF JUDGE SLEDGE: All right.
13 Judge Wisniewski.

14 JUDGE WISNIEWSKI: No questions.

15 CHIEF JUDGE SLEDGE: Thank you,
16 sir.

17 THE WITNESS: Thank you, Your
18 Honors.

19 CHIEF JUDGE SLEDGE: Mr. Joseph.
20 MR. JOSEPH: Your Honor, if I may,
21 a quasi-housekeeping/quasi-evidentiary matter.
22 We, as you may recall, had stipulated with

1 SoundExchange, this is Sirius I'm speaking on
 2 behalf of, that the testimony of Mr. Law would
 3 be taken on the written direct without
 4 actually presenting him. At the time, it
 5 wasn't clear to us whether Your Honors needed
 6 or wanted us to actually offer that formally
 7 in court. We're prepared to do that, or rely
 8 on the previously submitted written direct.
 9 But just to make sure there are no gaps in the
 10 record, we have Mr. Law's written direct that
 11 we would now propose to offer into evidence
 12 formally, so that there's no question about
 13 its status. And I don't think we need to give
 14 a copy to Mr. Law, the phantom in the chair.
 15 And, Your Honor, Sirius at this time would
 16 offer what I think has been marked Sirius
 17 Exhibit 42.

18 (Whereupon, SIR Exhibit
 19 No. 42 was marked for
 20 identification.)
 21 CHIEF JUDGE SLEDGE: Any objection
 22 to Exhibit 42?

1 Sirius call as their next and final witness
 2 their second expert witness, Armand Musey who
 3 will be examined on direct by my colleague,
 4 Will Cruse.

5 CHIEF JUDGE SLEDGE: Counsel said
 6 your last name is Cruse?

7 MR. CRUSE: Yes, sir, C-r-u-s-e.

8 CHIEF JUDGE SLEDGE: Stand up, Mr.
 9 Musey, thank you. Your current and comparable
 10 might teach you not to listen to lawyers. Mr.
 11 Musey, please raise your right hand.

12 Whereupon,
 13 ARMAND MUSEY
 14 was called as a witness and, having been first
 15 duly sworn, was examined and testified as
 16 follows:

17 CHIEF JUDGE SLEDGE: Thank you,
 18 please be seated. Mr. Cruse.

19 MR. CRUSE: May it please the
 20 Court.

21 DIRECT EXAMINATION

22 BY MR. CRUSE:

1 MR. HANDZO: No, Your Honor.
 2 CHIEF JUDGE SLEDGE: Without
 3 objection, it's admitted.
 4 (Whereupon, SIR Exhibit
 5 No. 42 was admitted.)
 6 MR. JOSEPH: And, Your Honor, if
 7 there is no objection, and if the Court would
 8 indulge us, I would ask for a five-minute
 9 recess before we bring our next witness on.
 10 Certainly, I understand the five minutes would
 11 be charged to our clock.
 12 CHIEF JUDGE SLEDGE: All right.
 13 We'll recess five minutes.
 14 MR. JOSEPH: Thank you.
 15 (Whereupon, the proceedings went
 16 off the record at 11:48 a.m., and went back on
 17 the record at 11:51 a.m.)
 18 CHIEF JUDGE SLEDGE: We will come
 19 to order, first. We never took a recess, did
 20 we? Yes, we did. Yes, we did. Come to
 21 order, thank you.
 22 MR. RICH: Your Honor, XM and

1 Q Mr. Musey, at the time of filing
 2 your written direct statement, what was your
 3 employment?
 4 A I was President of New Earth, LLC.
 5 Q And what sort of services does New
 6 Earth provide?
 7 A New Earth LLC is a boutique
 8 investment bank that provides mergers and
 9 acquisition advisory, advises companies on
 10 raising capital and a variety of financial
 11 consulting services.
 12 Q And what sort of companies?
 13 A Companies related to the satellite
 14 industry as well as closely related media
 15 telecom industries.
 16 Q And does that include the services
 17 that are on the proceeding?
 18 A Yes, it would.
 19 Q And how has your employment status
 20 changed since the filing of your written
 21 direct statement?
 22 A At the end of April, I decided to

**Before the
LIBRARY OF CONGRESS
Copyright Royalty Board**

In the Matter of)
)
Adjustment of Rates and Terms for)
Preexisting Subscription and) Docket No. 2006-1 CRB DSTRA
Satellite Digital Audio Radio Services)
_____)

**DIRECT TESTIMONY OF ANTHONY J. MASIELLO
(ON BEHALF OF XM SATELLITE RADIO INC.)**

1. My name is Anthony J. Masiello. I am currently employed by XM Satellite Radio Inc. ("XM") as Senior Vice President of Operations. I have been employed by XM in that capacity since 1999. My responsibilities at XM encompass all technical aspects of our broadcast operation, including our broadcast signal, broadcast studios, transmission equipment, network operations and radio receivers.

2. My testimony will discuss, from a technological standpoint, the enormous effort and expense required to develop and launch the XM service, the ongoing efforts and expense of our operations, and our continuing commitment to innovation. This effort is unparalleled in the radio industry. Not since the introduction of FM broadcasting has an audio broadcasting service had to design, build and launch, virtually from scratch, all aspects of its service infrastructure from signal to receiver. But, unlike today's FM radio broadcasters, satellite radio had to pay for the spectrum, as well as design and build satellites and receivers in order to deliver their service to the public.

3. Each stage of this effort was undertaken with great care to deliver the best possible sound and a diverse array of program and data services using a finite amount of bandwidth. As a result of these efforts, XM has opened new technological avenues in the broadcasting field -- creating the world's largest state-of-the-art digital broadcast studio complex, which feeds more channels of audio with better sound quality, and new data services, to increasingly smaller car, home and portable radio receivers. Perhaps only the evolution of satellite television from a service utilizing expensive, large dishes as receivers to easy-to-install DBS service is comparable. XM, however, achieved this in just a few years, with much more compact equipment, and in a much more demanding mobile vehicle transmission environment.

Industry Experience Prior to Joining XM

4. I have more than 35 years of relevant experience in broadcast operations, starting with a position at Fordham University's WFUV-FM in 1968. At WFUV, I operated and maintained the transmitter facilities as part of a work-study assignment. I also took courses in basic broadcast signals and electronics, computer science, and tube design, and obtained my FCC First Class license to operate and maintain broadcast facilities. In 1971, I was employed by ABC Radio Networks, where I was assigned to the radio network division and began doing field and studio technical work. By 1977, I was manager of broadcast services for ABC Radio. My responsibilities included station interconnects to the network, and setting up remote broadcasts for major news and sporting events such as political conventions and the Olympics. Initially, the network operated over analog AT&T land lines. In 1979, toward the end of my tenure at ABC, the network was making the transition to use of digital broadcast satellites. On the management side, I was the team member receiving and reviewing bids on how to link to our affiliates to the

ABC Radio network via satellite, and we conducted numerous audio tests to evaluate the sonic quality of satellite digital radio transmissions.

5. In 1980, I became Director of Operations and Engineering for Enterprise Radio, a start-up 24 hour sports talk service. In 1982, I became the Vice President of Engineering for Dick Clark Productions' United Stations. I built the studios and satellite transmission infrastructure for the company, a 24-hour broadcaster and syndicator of programming to radio stations, including shows such as Dick Clark's "Top 40" countdown.

6. In 1984, I became Vice President of Engineering at Meadowlands Communications. The company built systems for satellite transmission at stadiums, all in digital format. We handled all of the 1984 Los Angeles Olympic coverage. We also handled news coverage, interconnecting with local audio/video lines and then uplinking the signal for distribution. In 1986, I became an industry consultant. For one of my clients, based in Homdel, New Jersey, I developed a business plan to deliver commercials to stations via satellite (as opposed to shipping physical tapes).

7. I joined CBS Radio Networks in 1988 as the Director of Technical Operations, and was later promoted to Vice President, Technical Operations. In these roles, I had responsibility for all the technical and engineering aspects of CBS's AM and FM owned and operated stations, as well as the CBS radio network programming delivered to affiliate stations. My work included designing facilities and building studios for broadcasting. I led cutting-edge technology efforts at CBS in which I developed substantial expertise in the processing of digital audio signals, and in "audio compression" technology that could reduce the amount of digital information in a broadcast transmission signal yet still produce clear digital sound quality. I also developed a second area of expertise concerning digital audio broadcasting by terrestrial radio

broadcast services. I studied the European Digital Audio Broadcasting system, and worked on early in-band on channel digital audio transmission systems (a technological standard that provides a method for transmitting near-CD quality audio signals to radio receivers along with new data services such as station, song and artist identification, stock and news information, as well as local traffic and weather bulletins). I also participated in founding a company known as USA Digital, which later became iBiquity – the company that created the terrestrial broadcast signal technology used in HD Radio in the United States.

My Role at XM

8. In 1999, I was recruited by XM. When I joined the company as Vice President of Broadcast Operations, XM had little more than an FCC license and satellite designs. There were no studios, no chipset technology and no satellites had been launched. The owners of what would become XM had invested \$90 million dollars in an FCC license on the assumption that the right team of people would be willing to come to XM to design and build the entire technology and operating infrastructure needed for the successful launch of the audio service, a service that competes with AM/FM radio, which people traditionally used for free. The satellites needed to be built to XM's specifications, insured and launched. Likewise, a network of terrestrial repeaters had to be constructed so that the XM signal could be heard coast to coast with little interference or interruption. Signaling protocols, integrated circuits, chipsets and radios had to be developed from scratch. An entire broadcast operations center needed to be created, including studios for production and transmission of programming.

9. My job was to oversee the design and build out of XM's broadcast infrastructure. This was an enormous technological challenge. However, I thought it could be accomplished, and was fairly confident that consumers would pay for radio as they did for cable television

service. I was enthusiastic about the opportunity, and left a conventional and secure broadcasting job to move to Washington and help start XM.

10. My primary responsibilities include oversight of all technical aspects of XM's operation through to the uplink to the satellite. My department includes about [70] technical operations employees at our Washington, D.C. facilities. Another [75-100] technical employees reside at our Florida technical development location (known as the "Innovation Center"). Since I started at XM, I have recruited top tier people with the ability to think "outside the box," which was necessary when launching a new technology service. On the satellite side, we hired people who had worked at RCA Americom (now SES Americom), a pioneering communications satellite firm. Patent holders and innovators who previously worked at Motorola, Inc. make up part of the staff in Florida.

XM's Facilities and Technology

11. In our D.C. facility, XM built the largest digital broadcast studio complex under one roof, using state-of-the-art digital production and broadcast technology. All of the 82 studios in that facility, including dedicated production studios, are able to go live on-air. By way of comparison, at the time that I worked for CBS, CBS radio network had only 10-11 studios. In addition to being the largest digital complex, I believe XM has one of the largest radio studio complexes of any type, analog or digital, in the western hemisphere. Only the BBC can rival the number of distinct studios under one roof. [Masiello Exhibit 1 is the floorplan of our D.C. studio complex.]

12. To accommodate air talent in other parts of the country, we have three studios in New York City, including one at Jazz at Lincoln Center; one in Nashville, Tennessee; and one in Chicago (used in conjunction with Oprah Winfrey's Harpo Productions). We lease the space at

Jazz at Lincoln Center, have built studios and own all of our broadcasting equipment. Likewise, in Nashville, our studio is at the Country Music Hall of Fame, but we built out the studio and provided the equipment. At the other two locations in New York, we lease the space but have built the studios to our own specifications and supplied all equipment. The Chicago studio is owned and operated by XM and was built in conjunction with Harpo Radio, Inc. as part of the agreement to create the Oprah & Friends channel on XM. In addition to the effort and expense involved in building these state-of-the-art studios, XM must maintain the equipment, create the technological link to the XM's main broadcast center, and staff the space with skilled personnel. Masiello Exhibit 2 is a photograph of our Jazz at Lincoln Center studio. Masiello Exhibit 3 is a photograph of our Nashville studio. Masiello Exhibit 4 is a photograph of our Chicago studio.

13. Our Washington, D.C. facilities include our broadcast, network and technical operations centers. Broadcast operations consists of the studio and technical facilities that enable our programmers to generate the content aired on XM. Broadcast operations prepares and stores content and makes content available for broadcast to subscribers. Masiello Exhibit 5 is a photograph of our D.C. broadcast center.

14. Network operations runs the network and the satellite uplink. It is the control center that supervises operation of the satellite network and the terrestrial repeater network. The company also has a back-up uplink site in an undisclosed location. Masiello Exhibit 6 is a photograph of our D.C. control center.

15. Technical operations provides support for all of XM's departments. We support all aspects of the studio and broadcast operation, and the uplink to the satellite. We monitor IT operations (the servers, switches, and local area networks), but do not offer general IT support to XM desktop PC users.

16. Costs of broadcast operations were \$17 million for 2005. These include costs associated with the management and maintenance of systems and facilities, production and performance studios used in the creation and distribution of XM-original and third party content via satellite broadcast, and web and other new distribution platforms. I now turn to a more detailed account of the development of XM from a technological perspective.

Initial Design

17. Contracting for the first and second satellite was completed by March 1998, and some work was done on XM's system technology during 1998. Most of the design and development process took more than three years prior to the launch of the XM service. The process encompassed the design of the XM signaling protocols, the design, manufacture and launch of the satellites, the design and construction of XM's broadcast and operations facilities, the design and manufacture of the terrestrial repeater network, the design and development of XM's chipset and the design and manufacture of the XM radio receivers. The satellites had to be specially designed for XM. The steps I describe below basically needed to occur in sequence.

18. The first and most critical step toward XM's launch was to develop the technical specifications (or "waveform") for the signals that transport the XM broadcast content from the studio to the XM radios. Many fundamental and difficult decisions had to be carefully made in developing these specifications. All these decisions had to be made correctly from the start. The audio signal protocols could not be changed once the service launched, because any such changes to the signal would make the signal incompatible with radios already in the field. Some of these critical design decisions were:

-- Because all XM subscribers receive exactly the same broadcast signal, the signal design had to take into account variations in listeners' locations and the demands of transmitting signals to moving vehicles and portable receivers.

-- The system had to be robust enough to uplink to the satellite and be received clearly by subscribers.

-- We had to select a secure encryption method that could guard against theft of the XM service, without imposing severe processing obligations on the receivers that would have to decrypt the signal.

-- The key question was how to manage the trade-off between the sound quality of each channel and the total number of channels that XM could broadcast. Better sound quality requires greater bandwidth, and the amount of total available bandwidth was a finite commodity allocated to us by the FCC. Therefore, one of the most important initial decisions was to test various compression technologies, and license the most efficient algorithm for broadcasting. To further maximize sound quality, XM also licensed from Neural Audio a processing technology customized for XM that would deliver a high quality, optimized stereo image to the consumer, while reducing the amount of data XM must transmit per channel. The distinctive "sound of XM" relates directly back to this decision. Two independent tests conducted in 2002 concluded that the XM signal yielded superior satellite radio sound quality. We were able to launch the service in 2001 with 100 digital channels and today we offer more than 170 channels of talk, music, and other entertainment on the XM service.

Satellite and Uplink Design and Launch

19. Another fundamental question that we needed to address when I joined XM was how to ensure the best possible reception of the satellite-delivered signal. XM has three

enormous challenges: delivering a signal to moving vehicles; delivering a signal in urban areas where a satellite may not have the necessary line of sight with the receiver; and ensuring complete, nationwide coverage. Because consumers long have experienced interference in receiving FM stations, and loss of signal when traveling out of the range of the station's antenna, XM had to provide outstanding nationwide coverage in order to convince consumers to pay for an XM subscription.

20. The entire XM transmission system consists of satellite uplink dishes that send the XM signal to several geostationary satellites, which in turn re-transmit the signals to the United States; and a network of approximately 800 terrestrial repeaters, located in the top broadcast markets, which receive and re-transmit the satellite signals in places where the direct satellite signal might otherwise be obstructed by tall buildings, mountains, or tunnels. These repeaters are installed on rooftops or existing tower structures. They receive the XM signal from one of the satellites, amplify it and retransmit it at higher signal strength to overcome any obstructions. Masiello Exhibit 7 is a photograph of one of XM's satellites. Masiello Exhibit 8 is a photograph of one of XM's repeaters.

21. Our system, which was initially designed entirely on paper, included repeaters from the outset. We launched commercial service only when a sufficient repeater network was in place so a consumer could drive from coast to coast through dense urban and wide open areas and never lose the XM service. XM had to participate in the design of the repeaters, as satellite radio was the first (and remains the only) satellite based service that uses S-band repeaters this extensively. We also had to determine proper placement of the repeaters, and take into account the degree of overlap needed and the chance that repeaters may cause interference with one another, as they all share the same frequency band.

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22. After the “on paper” phase of this signal design was complete, the transmission system had to be tested in the field before we launched our satellites. Our testing included simulations where test XM transmitters were “launched” in helicopters, and the signal was received on pre-prototype XM satellite radio receiver boxes.

23. We next had to design and map out the basic elements of the satellite system including the physical uplink, the construction of the satellites, and the actual launch. This effort was enormously expensive, at a cost of [\$220-225 million per satellite for XM 1 & 2 and over \$290 million for XM 3.] Hughes (now part of the Boeing Company) constructed the satellites, which includes the basic satellite infrastructure. Alcatel provided the communications payload elements of the satellites that are particular to the transmission of XM and were designed specifically to handle our application. Each of the satellites was launched by rocket from the sea. The Sea Launch consortium handled the launch for XM. Sea Launch was a new satellite launch service at the time, having successfully launched only a handful of satellites before sending XM’s first satellite into orbit. Launching satellites is inherently a risky endeavor, even for the most experienced launch companies, and therefore insurance is required, costing per satellite over [\$40 million for XM 1 & 2 and \$50 million for XM 3].

24. To enable nationwide reception and the technology necessary for a viable satellite radio service, XM had to launch its own satellites built to its own power and other specifications. Thus, XM did not have the option of merely renting time on another company’s satellite. Commercial communications satellites generally transmit low-power signals that can be received by dishes of various sizes, from the relatively small dishes that feed DBS such as DirecTV or Echostar to commercial dishes several feet in diameter. But cars cannot drive around even with the small parabolic dish antennas that focus and amplify a low-power signal. The need to

purchase and install dishes would also limit the appeal for home use, and would rule out any reasonable opportunity to develop portable and personal radios. Moreover, because the signal must be delivered to moving vehicles, this signal must be omnidirectional, rather than narrowly targeted to specific stationary receiving dishes. Therefore, to be successful, XM needed satellites capable of blanketing the country with an extremely high power signal that could be received by a very small antenna mounted on the roof of a car, or situated in a consumer's home, or embedded in a hand-held portable device.

25. We planned the launch of two geostationary satellites located at widely spaced orbital positions (85°W and 115°W) covering the entire 48 contiguous states with overlapping footprints. Each satellite alone covers the entire 48 contiguous states. (We named these satellites "Rock" and "Roll.") Each satellite has two transponders that transmit across different frequencies. The purpose of having multiple satellites and transponders is to ensure that if a subscriber's receiver were to lose contact with one satellite, it could quickly pick up the signal from another satellite. The different positioning of the two satellites in space provides for "Space Diversity" making satellite reception robust. In addition to space diversity, XM's waveform also employs "Time Diversity" which buffers 4 seconds of all signals (from the satellites and terrestrial repeaters) in the radio receivers eliminating "drop outs" when the vehicles travel into small tunnels and/or highway underpasses.

26. We have launched a third satellite, named "Rhythm," in February 2005 and will launch a fourth satellite, named "Blues," sometime in 2006. We had to launch additional replacement satellites, only four to five years from our initial service launch, due to the unexpected rapid deterioration of the transmission power of the two original satellites. This was

the result of a manufacturer's defect in the satellite's solar power system which was discovered shortly after the satellites were launched into space.

27. The "uplink" side of XM is the transmission of broadcast signals from large (7-meter wide) parabolic satellite dishes located at XM's facilities to the satellites, which then beam back down to subscribers' radios and the terrestrial repeaters. In case of technical interruptions, XM also has a redundant uplink facility in an undisclosed location. Masiello Exhibit 9 is a photograph of XM's parabolic satellite dishes used in our uplinks.

28. The uplink system that prepares the signal and transmits it to the satellites had to be developed from scratch. The uplink system first compresses the 170 channels of audio and the non-audio data channels and builds them into a single encrypted XM signal. That "multiplexed" signal then is modulated onto a carrier frequency, and is fed to the satellite dishes which amplify the signal for transmission to the satellites. The uplink system also includes the business authorization system. This is part of the broadcast signal that transmits commands that "turn on" each individual subscriber's radio when a consumer activates a new subscription account.

29. For urban areas, where the satellite signals could be blocked by tall buildings, we needed to design and install a network of signal terrestrial repeaters on the ground that would receive the satellite signal and retransmit that signal to fill in the gaps in coverage. These repeaters had to be designed to operate on a different signal frequency and use a different modulation method than the satellites. This optimizes propagation of the signal, and avoids interference with the satellite signal. As noted above, our approximately 800 terrestrial repeaters are a central part of the XM system architecture, and contain some custom-built components. XM obtained a separate FCC authorization for these repeaters. That authorization was granted

on an interim basis in 2001. Creating our repeater network is not just a one-time investment, since we have to maintain the repeaters on a continuous basis. Subject to FCC approval, we are also planning to add repeaters during the next 1-2 years, and on an ongoing basis, to replace existing repeaters to further enhance the integrity of our signal reception. For 2005 alone, XM's costs relating to its satellites and terrestrial repeater network was \$42 million.

Progression of Radio Receivers

30. All XM radios perform the same essential functions. They receive the signal from the XM satellites and repeaters. They then amplify the signal, de-modulate the digital signal from the carrier frequency, separate (or "de-multiplex") the single signal into channels that can individually be tuned, then tune in each individual channel. These radios are capable of receiving and processing the XM signal from XM satellites and from terrestrial repeaters. These radios are one-way receivers that send no information back to the satellite. For that reason, XM has no technological way to know whether or how long a particular XM radio is on, or what any subscriber is listening to.

31. XM itself designed all aspects of the radios used to receive the XM signal. These XM radios have several key components. The first, most fundamental, element is the chipset, which provides the "brains" of the radio devices subscribers use to receive the XM signal. It has evolved substantially over the years to become more capable, sophisticated and complex, yet significantly smaller and lower cost than the first generation chips. Our own engineers at XM's Deerfield Beach, Florida facility designed the radio, including proprietary chipsets. Although it was more expensive to do it this way, XM reaped a tremendous competitive benefit by retaining control over all aspects of the design process and understanding how all of the technological

elements came together. Once the chipset was developed, we sent it to outside manufacturers to mass produce.

32. The second element is the “XM stack” – the software the radios use to control the radio hardware, tune individual channels, and display information to the user. All display functions, including the information displayed about a song as it is played on XM and data-only displays, such as scrolling stock prices and sports scores, are controlled by the stack. The XM stack also incorporates complex algorithms resulting in a robust signal reception in “difficult” terrestrial environments (areas with high terrain and multiple building reflections).

33. The third element is the antenna to receive the XM signal. All XM antennas must be electrically powered to receive the signal from the XM satellites and the terrestrial repeaters, and then to amplify the signal. A major radio design milestone was the reduction of the size of the antenna, which has led to development of portable receivers similar in size to a cell phone (which I discuss below).

34. Through dedicated development efforts, we have evolved these three elements substantially over time to provide additional functionality in a much smaller form factor, while remaining compatible with the same XM signals that still work in the very first generation of radios.

35. The first XM radio receivers available for consumers were after-market units designed for use only in vehicles, and were produced by Pioneer and Alpine. To install these units, the old car radios had to be replaced with the new XM unit. The XM radios consisted of two pieces. One was a very large (about 6” by 9”) black box unit that was installed in an automobile’s trunk. The other part was a head unit installed in the dashboard, which allowed for tuning to different XM channels. A separate antenna for satellite and repeater reception that

looked like a shark fin was installed on the roof of the car. Masiello Exhibits 10 and 11 show an early radio and antenna.

36. Sony was the first manufacturer to come out with the first generation “Plug and Play” XM radio, with a chipset designed by XM, which enabled subscribers to add XM radio to their existing car audio system using an adapter unit rather than replacing the existing car radio. Masiello Exhibit 12 is a photograph of a first generation “Plug and Play” radio.

37. The constant reduction in chipset size led to the next generation “Plug and Play” radio, the “SKYFi,” a unit that could be powered by an AC adaptor or batteries, allowing subscribers to experience XM in the car, at home or virtually any location. The SKYFi was designed entirely by our Florida engineers and branded by Delphi. Masiello Exhibit 13 is a photograph of a SKYFi radio.

38. The chipset continued to shrink, allowing for production of the smaller “Roady” series. In 2005, XM introduced the first portable “XM2Go” receiver radios that subscribers could use either to receive live XM signals (like a portable transistor radio) or to record 5 hours of XM to enjoy in locations where XM signals cannot reach (such as in an office, the gym or on an airplane). The technological breakthrough with these “XM2Go” devices was a reduction in chip size and power consumption and development of an integrated antenna without losing signal quality in outdoor environments. Masiello Exhibits 14 and 15 show an XM2Go and MyFi (with integrated antenna) radios.

39. Following the introduction of radios in the retail or automotive after-market channel, XM began working with automotive partners to include XM radio as a factory-installed option in new cars. GM began to offer XM radio as original equipment in certain new Cadillacs in late 2001 and expanded its offering to other vehicle makers in subsequent years.

40. In less than five years, XM not only released the first satellite radio receivers, we reduced the size of the entire radio – including the chipset and antenna – to a device that could fit in the palm of a subscriber’s hand.

41. Hardware innovations continue at a fast pace. Just this year, XM introduced two new devices. One is the “Mini-tuner,” which is a matchbook sized XM radio receiver unit that a consumer can snap into a specially-equipped car unit or home stereo. The second is our new series of smaller, more attractive XM2Go devices. Known as the “inno” by Pioneer and the “Helix” by Samsung, these devices can receive live XM radio, record XM channels or programming (like a TiVo or VCR), and store sound files from the subscriber’s own collection (such as from the Napster online music service or from the subscriber’s own PC). Masiello Exhibit 16 is a photograph of an XM mini-tuner. Masiello Exhibit 17 is a photograph of an inno radio.

42. Another innovation by XM is the delivery of audio channels in “surround sound,” that can be enjoyed on home theater systems manufactured by consumer electronics manufacturers such as Yamaha, Pioneer, Onkyo, Denon, and Sony. At present, the XM Classical “Pops” channel and XM’s “Fine Tuning” are encoded for surround sound.

43. XM’s research and development efforts are extremely costly. For example, costs of research and development were total \$31 million for 2005. But innovation is essential to help make the XM service more ubiquitously available to consumers, as well as to drive down costs of the hardware. To penetrate the mass market rapidly, radios had to evolve from bulky, expensive devices to a range of price points, including small, \$30-50 units that could easily be used in a car or home stereo system.

XM's Data Services

44. The XM service also includes transmission of data, some of which is broadcast on non-audio data channels. For example, data concerning channel identification, program content and/or song information is sent for each channel. All of this information is sent on a Broadcast Information Channel separate from the audio channels themselves. Other data also enables textual and graphic features (such as channel names and logo designs) on XM radios or display of sports scores and stock prices.

45. XM's local traffic, weather, and emergency alert service provides audio channels dedicated to 21 metropolitan areas, covering 177 million people, just over 50% of the total population of the United States. The traffic data is provided by traffic.com, which is a service that uses traffic sensors on roadways, coupled with state and local Department of Transportation data, to create a database that in turn provides usable information to XM. Weather data is provided by The Weather Channel, which has a dedicated website that XM may access. Emergency alert information is provided by a number of government sources, as well as broadcast and cable news networks. XM employees create the audio broadcasts for each of these channels from our studios utilizing this third party data.

46. We also provide "XM WX Satellite Weather," an aviation and marine service. This data provides real-time graphical weather data, including NEXRAD radar, temperature, windspeed, and other information in plane cockpits. It has been adopted as the leading cockpit weather solution for the aviation industry, and is now a built-in feature on over 80% of new general aviation planes sold in the U.S. Baron Services provides the weather data to XM for broadcast. Masiello Exhibit 18 is a page from the XM website describing the XM WX Satellite

Weather service. This service is only possible because of the extensive capabilities of the XM broadcast system to deliver real-time data to an aircraft while in flight.

47. XM's "NavTraffic" service provides real-time traffic updates to a vehicle's on-board GPS navigation system. The service, which launched in October 2004, is now available in 44 metropolitan areas. Honda, GM, Toyota, and Nissan offer vehicles equipped with suitable GPS navigation systems to receive the NavTraffic service and leading manufacturers of aftermarket navigation systems, including Garmin, Pioneer, and Alpine, offer devices which also use the service. The data for the NavTraffic service is provided by Navteq, a provider of digital map data for vehicle navigation systems. Navteq gathers traffic data from multiple government and commercial sources and transmits the data to XM in a codified form that is relevant to a map-based display. Masiello Exhibit 19 is a page from the XM website describing the XM NavTraffic service.

48. Automotive telematics, which include data services such as "NavTraffic" that can interact with GPS systems, were envisioned by XM at the outset of developing XM's service. Other automotive telematics services now in development or in limited use include sending an overlay of weather information onto maps showing traffic information; information from Zagat on restaurants located close to the subscriber's vehicle; and information which utilizes sensors in parking garages to help locate open parking spaces.

49. The Zagat restaurant data is the result of a partnership with Honda, and is available in certain Honda and Acura vehicles. With this service, XM does not provide the data content itself, but acts as a pipeline to the carmaker's vehicles.

50. XM's far-reaching, reliable coverage uniquely positions XM to provide vital emergency assistance to communities in need; terrestrial disasters may devastate other

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communication services but not affect XM's satellite-based communication. When Florida was devastated by hurricanes in September 2004, XM launched XM Emergency Alert Channel 247, which is dedicated to providing critical information after natural disasters and other emergencies. We make this service available to emergency responders with XM radios, without any subscription. In the aftermath of Hurricane Katrina, XM was able to broadcast to the affected areas, while traditional radio and television stations were knocked off the air for an extended period of time. XM established another free service during Katrina, the Red Cross Radio channel, which reached workers and aid stations in the Gulf Coast region. XM donated 300 radios during this crisis to quickly disseminate critical emergency news and aid information.

51. This commitment to public service led to the development of an alert feature that tells the user that important safety, weather or traffic information is being transmitted on another XM channel. [Starting in early 2007, subscribers with second-generation XM2Go receivers will be able to type in location information, and automatic alerts will be delivered when there is an emergency in the area].

Future and Continuing Technology Investments for XM

52. As discussed above, XM is continually innovating to make its service and radios attractive and more affordable to subscribers and partners. I expect such innovation to continue at an accelerated pace over the next five years so XM can remain competitive in the ever-changing consumer electronics and audio entertainment industries.

53. In addition to developing new features and hardware, XM must perform ongoing maintenance so that our infrastructure remains sound and there is no drop-off in the quality and coverage of XM's signal. This maintenance must be done on all of the systems I have described above, including some that I will highlight below.

54. Our fourth satellite will be launched later this year, and work is underway on our fifth satellite, which is being built by Loral. This satellite is being built as a ground spare. Our network operations department will continue to monitor the first two satellites, which will be powered down but kept as in-orbit spares.

55. Our network of terrestrial repeaters must also be maintained and expanded. As elements of these repeaters reach the end of their useful life, they must be replaced. Leases for repeater sites need to be renegotiated periodically. Subject to FCC approval, we also will add new repeaters to the network over the next five years to improve signal coverage.

56. Our production and performance studios and equipment must also be maintained and replaced as necessary. [For example, in 2008, we are scheduled to begin a three year project to replace the audio consoles and audio routing equipment for all of our studios except for our new Chicago studio.]

Certification

I declare under penalty of perjury that the foregoing is true and correct.

Dated: Washington, DC
October 30, 2006



Anthony J. Masiello

Senior Vice President of Operations,
XM Satellite Radio Inc.

Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 In the matter of: °
 Adjustment of Rates and Terms ° Docket No.
 for Preexisting Subscriptions ° 2006-1
 Services, ° CRB DSTRA
 and °
 Satellite Digital Audio Radio °
 Services °
 Room LM-408
 Library of Congress
 First and Independence
 Avenue, S.E.
 Washington, D.C. 20540
 Wednesday,
 June 6, 2007

The above-entitled matter came on
 for hearing, pursuant to notice, at 9:30
 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES: (cont'd)

On Behalf of Music Choice:
 PAUL M. FAKLER, ESQ.
 of: Moses & Singer LLP
 406 Lexington Avenue
 New York, New York 10174-1299
 (212) 554-7800
 pfakler@mosessinger.com

APPEARANCES:

On Behalf of SoundExchange:
 DAVID A. HANDZO, ESQ.
 MICHAEL B. DESANCTIS, ESQ.
 JARED O. FREEDMAN, ESQ.
 THOMAS J. PERRELLI, ESQ.
 MARK D. SCHNEIDER, ESQ.
 of: Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 (202) 639-6060
 dhandzo@jenner.com
 On Behalf of XM Satellite Radio Inc.:
 BRUCE RICH, ESQ.
 JONATHAN BLOOM, ESQ.
 TODD LARSON, ESQ.
 BENJAMIN MARKS, ESQ.
 BRUCE S. MEYER, ESQ.
 RALPH MILLER, ESQ.
 of: Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 (212) 310-8238
 On Behalf of Sirius Satellite Radio
 Inc.:
 BRUCE G. JOSEPH, ESQ.
 KARYN K. ABLIN, ESQ.
 MATT J. ASTLE, ESQ.
 JENNIFER L. ELGIN, ESQ.
 THOMAS W. KIRBY, ESQ.
 MICHAEL L. STURM, ESQ.
 of: Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 (202) 719-7528
 bjoseph@wileyrein.com

WITNESS	DIRECT	CROSS	REDIRECT	RECROSS
Mark Vendetti				
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1 THE WITNESS: April of '05.
 2 JUDGE WISNIEWSKI: April of '05
 3 had a negative impact on revenues?
 4 THE WITNESS: Correct. Because it
 5 impacted our churn, which is the percentage of
 6 customers leaving the service, and we saw an
 7 impact to conversion rate.
 8 JUDGE WISNIEWSKI: Now, that's not
 9 so surprising in a sense. I mean, a normal
 10 relationship on a typical demand curve is an
 11 inverse relationship between price and
 12 quantity, so that if the price goes up you
 13 would expect to have fewer units sold at that
 14 new price, wouldn't you?
 15 THE WITNESS: Right. It changes
 16 the value equation for --
 17 JUDGE WISNIEWSKI: The real
 18 question is what happens to total revenue as
 19 a result? Because if prices goes up,
 20 multiplied by the number of new units, even
 21 though the number of units may be less, the
 22 offset in price may make up for that in terms

1 average revenue per unit or per subscription.
 2 CHIEF JUDGE SLEDGE: All right.
 3 Thank you, sir.
 4 THE WITNESS: Thank you.
 5 CHIEF JUDGE SLEDGE: All right.
 6 MR. MILLER: Thank you, your
 7 Honor. We would like to call the last company
 8 witness on behalf of XM, Mr. Anthony Masiello,
 9 who is here to be sworn, your Honor.

10 WHEREUPON,
 11 ANTHONY MASIELLO
 12 was called as a witness by Counsel for XM
 13 Satellite Radio and, having been first duly
 14 sworn, assumed the witness stand, was examined
 15 and testified as follows:
 16 DIRECT EXAMINATION
 17 BY MR. MILLER:

18 Q For the record, this is Ralph
 19 Miller here for XM again. Could you state
 20 your name for the record, please, sir?
 21 A Anthony J. Masiello.
 22 Q Where are you currently employed?

1 of the additional revenue; isn't that a fair
 2 statement?
 3 THE WITNESS: That may be,
 4 although it may be that the --
 5 JUDGE WISNIEWSKI: I'm trying to
 6 get to Mr. Meyer's reference, oblique
 7 reference to elasticity earlier.
 8 THE WITNESS: Right. I think that
 9 the thinking was you could, with the rate
 10 increase, you could increase revenue. But the
 11 intention was to spend back some of that
 12 revenue on other marketing funds.
 13 JUDGE WISNIEWSKI: Well, what, in
 14 fact, happened to your annual revenue per
 15 average subscription over this period that's
 16 in the charts, 2004 through 2006?
 17 THE WITNESS: The ARPU, as we call
 18 it, did increase over time gradually.
 19 JUDGE WISNIEWSKI: Thank you.
 20 CHIEF JUDGE SLEDGE: What was the
 21 word you said? The what did increase?
 22 THE WITNESS: We call it ARPU,

1
 2 A XM Satellite Radio.
 3 Q What's your position at XM
 4 Satellite Radio?
 5 A Senior Vice President of
 6 Operations.
 7 Q And how long have you been at XM?
 8 A Since August of 1999.
 9 Q Tell us briefly about your
 10 educational background.
 11 A I attended Fordham University and
 12 also took electronic courses to study for the
 13 FCC First Class License and been involved in
 14 continuing education, particularly in the
 15 field of digital audio and digital audio
 16 compression.
 17 Q Did you receive any government
 18 licenses related to broadcasting?
 19 A Yes. FCC First Class License.
 20 Q And what did that authorize you to
 21 do?
 22 A It will authorize you to operate

1 transmitters, AM/FM transmitters, to change
 2 parameters and, more importantly, to perform
 3 maintenance on those devices.
 4 Q How many years have you been
 5 working in broadcast operations?
 6 A Yes, sir, around 35 years.
 7 Q Has that been predominantly radio?
 8 A Yes, it has.
 9 Q Have you worked for any radio
 10 networks?
 11 A I worked for ABC Radio Network and
 12 for the CBS Radio Division.
 13 Q What was your, what did you do at
 14 ABC?
 15 A I started out as an Operations
 16 Supervisor and became a Studio Field and
 17 Master Control Technician, and then became
 18 Manager of Broadcast Services.
 19 Q And what did you do for CBS?
 20 A Vice President of Technical
 21 Operations, responsible for the owned and
 22 operated radio stations of CBS and the radio

1 A Yes, it is my testimony.
 2 Q And are there exhibits attached
 3 with each section of Exhibit 1, which was
 4 restricted?
 5 A Yes, there are.
 6 MR. MILLER: We would offer XM
 7 Exhibit 7, unless the order has been entered
 8 that says we don't have to do that.
 9 CHIEF JUDGE SLEDGE: Any objection
 10 to Exhibit 7?
 11 MR. HANDZO: No, your Honor.
 12 BY MR. MILLER:
 13 Q Mr. Masiello, what, basically, had
 14 been your primary responsibilities --
 15 CHIEF JUDGE SLEDGE: Without
 16 objection, Exhibit 7 is admitted.
 17 (Whereupon, XM Exhibit
 18 No. 7 was received into
 19 evidence.)
 20 MR. MILLER: Sorry, your Honor.
 21 BY MR. MILLER:
 22 Q What would have been your

1 network.
 2 Q And how long were you at CBS?
 3 A Eleven years.
 4 Q Have you worked at other
 5 businesses in the radio broadcasting field, as
 6 well?
 7 A Yes, I have.
 8 Q Are those set forth in your direct
 9 testimony?
 10 A Yes, they are.
 11 MR. MILLER: If I might approach,
 12 we have what's been marked as XM Exhibit 7,
 13 which is the Public Direct Testimony of Mr.
 14 Masiello.
 15 (Whereupon, the above-
 16 referred to document was
 17 marked as XM Exhibit No.
 18 7 for identification.)
 19 BY MR. MILLER:
 20 Q Mr. Masiello, would you look at XM
 21 Exhibit 7 and see if you can identify it for
 22 the Judges, please?

1 responsibilities at XM?
 2 A Responsible for the overall
 3 technical aspects of the broadcast operation,
 4 dealing with the broadcast studios, operation
 5 of the uplink. Basically, responsibility for
 6 making sure the signal gets from our
 7 programming center to our subscriber's radio.
 8 Q The first subject I'd like to turn
 9 to is, look a little bit at your direct
 10 testimony and talk about the subject of XM's
 11 facilities, which begins on paragraph 11. Do
 12 you recall that part of your testimony?
 13 A Yes, I do.
 14 Q You have some pictures attached of
 15 some of the facilities of XM.
 16 A Yes, there are some pictures
 17 attached of various studios.
 18 Q Would you turn to Exhibit 2, which
 19 shows the studios in New York, and explain to
 20 the Judges what happens in a broadcast studio
 21 like the ones we're looking at under Exhibit
 22 2.

1 A We have quite a number of these
2 studios, and I'd like to give you a couple of
3 examples of what we used them for. It's
4 primarily used to really enhance the whole
5 music experience. One of our channels, the
6 60s channels for instance, and it's not just
7 an oldies channel. The whole idea is to
8 recreate the feel of 1960, so we have disk
9 jockeys in the studios. They take phone
10 calls. They have the request line. There are
11 jingles. There are choruses that sing the
12 name. In fact, we even went out and got old
13 reverbs so they have that twangy kind of
14 echoey sound on the announcements, as much as
15 they did in the 60s.

16 Another example would be Willie's
17 Place, which is a traditional country channel,
18 lots of Hank Williams and Ferlin Husky and
19 that type. And the whole idea is that it's a
20 Texas Honky-tonk, and between the songs the
21 disk jockeys with names like Clarence and
22 Catfish and names like that, there are sound

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1 studios?

2 A In Washington, D.C. at our
3 programming center.

4 Q How many are there?

5 A Eighty-two.

6 Q And Exhibit 4 is what studio?

7 A Those are the studios --

8 JUDGE WISNIEWSKI: Did you say 82?

9 THE WITNESS: Eighty-two, yes,
10 your Honor. Studios at the facilities of
11 Harpo Productions that we use for the Oprah
12 and Friends channel.

13 BY MR. MILLER:

14 Q Are there any other remote studios
15 that are in the process of being completed at
16 this point?

17 A Actually, yes. There's one in
18 Carl's Corner, Texas, where we're actually
19 building a real Willie's Place. Willie Nelson
20 bought an old truck stop outside of Dallas,
21 and he's turned it into kind of an event place
22 and having his biodiesel facility there, and

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1 effects of being in a Honky-tonk, you know,
2 glasses clinking, fist fights, shouting, and
3 this and that. And the illusion was actually
4 so complete that a lot of subscribers would e-
5 mail and want to know where Willie's Place was
6 as a place to visit.

7 So these studios are used to
8 enhance the music and really create what we
9 call the XM experience. It's music plus, you
10 know, that ambience around it.

11 Q And is Exhibit 3 a picture of a
12 studio in Nashville?

13 A Yes, it is, at the Country Music
14 Hall of Fame.

15 Q Why is there a studio in
16 Nashville?

17 A Well, we have quite a number of
18 country channels, and the thinking is to be
19 there at the epicenter of country music so we
20 can interview artists as they come through
21 town and originate content there.

22 Q Where do you have the most

1 we're actually building a Willie's Place, a
2 studio that will look like a bar, to actually
3 this time have a real destination to go along
4 with the illusion, if you will.

5 Q What is shown on Exhibit 5?

6 A Exhibit 5 is our performance
7 studio in our Washington, D.C. facility.

8 Q Could you tell the Judges how a
9 performance studio differs from the other 82
10 studios you've just described to us?

11 A Sure. A performance studio is
12 much, much larger. It's designed to hold an
13 audience, as well as an orchestra, a band.
14 This is where we record a lot of the artists
15 that come in to XM. The control room is
16 reminiscent of anything you'd find in a major
17 recording studio in London, New York, or LA.

18 Q When you worked at ABC, did they
19 have a performance studio?

20 A No, they did not.

21 Q Did CBS have a performance studio?

22 A The Radio Division did not; no,

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1 sir.

2 Q Do you know of any major radio
3 networks besides XM that have performance
4 studios?

5 A Yes, Sirius has a performance
6 studio in their facilities in New York and NPR
7 at their facilities here in D.C.

8 Q And do you have any idea how
9 regularly this performance studio is used?

10 A It's in use an average of about
11 three days a week throughout the year.
12 Certain periods of time, it's almost every
13 day. Others, a little less. But it averages
14 out to about three times a week.

15 Q And about how many artists have
16 actually recorded music in the studio,
17 performance studio?

18 A We've had about 1200 - 1250
19 different artists come through and actually
20 record content.

21 Q And you've produced about how many
22 tracks through the performance studio?

1 And it's their job to understand and know the
2 state of XM at any given time. At the
3 broadcast operations center, we monitor the
4 various channels, take a look at the
5 automation system that's playing back the
6 vices, switching between studios. Then we
7 have the network operations center where the
8 control of the uplink, monitoring of the
9 various multiplexes, and the nationwide
10 repeater network monitoring center is there,
11 as well.

12 Q Would you tell us what's pictured
13 in Exhibit 7 of your direct testimony, please?

14 A That's a picture of a Hughes 702
15 series satellite.

16 Q And this is what was used for
17 which satellites?

18 A XM 1 and 2.

19 Q If we had this satellite in the
20 courtroom here, about how big would it be?

21 A A satellite, wing tip to wing tip,
22 is 150 feet, so I guess about three times the

1 A About 8,200.

2 Q And are those tracks that are used
3 again at times --

4 A Sure, used by the various
5 channels, depending upon the artist, to be
6 incorporated into their normal programming.

7 Q Are there any other performance
8 studios besides the one that's pictured in
9 Exhibit 5?

10 A There's a small one that we had to
11 build to catch the overflow, if you will. We
12 use that a lot for unsigned artists and small
13 groups that may come in.

14 Q What is pictured in Exhibit 6,
15 please, sir?

16 A That's one of our control centers,
17 a programming center. We have a number of
18 them. This is called the ECC or Enterprise
19 Control Center, and it's also a position.
20 That's the Technical Supervisor, Operational
21 Supervisor for XM that's on duty. It's
22 staffed 24 hours a day, seven days a week.

1 size of this room in length. And the center
2 part of it, the box portion of it, is about
3 three stories high, fairly large, massive
4 device.

5 Q Now, the 702 is a basic satellite
6 that Hughes offers; is that correct?

7 A It is their latest iteration, and
8 it is actually one of the more powerful
9 satellites.

10 Q What adaptations were made to the
11 702 for use as XM 1 and XM 2?

12 A Well, the choice of the 702,
13 because as satellite technology evolves, as we
14 know satellite technology has been around for
15 a while, but the innovation here is the amount
16 of electrical power that this satellite
17 generates, the largest amount that's
18 available. And the payload or the business
19 side of what the satellite is doing also had
20 to be specially developed, if you will.
21 Technical advances in the science of satellite
22 were necessary. The extreme or the very large

1 amount of power generated by the satellite is
 2 used by the payload to turn it into a very,
 3 very large amount of RF energy. And there are
 4 challenges with that, as well, that had to be
 5 developed and overcome, particularly in how do
 6 you dissipate the heat of so much RF energy
 7 being generated by tubes within the satellite.
 8 So this satellite payload really was essential
 9 in order to make XM work.

10 Q What does RF stand for?

11 A Radio frequency.

12 Q Are there more powerful satellites
 13 in orbit than these that you know of?

14 A Commercially, not that I know of.

15 Q What is pictured in Exhibit 8 to
 16 your testimony, please, sir?

17 A Typical XM repeater.

18 Q About how big is that box we see
 19 on the right?

20 A About the size of a refrigerator.

21 Q And on the left, what is that a
 22 picture of?

1 overlapping. That's a very daunting problem
 2 that had to be resolved with waveform design,
 3 as I said, lots of testing, and frequency
 4 management.

5 Q Was that something that was
 6 already being done by others, or was it an
 7 innovation?

8 A As far as I'm aware, the first
 9 time this has been done using SDARS.

10 Q And when you say the cells
 11 touching each other, can you explain what you
 12 meant by that?

13 A Well, in typical cell phone usage,
 14 you have, you know, one cell, and they're
 15 designed so that it don't overlap and it hands
 16 off from one tower to the other as you drive
 17 around, so they're really not interfering with
 18 each other. With SDARS, both Sirius and XM,
 19 the satellite and the repeaters are in the
 20 same frequency band, and you have that
 21 problem. So you need to engineer the system
 22 to help mitigate that issue.

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1 A A typical antenna installation, a
 2 monopole installation, something that would be
 3 three to four feet tall, maybe an inch in
 4 diameter.

5 Q Now, repeaters were not a new
 6 concept, were they?

7 A No, repeaters and devices that act
 8 as repeaters have been around for a while, but
 9 the real key important part here is that
 10 technologies, waveforms had to be developed
 11 because you have the satellite and the
 12 repeaters operating within the same frequency
 13 band, one actually causing interference to the
 14 other. So waveform and the frequency
 15 allocation and spectrum allocation tables had
 16 to be developed to actually mitigate this kind
 17 of self-generated interference. And that's
 18 really what's unique about what Sirius does
 19 and what we do with satellites and repeaters,
 20 so it's not like your typical cell site where
 21 the cells just touch each other. These are
 22 signals that are common; they're actually

1 Q And without going into the
 2 technical details, just briefly, what sort of
 3 engineering went into making that work?

4 A Waveform had to be specially
 5 developed to handle that, as well as the
 6 positioning of the carriers within the
 7 spectrum, developing a methodology for
 8 transmitting the satellite signals and the
 9 repeater signals.

10 Q Now, we heard before that there
 11 are two satellites transmitting the same
 12 signal, but they're four seconds apart; is
 13 that right?

14 A That's correct.

15 Q Which satellite transmits ahead of
 16 the others?

17 A The eastern satellite, if you
 18 will, transmits ahead of the others.

19 Q And which satellite do the
 20 repeaters work off of?

21 A The eastern satellite.

22 Q What is pictured in Exhibit 9?

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1 A That's a photograph of one of the
2 two satellite uplink dishes at our D.C.
3 facility.

4 Q About how big is that across?

5 A Seven meters, about 21 feet.

6 Q And are there other parts of the
7 uplink facility that aren't in the picture?

8 A Yes. This is what folks commonly
9 think of when they see an uplink is the
10 dishes, but there are amplifiers, if you will,
11 that are the actual transmitters that feed the
12 signal into the dish to be beamed to the
13 satellite, as well as in the network
14 operations center racks of equipment and
15 devices that are used to encode the audio,
16 take the data, and begin to multiplex it
17 together to build the signals that go through
18 the satellite. We also incorporate data into
19 that. We add the program associated data to
20 the signal, which basically is the artist/song
21 title information, and all of that gets
22 managed in what we can call the uplink. So

1 selection was available, the PAD data would
2 get displayed. Those are the two components.

3 Q Did you bring the actual XM radio
4 that's pictured here with you?

5 A Yes, I did.

6 Q Could you show that?

7 A This is the Pioneer unit, one of
8 our first XM radios. A complete XM radio
9 power, antenna signal in, and the audio comes
10 out of this.

11 Q Now, does that also contain an
12 AM/FM radio?

13 A No, it's just the XM.

14 Q Has any technological development
15 been done to try to make those smaller?

16 A Absolutely, yes.

17 Q And do you have a picture of the
18 current size version in your exhibits here?

19 A This is a minituner, so this and
20 this are the same thing, separated by four
21 years.

22 Q And that's Exhibit 16 in your

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1 it's not just what you see outside. The real
2 business end is, if you will, inside.

3 Q Is there any backup uplink
4 facility?

5 A Yes, there is.

6 Q And is that location considered
7 confidential?

8 A Yes, it is.

9 Q Let's change subjects and talk a
10 little bit about the receivers. What is
11 pictured in Exhibit 10?

12 A It's one of our early XM radios.
13 It's a Pioneer head unit and the actual XM
14 tuner box.

15 Q And what is the difference between
16 the head unit and the tuner box?

17 A The tuner box is what makes it an
18 XM radio. That is the XM radio. The head
19 unit is what you'd find in your dashboard. It
20 had AM, it had FM, but it had a special
21 interface that knew how to talk to the box
22 that's the XM radio so that the channel

1 testimony is a picture of the minituner with
2 a quarter on it, right?

3 A That's correct.

4 Q And can you tell us what all a
5 minituner does?

6 A The same thing as this big box
7 does. You apply power to it, the antenna
8 signal, and out comes the audio and/or data.

9 Q And if I wanted to have XM radio
10 on an airplane that got data, as opposed to
11 radio in a car, would I need a different
12 minituner?

13 A Yes, it uses the same chip set.
14 It may not be this plastic form function, but
15 it is the same chip set inside that's used for
16 all of our applications, whether audio or
17 data.

18 Q So we talked about two of the
19 pieces: the head unit which has the tuner on
20 it; is that right?

21 A That's right.

22 Q It has the dial buttons. The

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1 actual radio, are there any other components
2 installed in a typical XM installation?

3 A Yes, the antenna.

4 Q Do you have a picture of an early
5 antenna in your exhibits? And if so, can you
6 tell us is that Exhibit 11?

7 A Yes, that's Exhibit 11.

8 Q Did you bring an actual antenna so
9 we can see what that used to look like?

10 A Yes, this is what we used to call
11 our shark fin antenna. This is a magnetic
12 mount in the roof of a vehicle, either the
13 front or the back, wherever the easiest place
14 was to enter the cable. So that typically
15 would go with this.

16 Q What is inside the shark fin?

17 A There are actually two elements:
18 one on an horizontal plane and one on a
19 vertical plane that are specialized for
20 satellite versus terrestrial receptions. It's
21 one of the earlier implementations.

22 Q And why are they turned at

1 of the bill of materials to make a receiver
2 down, so that it's easily accessible by the
3 users. I mean, we don't make our money off
4 receivers, we do off subscribers. So you want
5 to remove the barrier eventually, and buying
6 an XM radio is a barrier, we've spent a lot of
7 time and effort to reduce that barrier by
8 innovating things like reduced chip set and
9 smaller antennas with the primary driver being
10 to lower the cost.

11 Q And has that been successful in
12 lowering the total cost of an XM --

13 A Yes, it has.

14 Q -- installation kit?

15 A Yes.

16 Q I'd like to direct your attention
17 to a different subject here briefly.

18 Paragraph 42 of your direct testimony talks
19 about surround sound. Could you tell the
20 Judges what surround sound is technically,
21 briefly?

22 A Sure. It's a methodology to

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1 different angles?

2 A Because the satellite signals are
3 basically coming in at a 30-degree angle from
4 the east and the west, and the terrestrial
5 signals tend to be more, if you will,
6 vertical. So they're designed and peaked, if
7 you will, to perform specifically in those
8 areas.

9 Q Has there been any progress in
10 making those smaller?

11 A Sure. Just as the chip is getting
12 smaller, this is now the antenna that's used.

13 Q And how big is the actual inside
14 of that antenna?

15 A About the size of my fingertip
16 here. And the single element that does both
17 the terrestrial and the satellite.

18 Q In the move from the larger box to
19 the smaller tuner, has there been any cost
20 improvement or change?

21 A Oh, yes. That's one of the
22 primary reasons to do that is to get the costs

1 reproduce a full spectrum of the audio stage,
2 if you will, sounds that generate from the
3 left, from the right, from the center, and
4 particularly from the rear. It originally
5 developed for movie theater applications to
6 add to the realism of a sound track, but
7 there's also now recorded music that's
8 recorded using surround sound methodology.

9 Q And when we see these home theater
10 units in the stores that have a bunch of
11 speakers all around you, is that surround
12 sound?

13 A That's correct.

14 Q Does XM transmit anything in
15 surround sound?

16 A Yes, we do. We transmit two
17 channels: XM Pops, a classical type station;
18 and Fine Tuning, an eclectic mix of different
19 music.

20 Q And what technology makes this
21 possible?

22 A We use technology from an

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1 organization, a company called Neural Audio,
2 that allows us to take the six channels of
3 content and mix them down so that they fit
4 within the spectrum or the bandwidth that we
5 have available and receivers that are equipped
6 with a neural decoder can now, when they see
7 the watermark that tells it it's surround,
8 mixes it back up to the six channels.

9 Q Do you know if surround sound is
10 regularly transmitted by any other radio
11 systems in the world?

12 A As far as I know, no. XM
13 innovated that particular --

14 Q And where do you get the
15 recordings to do the surround sound?

16 A From recording companies, record
17 companies.

18 Q Do you generally buy them?

19 A No, they've been giving us the
20 content and very happy to see it being
21 disseminated, in particular, as surround
22 sound.

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1 Q Turn to page 17 of your direct
2 testimony, and you see the heading for XM data
3 services.

4 A Yes.

5 Q Could you tell the Judges briefly
6 what is data service?

7 A Anything that's not audio we
8 consider to be data service, and there is some
9 data services that are tied directly to the
10 audio, if you will, and that is the artist and
11 song title information, which we call program
12 associated data, and that's what's displayed
13 on your radios.

14 Q Do you have any pictures in your
15 exhibit of where there is an artist and song
16 title displayed that we could look at?

17 A Yes, Exhibit 13 shows one of our
18 XM SKYFi's, and there's an example of what the
19 display tells you. The data also tells you
20 the channel you're listening to, both in title
21 and number, who's performing, the title track,
22 as well as some other information.

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1 Q So help the Judges understand, XM
2 Caf,, is that the name of a channel?

3 A That's the name of the channel,
4 and its channel number is 45.

5 Q And then Sting is the name of the
6 artist.

7 A Is the name of the artist, and
8 Sacred Love is the title of the track that's
9 playing.

10 Q Does sending the artist and title
11 use bandwidth?

12 A Yes, it does.

13 Q Why do you devote the bandwidth
14 for that purpose?

15 A We think that's one of the unique
16 features of satellite radio is to be able to
17 provide this information, you know. In
18 traditional radio, you back-announce, as it's
19 called, a song. Hey, you heard, you will
20 hear, but you don't get to hear all of them.
21 It was really thought to be a consumer benefit
22 to tell the listener this is what you're

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1 listening to. Even if you came in in the
2 middle of a song, the artist and song title
3 information stays throughout the song as it
4 plays. If you really like the song, you can
5 jot down the information and go out and buy it
6 and have it for your own, if you wish.

7 Q Does Sirius have this same
8 feature?

9 A Yes, they do.

10 Q How about Music Choice?

11 A Yes, they do, as well.

12 Q What is Exhibit 18?

13 A Exhibit 18 is another one of our
14 data services, and that's called XM Weather.

15 Q What does that do?

16 A XM Weather is a service that was
17 primarily initiated for the aviation and the
18 marine environment, and it's become not only
19 popular but almost a necessity now. XM
20 Weather is factory-installed in over 80
21 percent of general aviation aircraft. You
22 can't buy a jet without getting XM Weather in

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1 it. And there are also other companies, such
2 as Rockwell Collins, Honeywell, Garmin, that
3 now, you know, include this as part of an
4 avionics package.

5 Q Is that a different signal from
6 the satellite that's sending weather signals?

7 A No, it's the same signal, it's the
8 same chip set. The same chip that produces
9 music, the audio channels also carries all of
10 this other, this particular weather
11 information.

12 Q Can your repeaters deal with the
13 weather data?

14 A Yes, they do. It's, again, the
15 same signal from the satellite goes through
16 the repeaters, and it ends up being used for
17 this service, as well.

18 Q What is Exhibit 19?

19 A Nineteen talks about NavTraffic,
20 which is another one of the XM data services.
21 NavTraffic is the transmission of data that's
22 used to update in real time navigation systems

1 think of it as a sports ticker, the line
2 scores, the teams that are playing, and what
3 their scores are, and that also is transmitted
4 on the same platform.

5 Q Does traditional terrestrial radio
6 send that sort of thing to cars?

7 A No, they don't.

8 Q I'll direct your attention to
9 paragraph 50, which talks about XM Emergency
10 Alert Channel 247. Do you see that?

11 A Yes, I do.

12 Q Are there any advantages for
13 emergency notification over satellite radio as
14 opposed to terrestrial radio?

15 A Yes, the one big advantage is just
16 that, it is not terrestrially based. As we've
17 seen in the past few years with hurricanes and
18 manmade disasters, the satellites, because the
19 way they are positioned, they are not
20 subjected to a destruction of the
21 communications facilities on the ground.

22 Q Have there been any examples of

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1 that exist in modern cars. If you have one of
2 these Nav systems and subscribe to XM and have
3 NavTraffic, the roadways in front of you, for
4 instance if you were stuck on the beltway
5 between point A and point B, say around the
6 American Legion Bridge, that portion would
7 show up as red on the display. There would be
8 a little icon that could simulate or show that
9 there was an accident there or construction.
10 So it's really a benefit because you can
11 actually update in real time and take a look
12 at what's going on with the traffic, and you
13 can plan your route accordingly.

14 Q Are there other data services
15 besides the ones we've looked at that are
16 commonly sent over the XM signals?

17 A Sure. As that other exhibit shows
18 with the PAD data, we actually send out stock
19 quotes and sports scores. We give an end
20 number of stock quotes that you can choose to
21 find information about, and that scrolls at
22 the bottom of the radio. And also sports,

1 when terrestrial radio was not able to work to
2 deal with local disasters?

3 A Well, Katrina was a good example.
4 The towers were taken down, and broadcast
5 stations, cell towers, etcetera, were not
6 functioning; and, yet, the satellite signals
7 were still available.

8 Q Since your direct testimony was
9 prepared, have there been any other
10 developments in emergency services provided by
11 XM?

12 A Yes. We have been chosen by FEMA
13 to be a participant in the upgrade of the
14 Emergency Alert System. This system has been
15 around for many, many years, since the 1950s.
16 It basically was designed to deliver what's
17 called the Presidential message in time of
18 emergency. Presently, that's done via phone
19 lines to certain key stations in each market
20 called primary entrance points. You've all
21 heard these tones that they use for weather
22 alerts, I know severe weather warning. Those

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1 same tones, special ones, are used to actually
 2 activate decoders that take over the audio of
 3 the radio stations, and other stations listen
 4 to the primary ones. It is this daisy chain.
 5 But we've developed a special XM receiver
 6 that's presently being installed in these PEP
 7 stations, and we will be transmitting the
 8 tests, as well as the Presidential message, if
 9 and when it ever comes.

10 Q With regard to the Emergency Alert
 11 Channel 247, do you have to subscribe to be
 12 able to get that?

13 A No, that channel is available
 14 right out of the box. You buy a radio, turn
 15 it on. Even if you're not a subscriber, you
 16 get the Emergency Alert Channel.

17 Q And does XM expect to make much
 18 money on this new program for FEMA?

19 A No, the receivers are done at
 20 cost, and the channel space and all of that
 21 was necessary to put it together done pro
 22 bono.

1 Do you see that?

2 A Yes.

3 Q And you describe RCA Americom as a
 4 pioneer in communications satellite firm?

5 A Yes.

6 Q What was it that Americom did?

7 A Americom was a communications
 8 company. They managed, if you will, the
 9 spectrum available on the satellites that it
 10 launched. RCA built, if you will, the
 11 satellites, and Americom managed them, and you
 12 could buy spectrum space from them, if you
 13 will, buy transponders, etcetera.

14 Q And so you hired people from that
 15 company who had expertise that you needed --

16 A People who had worked there in the
 17 past, sure, who had expertise in those
 18 systems.

19 Q So they developed expertise at
 20 Americom, and then they brought it to XM: is
 21 that right?

22 A Sure.

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1 MR. MILLER: That concludes my
 2 direct questions of this witness, unless
 3 there's something that the Court would like me
 4 to clarify.

5 CHIEF JUDGE SLEDGE: Any questions
 6 by Sirius?

7 MR. JOSEPH: No, your Honor.

8 CHIEF JUDGE SLEDGE: Music Choice?

9 MR. FAKLER: No, your Honor.

10 CHIEF JUDGE SLEDGE: Cross

11 examination?

12 MR. HANDZO: Thank you, your
 13 Honor.

14 RE-CROSS EXAMINATION

15 BY MR. HANDZO:

16 Q Good afternoon, Mr. Masiello.

17 A Good afternoon, sir.

18 Q Mr. Masiello, turning to paragraph
 19 10 of your direct testimony, you talk about
 20 some of the employees who were recruited for
 21 XM, and you say on the satellite side you
 22 hired people who had worked at RCA Americom.

1 Q And then what did they do for XM?

2 A They were part of the satellite
 3 team.

4 Q So they were doing the same sorts
 5 of things that they had done at Americom?

6 A Yes, they had.

7 Q Now, XM, of course, did not build
 8 its satellites, right?

9 A Well, it did not physically build
 10 them. It contracted to have them built.

11 Q Right. The satellites were built
 12 by Hughes?

13 A Hughes, then Boeing.

14 Q Then Boeing. Hughes became
 15 Boeing?

16 A That's correct.

17 Q And the payload was built by
 18 Alcatel?

19 A That's correct.

20 Q Now, XM did not design the
 21 satellites either, correct?

22 A No, they didn't design them, but

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1 they certainly had a lot to do with the
2 features that had to exist in order to make
3 the XM service work.

4 Q Well, XM had to provide
5 specifications for what it needed, right?

6 A Well, for instance, the power
7 generation. The satellites had to be able to
8 generate a large amount of electrical power in
9 order to generate a lot of RF energy. Again,
10 they were the most powerful satellites at the
11 time, and part of the impetus was to push to
12 get that power generation. You know, you're
13 transmitting RF to tiny little antennas such
14 as this. The need for the payload, for
15 instance, from Alcatel, you have to generate
16 a large amount of RF energy. And one of the
17 problems was how do you dissipate the heat
18 generated by the tubes? It's not a complete
19 efficient transfer from electrical power to
20 RF. Heat is given off. How do you do that?
21 And so there was special challenges that had
22 to be overcome specifically to make a

1 our system, what we proposed to design. So,
2 you know, they offered, obviously, lots of
3 guidance in trying to get developed what we
4 needed developed.

5 Q In order for them to design their
6 satellite, they had to understand how you were
7 going to use it, right?

8 A That's correct.

9 Q Now, it was Alcatel that designed
10 the payload, right?

11 A That's correct. It built a
12 payload.

13 Q And Alcatel had previously
14 designed and built the payload for World
15 Space, right?

16 A That's right.

17 Q And World Space was a company that
18 was in the business of providing satellite
19 radio service to third-world countries?

20 A That's correct.

21 Q And it existed prior to XM,
22 correct?

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1 satellite to service XM and to make XM work.

2 Q And so the reason XM selected
3 Hughes, Boeing, was because it had the 702
4 series of satellites, right?

5 A It had the 702 series that had a
6 very powerful bus.

7 Q And Hughes had previously designed
8 that for other companies before XM, right?

9 A It had designed that series of
10 satellites, yes.

11 Q Okay. And so XM went to Hughes,
12 which already had this powerful satellite, and
13 gave Hughes its design specifications, right?

14 A Asking that it generate this
15 amount of power, etcetera.

16 Q And then Hughes went about doing
17 what XM needed, right?

18 A They provided what we requested.

19 Q Okay. And it was Hughes that
20 designed that, right?

21 A But in conjunction with our folks,
22 as well, providing input because we understood

1 A That's correct.

2 Q So Alcatel had already built
3 payload for World Space before it built the XM
4 payload?

5 A Right, but not one that was as
6 powerful as what we needed for XM. So XM's
7 payload was bigger, more power, if you will.

8 Q Now, looking at, again, paragraph,
9 I'm sorry, paragraph 23, you discuss the
10 launch of the satellite and you say that XM
11 chose to use Sea Launch?

12 A That's correct.

13 Q And you say that Sea Launch had
14 successfully handled only a handful of
15 satellites before XM?

16 A Yes.

17 Q XM had the option to use a more
18 experienced launch service, correct?

19 A There were other launch providers,
20 yes.

21 Q That were more experienced than
22 Sea Launch?

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1 A That's correct.

2 Q But they were more expensive?

3 A I really don't know that. I'm not
4 familiar with that.

5 Q You weren't involved in that part
6 of it?

7 A Not in the costing of it, no.

8 Q Okay. With respect to the
9 operation of the satellites, that's not
10 handled by XM, correct?

11 A The satellites are flown, if you
12 will, managed by TeleSat Canada, but there is
13 a control facility here in D.C. that's fully
14 operational, and a number of times a year the
15 operators come down and our operators are
16 trained on taking over the, quote, flying of
17 the satellites.

18 Q Okay. But on a day-to-day basis -
19 -

20 A Yes, it's TeleSat Canada.

21 Q Now, in paragraph 18 of your
22 statement, you discuss at the beginning of the

1 document?

2 A It depends when this document is
3 from. It's a group that did a lot of the
4 presentation and PowerPoints along the way,
5 and I guess that group would do that.

6 Q Okay. Would that group have
7 gotten information from you or people
8 reporting to you?

9 A Just by looking at this, I think
10 this was put together before I joined the
11 company.

12 Q Let me ask you to turn to page
13 five of the document.

14 A Okay.

15 Q And looking down at the second
16 bullet point from the end, is it correct to
17 say that the digital wave form technology was
18 based on proven World Space technologies?

19 A Partly, yes. But it's important
20 to note that the World Space system is a bit
21 different than ours. They don't have
22 terrestrial repeaters sharing the same

1 paragraph the waveform for the signals.

2 A Yes, sir.

3 Q Actually, before I go there, let
4 me show you what we're going to mark as
5 SoundExchange Trial Exhibit 21.

6 (Whereupon, the above-
7 referred to document was
8 marked as SoundExchange
9 Exhibit No. 21 for
10 identification.)

11 BY MR. HANDZO:

12 Q Mr. Masiello, have you seen this
13 document before?

14 A Yes, just recently when it was
15 shown to me by counsel.

16 Q Okay. Is this a document created
17 by XM?

18 A I assume it is because it says so.
19 I'm not familiar when it was created or who
20 created it.

21 Q Is there a group or department
22 within XM that would have likely created this

1 frequency space, and their system was not
2 primarily designed for a mobile reception. So
3 while that may have been, you know, based upon
4 that, considerable work had to be done on the
5 waveform by XM creating its own waveform to
6 handle some of the issues we talked about
7 earlier: repeaters sharing the same frequency
8 space and, particularly, driving down the road
9 at 70 miles an hour or stopped, you had to
10 have an acceptable signal. So it is different
11 than World Space.

12 Q Some portion of the waveform
13 technology was borrowed from World Space,
14 right?

15 A Yes, some portion of it. That's
16 correct.

17 Q And by the way, World Space was an
18 early investor in XM, right?

19 A I'm not familiar with the -- yes,
20 so I hear. I'm not familiar with the actual -
21 -

22 Q Is that before your time?

1 A Yes, that is.
 2 JUDGE ROBERTS: Mr. Handzo,
 3 haven't we heard most of these questions in
 4 direct to Mr. Parsons?
 5 MR. HANDZO: Probably, yes. I'm
 6 going to take that as a suggestion that I move
 7 on.
 8 JUDGE ROBERTS: Yes.
 9 BY MR. HANDZO:
 10 Q Mr. Masiello, let me ask you to
 11 look at paragraph 10 again. Again, going back
 12 to recruitment, you mentioned that you
 13 recruited some people from Motorola; is that
 14 right?
 15 A I specifically didn't. The
 16 company, XM, recruited people from Motorola.
 17 Q Okay. And you refer to them as
 18 patent holders, do you see that?
 19 A Yes.
 20 Q Okay. Does that mean that they
 21 were already patent owners when they were at
 22 Motorola?

1 your Honor.
 2 CHIEF JUDGE SLEDGE: Mr. Handzo
 3 got no information on cross. I'm wondering
 4 what you could redirect on.
 5 MR. MILLER: Sea Launch.
 6 CHIEF JUDGE SLEDGE: All right.
 7 REDIRECT EXAMINATION
 8 BY MR. MILLER:
 9 Q Mr. Masiello, is there any
 10 technical advantage to using Sea Launch from
 11 the equator as opposed to another launch
 12 provider?
 13 A Yes. One of the benefits of Sea
 14 Launch is that they launch from the equator,
 15 and that provides for very accurate insertion
 16 orbits. In other words, it's like trying to
 17 shoot an arrow on a bulls eye over five miles.
 18 They're very good at positioning the satellite
 19 at the exact point for transfer orbit, and
 20 this saves fuel. So that's like not missing
 21 the mark. It's real close, and you can
 22 preserve fuel on spacecraft that way.

1 A That's correct.
 2 Q And did they bring those patent
 3 rights with them to XM?
 4 A I don't know if they do or not. I
 5 --
 6 Q So you don't know whether these
 7 patents are part of what XM currently
 8 considers its patent portfolio?
 9 A That's correct.
 10 Q Just a couple more questions, Mr.
 11 Masiello. Going back to the document that I
 12 just showed you on page five, there's a
 13 discussion there of proven techniques for
 14 microwave signal distribution. Do you know
 15 what that's a reference to?
 16 A Where do we see that?
 17 Q The fourth bullet point.
 18 A I really don't know what that
 19 refers to. Sorry.
 20 MR. HANDZO: Thank you. That's
 21 all I have.
 22 MR. MILLER: Very brief redirect,

1 Q What fuel does the spacecraft use,
 2 in addition to solar energy?
 3 A It has xenon gas that's then
 4 ionized to provide propulsion.
 5 Q And why is propulsion important to
 6 a satellite?
 7 A Well, you're going to need it for
 8 station keeping over the years. It's one of
 9 the determinants of the life of the satellite
 10 if so much fuel is available.
 11 Q And just to be clear, these are
 12 geostationary satellites, right?
 13 A That's correct. They appear to be
 14 stationary when viewed from the respect to the
 15 Earth.
 16 Q And that has some relationship to
 17 the equator, right?
 18 A It certainly does. They're above
 19 --
 20 Q It's right over the equator?
 21 A -- the equator. That's correct.
 22 Q So they're turning at the same

1 speed as the Earth, right?
 2 A That's correct.
 3 Q And why was it important
 4 technically to XM to have as much fuel as
 5 possible in the satellites when they reach
 6 their station?
 7 A Because one of the determining
 8 factors of a satellite's life is how much
 9 onboard fuel there is, again for station
 10 keeping, maneuvering, things that are going to
 11 be necessary during the life of the satellite
 12 to keep it stable.
 13 MR. MILLER: I have no further
 14 redirect.
 15 CHIEF JUDGE SLEDGE: Any questions
 16 from the bench? Thank you, sir.
 17 THE WITNESS: Thank you, your
 18 Honor.
 19 CHIEF JUDGE SLEDGE: Mr. Miller, I
 20 think I've missed something. What's the
 21 purpose of Mr. Masiello's testimony?
 22 MR. MILLER: Your Honor, Mr.

1 JUDGE WISNIEWSKI: Mr. Miller,
 2 would you collect Mr. Masiello's exhibits?
 3 Thank you.
 4 JUDGE ROBERTS: Mr. Joseph, before
 5 you begin, the respective sides may be
 6 interested to know, now that we've completed
 7 the initial portion of XM, that SoundExchange,
 8 of the 50 hours allotted for direct case, five
 9 hours and 45 minutes. And the services have
 10 consumed nine hours and 45 minutes.
 11 MR. JOSEPH: Thank you, your
 12 Honor.
 13 CHIEF JUDGE SLEDGE: Are we ready?
 14 Please proceed.
 15 MR. JOSEPH: Your Honor, I'd like
 16 to introduce my partner, John Wyss, who
 17 unfortunately wasn't here for the opening but
 18 was here yesterday, so he's observed the
 19 proceedings and is familiar with the rules,
 20 and he will call our first witness.
 21 CHIEF JUDGE SLEDGE: Mr. Wyss?
 22 MR. WYSS: May I approach, your

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1 Masiello is dealing with the technical
 2 innovation aspect of the 801(b) factor, which
 3 deals with the relative contribution of
 4 technological innovation. We believe he also
 5 is explaining -- well, I think that's the
 6 central focus, your Honor, is technological
 7 innovation. I might also add, your Honor,
 8 that his testimony, I think, on broadcasting
 9 goes to the issue of the addition that is made
 10 to the music besides simply playing the
 11 recorded music, what's done in the studios for
 12 example, your Honor. And it also goes, I
 13 believe, to disruptive effects, the fact that
 14 this business has many benefits besides simply
 15 delivery of entertainment, for example, and
 16 should things be done that threaten the
 17 business in its future, then that would have
 18 considerable disruptive effects, including
 19 disruptive effects, for example, in emergency
 20 services. And that was one of the reasons for
 21 his testimony.
 22 CHIEF JUDGE SLEDGE: Thank you.

1 Honor? Thank you. I bring my water with me,
 2 as well.
 3 CHIEF JUDGE SLEDGE: So far, we're
 4 allowing that.
 5 MR. WYSS: Thank you. Your Honor,
 6 our first witness is Mel Karmazin who we would
 7 call. Could Mr. Karmazin please come forward?
 8 WHEREUPON,
 9 MEL KARMAZIN
 10 was called as a witness by Counsel for Sirius
 11 Satellite Radio and, having been first duly
 12 sworn, assumed the witness stand, was examined
 13 and testified as follows:
 14 DIRECT EXAMINATION
 15 BY MR. WYSS:
 16 Q Would you please state your name
 17 for the record?
 18 A My name is Melvin Karmazin. I go
 19 by the name of Mel.
 20 Q And what is your current position
 21 with Sirius?
 22 A I'm President and CEO of Sirius

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**RESTRICTED VERSION: CONTAINS PROTECTED MATERIALS SUBJECT TO
PROTECTIVE ORDER IN DOCKET NO. 2006-1 CRB DSTRA**

**Before the
LIBRARY OF CONGRESS
Copyright Royalty Board**

In the Matter of)
)
Adjustment of Rates and Terms for)
Preexisting Subscription and) Docket No. 2006-1 CRB DSTRA
Satellite Digital Audio Radio Services)
_____)

**DIRECT TESTIMONY OF STEPHEN R. COOK
(ON BEHALF OF XM SATELLITE RADIO INC.)**

Overview

1. My name is Stephen R. Cook. I am currently employed by XM Satellite Radio Inc. ("XM") and was recently named Executive Vice President, Automotive. I have been employed by XM since 1999, when I was hired as Senior Vice President of Sales and Marketing. Prior to joining XM, I held key management positions with GTE Wireless Inc., Procter & Gamble, and Conxus Communications.

2. To succeed, XM must market its satellite radio business through multiple automotive and retail channels in order to acquire and retain subscribers cost-effectively. XM is proud that currently it has more than 7 million subscribers to date. My testimony will focus primarily on XM's early and ongoing marketing and sales efforts that are responsible for creating this subscriber base.

3. Marketing a new product like XM is particularly challenging and expensive for several reasons. As an initial matter, XM must convince consumers that its product is different

enough from FM radio and other audio entertainment, and compelling and unique enough in itself, to justify purchasing new equipment and paying an ongoing monthly subscription fee. It was also important to generate rapid subscriber growth to demonstrate the viability of the service considering the large capital investment. Further, actual and potential satellite radio customers are spread across a wide variety of different demographic segments. In order to attract, build and maintain its subscriber base, XM's marketing has emphasized several of its differentiating features:

- Diversity and depth of XM's programming appealing to mass and niche key market segments
- More channels and more choice than our competitors
- Exclusive non-music programming available on XM
- Absence of commercials and unique and exclusive programming on XM's music channels
- Nationwide coverage and outstanding digital sound quality of XM's signal

Additional drivers of subscriber growth include the competitive price of XM's monthly subscription as well as the competitive price and quality of the radio receivers using technology that XM develops in-house.

4. The automotive and retail distribution channels are crucial to XM's marketing strategy. While expensive, these distribution channels are necessary to expose consumers to XM's service and radio options. Broad distribution of XM Radio through the new automobile market is essential to our success. Looking forward, the automotive industry is increasingly focused on XM's ability to provide data services to subscribers, such as traffic flow and parking information, sports scores, stock quotes, and messaging (e.g. maintenance reminders). This emphasis on data services by our automotive partners complements other growth areas for XM,

including increasingly popular navigational offerings, consisting primarily of weather information, for airplanes and boats.

5. From a marketing/distribution perspective, I believe that a significant increase in royalties for music rights would impose a tremendous burden on XM's ability to market and grow its service. Many of our equipment subsidies and partner distribution costs are fixed. Any attempt to increase subscription fees to offset a significant royalty increase could increase subscriber cancellations and decrease automotive trial conversion rate. In addition, any large cuts in our marketing and distribution efforts could likewise limit growth. XM is still at an early enough stage of its life cycle that exogenous financial shocks, such as that caused by a significant increase in royalties, could cause irreparable long-term harm.

Marketing and Sales Experience Prior to Joining XM

6. I have over 20 years of experience as a marketing professional and executive. I received an undergraduate degree at Duke University in 1978 and an MBA in marketing and marketing strategy from the University of North Carolina in 1983. My first marketing job was at Procter and Gamble. From 1983 to 1988, I was a Procter & Gamble Brand Manager, and ran the marketing efforts of several national household cleaning product brands.

7. In 1988, I moved over to Providence Journal Cellular, an early cellular service provider that was later acquired by GTE, to become part of GTE MobilNet (later named GTE Wireless). Like XM, Providence Journal Cellular had to purchase licenses, build a subscriber base from scratch, and convince consumers to purchase receivers in order to use the service. Initially, these receivers (referred to by many users in that early period as "car phones") were large and expensive, and almost all billing was per minute, with limited availability of heavy use plans. Over time, phone size was reduced and our costs and pricing came down. I held senior

marketing positions (including Vice President of Marketing for the post-merger company), and in 1993, became President of GTE's Southeast Region, which included Kentucky, Tennessee, Northern Alabama, and parts of Virginia.

8. In 1996, I left GTE to become Chief Operating Officer of Conxus Communications, a start-up company. Conxus marketed "Pocketalk," an innovative service that used paging spectrum to carry voice messages. At Conxus, I was responsible for marketing, sales and distribution, advertising, product development, customer service, and network engineering. I also directed distribution alliances with several regional paging companies and voice messaging providers. After initially raising \$500 million in capital, we paid \$90 million for 1 of the 2 national licenses available, and launched service in top ten markets such as New York and Washington, D.C. However, the service proved to be ahead of its time. We were unable to raise additional money, and the company went out of business. At that point, I was recruited for XM.

Marketing and Sales Roles at XM

9. In 1999, I joined XM as Senior Vice President of Sales and Marketing. For the past seven years in that position (and later as Executive Vice President, Sales and Marketing), I was responsible for all aspects of XM's sales and marketing, including the development of distribution channels, pricing strategy, hardware promotional spending, and marketing campaigns.

10. XM's key marketing and sales goal is to acquire and retain subscribers. My particular focus with respect to subscriber acquisition was to build XM brand awareness, educate consumers about satellite radio and the XM service, develop retail and automotive distribution channels, execute promotions to drive sales, and develop radio receivers that were attractive in

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terms of price and design -- all while minimizing subscriber acquisition costs. With regard to retention, my primary focus was on customer care with regard to both XM's billing operations and call center. As I discuss in detail below, important metrics regarding subscriber acquisition and retention include subscriber acquisition costs, costs per gross addition, subscription cancellations (known in our industry as "churn"), and the rate of conversion from trial subscriptions to long-term subscriptions.

11. There are approximately [110] people in the marketing and sales department of XM. The department's budget – including payments of various subsidies to automakers and retailers that I discuss more thoroughly below – totaled [\$604 million] in 2005.

12. Because of the critical importance of our relationship with the automotive industry to the marketing and distribution of XM radios and the XM service, it was decided that I should focus all of my time and energy on this part of the business. In July 2006, I was named Executive Vice President, Automotive. Nearly 60% of the automotive manufacturers who sell cars in the United States, including General Motors, Honda, Hyundai, Toyota and Nissan choose XM as their exclusive factory-installed satellite radio provider. GM offered XM satellite radio factory-installed in more than 50 car, truck and SUV models for the 2006 model year.

XM's Marketing and Sales Strategy

13. XM's fundamental marketing and sales goal is to acquire and retain subscribers as cost-effectively as possible. Satellite radio has a significant cost structure and is not viable solely as a niche market service. XM is a mass market product and needs to be adopted by a large cross-section of U.S. consumers to achieve the scale needed to support satellite radio's large fixed-costs, infrastructure maintenance and upgrades. Our target market is the 230 million registered vehicles and over 110 million households in the United States, including a focus on

the portable audio market. By reducing the cost of the radios and keeping the subscription rate reasonable, XM can become a viable mass market service; however, today analysts estimate that XM is still losing \$1.9 million a day in 2006.

14. Our on-going challenge is to create consumer demand for XM's service. Early on, the primary marketing messages were XM's breadth of programming, digital sound quality, coast-to-coast coverage, absence of commercials on XM produced music channels and its exclusive non-music programming. Nationwide transmission coupled with robust signal strength was crucial, especially since ten percent of XM's early adopters were long-haul truck drivers. Over time, XM's marketing has evolved to focus more on programming. Our value proposition relative to terrestrial radio includes the following offerings: exclusive programming (especially certain sports, news and talk programming); the most channels, diversity and breadth of programming; absence of commercials on XM produced music channels; and digital sound quality. We must effectively communicate to consumers reasons to pay for XM service and radio instead of staying with traditional commercial-supported AM/FM radio even as those traditional terrestrial radio broadcasters are moving to a digital platform and reducing their commercial load in response to competition.

15. In addition to our primary competition from terrestrial radio broadcasters and other sources of audio entertainment (iPod, MP3s, cellphone, etc.), XM must compete with Sirius for satellite radio subscribers. We compete with Sirius in a number of ways. For example, we promote our exclusive content and breadth and quality of XM programming. We also compete by constantly innovating our device offerings to consumers. And, importantly, we compete with our distribution deals, particularly with regard to distribution of our radios factory-installed in automobiles ("Original Equipment Manufacturer" or "OEM" distribution).

XM's Relationships With Automotive Companies

16. With the automotive distribution channel, we are literally and figuratively along for the ride when XM receivers are “factory installed” in the manufacturer’s vehicles. Initially, convincing automakers there was a demand for XM radio was a difficult and expensive proposition. General Motors, for example, negotiated very favorable terms when it became XM’s first automotive partner in 1999, two years prior to the launch of our service. In exchange for a 12-year exclusive commitment, we have substantial payment obligations to GM. In my view, this partnership was necessary for XM’s survival, as GM has the largest share of the United States automobile market and based upon experience to date, XM believes one of the best ways to penetrate the mass market is via the automotive channel. More than 90 percent of GM’s model-year 2006 and 2007 U.S. vehicles offer factory-installed XM radios as either an option or as standard equipment. During the summer of 2006, GM announced that it had produced its five millionth vehicle with factory-installed XM Radio. Other automakers such as Honda, Toyota, Nissan and Hyundai followed GM’s lead and signed up as XM partners.

17. Reaching agreements with our automotive partners continues to require economic incentives from XM. Specifically, XM subsidizes the hardware installed in cars and often gives these automotive companies an activation commission. Some automakers also get a revenue share from XM on the monthly service fee paid by subscribers. There are other types of costs involved as well. For example, XM supports the Honda/Acura auto racing program. These new car buyers generally receive three free months of XM service with their purchase of a new automobile with a factory-installed XM radio. The goal is expose the car owner to XM and to “convert” (a metric described in more detail below) as many as possible into self-paying subscribers.

18. While distribution through automotive companies is fruitful, it requires substantial ongoing investment over many years to bear this fruit because car models are designed so far in advance. See Cook Exhibit 1 (Flow of Marketing Costs of the Automotive Distribution Channel). To date, XM estimates that it has acquired more than 3 million subscribers through the automotive distribution channel. We expect the automotive channel to increasingly serve as a significant source of new subscribers.

XM's Relationships With Retailers

19. Through the retail distribution channel, we market directly to consumers with the assistance of mass market retailers of electronics products, such as Circuit City, Best Buy, and Wal-Mart. Like our automotive partnerships, initially these retailers had to be aggressively pursued. [We had to pay substantial fees to convince them to dedicate scarce shelf space in their stores to carry hardware for XM's service. We continue to subsidize retail sales of XM radio receivers in several ways. Over and above the margin they receive on the hardware, we pay the retailers a commission for each radio sold through that retailer that subsequently is activated by the consumer. Certain retailers also receive a small portion of XM's subscription fee from radios sold through that retail outlet. With some retailers, this subscription fee payment is capped at four years, and with others it continues for the life of the subscription. XM also pays a subsidy to the manufacturers and distributors of the XM radios, such as Delphi, Pioneer and Audiovox, in order to keep the wholesale price to retailers at levels that will allow XM to achieve a target retail price point. Finally, XM also provides substantial market development funds to its retail partners, which pay the retailers to advertise XM's receivers and service in newspaper circulars, in-store displays, etc. We develop and pay for in-store merchandising materials, including end-

aisle displays for several retailers, and train the sales forces of all major retailers.] See Cook

Exhibit 2 (Flow of Marketing Sales Costs of Retail Distribution Channels).

20. Growth trends are slightly different for the retail channel than for the automotive channel. The key to driving growth at retail is developing receivers that consumers want in terms of look and functionality, and at a price (for the monthly subscription and hardware), that is consistent with the consumers' perceived value of the service. This process has a very fast development cycle requiring significant research and development expense to keep pace with the changing trends in consumer electronics. XM estimates that it has obtained more than 4 million subscribers through this channel. In total, XM spends [\$300 million] annually on its retail distribution channel.

XM's Exclusive Content Deals

21. XM's exclusive content deals are vital to our effort to acquire subscribers by offering programming not available on Sirius, terrestrial radio, or other entertainment services. For example, our sports programming includes live coverage of every Major League Baseball game, and National Hockey League team, and full coverage of certain Division One college football and basketball conferences. Fans nationwide can follow games of their favorite teams on XM's service, regardless of whether those games are broadcast in their local media market. Indeed, after the launch of Major League Baseball on XM, 21% of new subscribers surveyed in the spring of 2005 said they signed up for XM because of its MLB programming. A new channel, Oprah and Friends, also provides XM with compelling original programming from Oprah Winfrey's company. In order to launch this channel, we had to spend \$55 million to acquire the programming and launch the channel, and [\$1.6 million to construct a Chicago studio

in conjunction with Oprah Winfrey's company.] We did this with the belief that we could attract Oprah's millions of fans to become XM subscribers.

XM's Subscription Rate Structure

22. We also seek to retain subscribers through multi-year commitments and multiple receivers within the same household, on-time and accurate billing and by incentivizing subscribers to pay by credit card. XM offers its service at a subscription fee of \$12.95 per month for the first receiver, and a "family" plan rate of \$6.99 per month is available for each additional receiver. XM also offers discounted service fees for paying one to five years in advance.

23. XM launched service in 2001, charging \$9.99 a month for our service. When we later raised our rate to \$12.95, it resulted in higher churn, or the number of paying subscribers who cancel their service after a period of time. See [Cook Exhibit 3 (Rate Increase Impact on XM Subscriber Churn).] Raising our service fee also negatively affected our conversion rate from the automobile channel, decreasing the number of new subscribers we acquire through this important channel. See [Cook Exhibit 4 (Automotive Trial Conversion Impact Following Rate Increase).] The conversion rate is the number of subscribers who receive a free three month trial with the purchase of a new car with an XM radio installed, and elect to become self-paying subscribers when the trial period expires. [We continually analyze the possibility of increasing the subscription rates but are concerned about the adverse effect it would have on subscriber growth.] In fact, competition from various existing services such as iPods, and other audio entertainment services, may exert downward pressure on our pricing in future years. Free HD Radio digital channels, whose music programming competes directly with XM's, are not subject to sound recording performance royalty fees or statutory sound recording performance license limitations such as the sound recording performance complement. Most major cellular carriers

offer streaming audio services and Wi-Max networks, as well as new “rich multimedia” technologies such as MedioFlo and DVB-H, will also carry music in the future, adding other competitors for satellite radio.

Results and Effectiveness of Marketing Approach

24. XM now has more than seven million subscribers. According to Greystone Communications, a media research and planning firm, the pace to the first five million subscribers was faster than other new technology introductions, other than DVDs, such as cable television, internet service, cell phones and MP3 players.

25. I look to several key indicators on a monthly basis to evaluate the effectiveness of XM’s marketing efforts to drive subscription growth. I first consider gross additions of new subscribers, which is all new self-paying subscribers and all new subscribers who purchased a car with an XM radio from our automotive partners and are in their three month trial period. Looking at Cost Per Gross Addition (CPGA) gives me a broad sense of how cost-effectively we are adding subscribers. Overall, XM’s cost to acquire a new subscriber has averaged a bit over \$100. I also look at subscriber disconnects, as measured by churn and conversion rates. Data concerning subscriber disconnects help me to gauge the effectiveness of our retention strategies and the ongoing appeal of XM's service. XM’s churn rate has averaged between 1.6% to 1.85% of our self-paying customer base per quarter for 2006 to date. Regarding our automotive trial conversion rate, in the first half of 2006 approximately 54% of new car buyers converted to self-paying subscribers. See Cook Exhibit 4. Overall, these metrics allow me to gauge XM’s growth, and determine how cost effective we are at adding new subscribers and retaining existing subscribers as a result of our marketing and retention strategies.

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26. Our service has achieved broad listener appeal across subscribers of different ages. On a pie chart showing XM's demographics by age group, the "slices" are fairly even. *See Cook Exhibit 5 (The Breadth of XM Radio's Appeal Creates Challenges for a Limited Marketing Budget)*. This demonstrates a pattern of mass product adoption across the age spectrum. We believe the broad appeal of our service is due to the combination of XM's music, news, sports and talk offerings, which appeal to a wide demographic. By contrast, other new technologies such as iPods have a younger user demographic. Our subscribers are currently 63% men, but we expect our gender demographic to move towards a more even split between men and women as more women convert to paying subscribers through our automotive partnerships. *See id.*

27. The broad appeal that XM strives for makes marketing an expensive, on-going challenge. We need to advertise the broad benefits of XM with an easy-to-convey message. Internet, newspaper and magazine advertisements can be used on a limited basis for targeted marketing to reach specific segments of the population. However, expensive national television is required to reach the mass market.

28. As discussed previously, XM's relationships with automotive companies and retailers and their marketing support also play a crucial role in subscriber acquisition and retention, as does XM's exclusive programming. XM also realizes tremendous benefits from adding well-established, major brands to its programming. Our entire channel line-up, particularly on the news, talk and sports side, is replete with brands that are well-known to consumers, thanks to the extensive marketing efforts of other companies. These include information sources, such as CNN, Fox News, ESPN and Bloomberg, and personalities, such as Willie Nelson, Oprah Winfrey, and Dale Earnhardt, Jr., who are recognized and associated with certain programming by millions of Americans. *See Cook Exhibit 6 (XM Program Guide)*. Our

ability to market the new XM brand is greatly helped by aligning XM with established programming sources.

29. We also conduct ongoing advertising and promotional activities, such as television, radio, print and Internet advertising, and distributing sample programming and marketing materials at retail outlets, concert venues, motor sports events, and on the Internet to generate consumer interest. General Motors and Honda sponsor national and local print and television advertising that features the XM logo and message. Our 2005 holiday season “Listen Large” marketing campaign featured TV spots with Ellen DeGeneres, Snoop Dogg, Derek Jeter, David Bowie and Martina McBride. We promoted our exclusive relationship with the PGA Tour by offering handheld radios for rental and purchase at PGA events. XM’s current “ON” TV and print advertising campaign seeks to deliver a distinctive, creative message about the breadth and appeal of XM’s programming, and represents a new strategy to reach potential subscribers in the “early majority” category. Our strategy of providing potential subscribers with the opportunity to experience the XM service leads to a number of marketing alliances where consumers sample our service offering. Consumers test-driving XM-enabled General Motors and Honda/Acura vehicles or renting AVIS, Alamo, National and Zipcar rental cars can experience XM radio first-hand and passengers flying JetBlue, AirTran or United sample a subset of XM’s programming during their flights.

Marketing Impact of New Product Development

30. XM’s internal research and technology development capability allows us to create more marketable receivers than would sole reliance on third-party manufacturers. Our product development team can easily identify and design features that, from a marketing perspective, should be included in radio design. Based on our research and contact with consumers, we can

determine features that subscribers and potential subscribers want -- for example, the number of presets they would like or how the navigation controls should work -- and work with R&D to develop user-friendly radios. The channels of communication are more open and the process of product development faster and more efficient than an outsourcing arrangement would allow.

31. One example of the benefits of XM's in-house R&D is the development of the Inno and other portable radios. The ubiquity of Apple's iPod and the need to compete with it and other MP3 players led XM to invest heavily in the development of a portable device that allowed subscribers to take both live XM and their own recorded music with them. XM now has these radios on the market, and we believe that the ability to listen to live and recorded XM as well as the consumer's own MP3 files offers significant advantages over iPods.

32. XM's partnership with Napster, one of the most recognizable brands in digital music, was also instrumental in marketing a device that could store music that the consumer purchased or owned, to be more competitive against iPods and other MP3 players. Apple's iTunes enables users to purchase and organize music for easy upload to their MP3 players. From my perspective, XM needed to market a similarly seamless way for subscribers to purchase music they hear on XM. The "XM + Napster" partnership does just that, by giving XM subscribers a single, user-friendly interface for accessing, purchasing, and managing music. Most importantly, XM + Napster allows subscribers to discover new music via XM's diverse and extensive line-up of music broadcast programming -- a feature that iPods lack. We hope that XM + Napster will give XM a competitive and marketing advantage; however, time will tell whether this effort and whether Napster itself will be successful.

Data Services as a Growth Opportunity

33. Another key component of XM’s long-term success will be data services, an innovative line of business that XM has helped develop from scratch. *See* Cook Exhibit 7 (XM Advanced Capabilities – Beyond Audio). Automakers are particularly focused on data services, and XM’s offerings have been a factor in XM’s success in getting automakers to include XM receivers as factory-installed equipment in their cars. GM, for example, sees XM’s data services as a complement to its popular On-Star system, and [is even considering building XM’s receiver into the very same module as On-Star]. I believe XM would not have reached a long-term agreement with many of these automakers without providing access to data services and dedicating private bandwidth to those manufacturers.

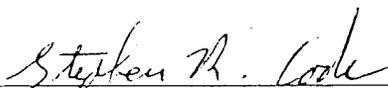
34. One data service currently offered by XM is “NavTraffic,” the first nationwide satellite-based data traffic information service that enables an overlay of current traffic conditions on a map on the navigation system in subscribers’ vehicles. *See* Cook Exhibit 8. The NavTraffic service is available in some Acura, Cadillac, Infiniti, Nissan and Lexus models, and also is available in some aftermarket equipment. XM is also working with leading parking industry operators to develop source data availability and a network to provide real-time parking space availability information through “ParkingLink.” *See* Cook Exhibit 9. XM also is developing “XM WeatherLink,” a new approach to weather for the automobile, optimized for vehicle navigation systems and focused on driver needs for information such as adverse road conditions and warnings and advisories. *See* Cook Exhibit 10. Subscribers pay premium prices for these data services, with packages starting around \$30 per month. XM is currently working with the product planning and engineering development teams of various automakers to provide

subscribers the ability to access information such as stock quotes, sports scores, weather updates, and flight information by voice command. *See* Cook Exhibit 11. This exciting project has helped to fuel the development of new technology allowing access to such information through conversational speech (e.g., “Did the Tigers win their game last night?”) rather than rigid commands requiring the use of only particular words for limited functions (e.g., “turn radio on”).

Certification

I declare under penalty of perjury that the foregoing is true and correct.

Dated: Washington, DC
October 30, 2006

A handwritten signature in cursive script, reading "Stephen R. Cook", is written over a horizontal line.

Stephen R. Cook
Executive Vice President,
Automotive,
XM Satellite Radio Inc.

Before the
 COPYRIGHT ROYALTY BOARD
 LIBRARY OF CONGRESS
 Washington, D.C.
 In the matter of: °
 Adjustment of Rates and Terms ° Docket No.
 for Preexisting Subscriptions ° 2006-1
 Services, ° CRB DSTRA
 and °
 Satellite Digital Audio Radio °
 Services °
 Room LM-408
 Library of Congress
 First and Independence
 Avenue, S.E.
 Washington, D.C. 20540
 Wednesday,
 June 6, 2007

The above-entitled matter came on
 for hearing, pursuant to notice, at 9:30
 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
 THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
 THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES: (cont'd)

On Behalf of Music Choice:
 PAUL M. FAKLER, ESQ.
 of: Moses & Singer LLP
 406 Lexington Avenue
 New York, New York 10174-1299
 (212) 554-7800
 pfakler@mosessinger.com

APPEARANCES:

On Behalf of SoundExchange:
 DAVID A. HANDZO, ESQ.
 MICHAEL B. DESANCTIS, ESQ.
 JARED O. FREEDMAN, ESQ.
 THOMAS J. PERRELLI, ESQ.
 MARK D. SCHNEIDER, ESQ.
 of: Jenner & Block
 601 Thirteenth Street, N.W.
 Suite 1200 South
 Washington, D.C. 20005
 (202) 639-6060
 dhandzo@jenner.com
 On Behalf of XM Satellite Radio Inc.:
 BRUCE RICH, ESQ.
 JONATHAN BLOOM, ESQ.
 TODD LARSON, ESQ.
 BENJAMIN MARKS, ESQ.
 BRUCE S. MEYER, ESQ.
 RALPH MILLER, ESQ.
 of: Weil Gotshal & Manges
 567 5th Avenue
 New York, New York 10016
 (212) 310-8238
 On Behalf of Sirius Satellite Radio
 Inc.:
 BRUCE G. JOSEPH, ESQ.
 KARYN K. ABLIN, ESQ.
 MATT J. ASTLE, ESQ.
 JENNIFER L. ELGIN, ESQ.
 THOMAS W. KIRBY, ESQ.
 MICHAEL L. STURM, ESQ.
 of: Wiley Rein
 1776 K Street, N.W.
 Washington, D.C. 20006
 (202) 719-7528
 bjoseph@wileyrein.com

WITNESS	DIRECT	CROSS	REDIRECT	RECROSS
Mark Vendetti				
By Mr. Miller	32			
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Stephen Cook				
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1 written direct statement based on experience,
2 compared to projections at the time of the
3 written direct statement.

4 MR. SCHNEIDER: Yes, that is
5 correct, and that's a fair characterization of
6 what I asked for. Yes.

7 CHIEF JUDGE SLEDGE: Let us take a
8 moment to discuss that.

9 (Whereupon, the proceedings in the
10 foregoing matter went off the
11 record at 10:06 a.m. and went back
12 on the record at 10:09 a.m.)

13 CHIEF JUDGE SLEDGE: We will come
14 back to order.

15 Mr. Miller, we considered that a
16 crack has been opened, but it still seems to
17 us the result is the same, that there has not
18 been sufficient disclosure to prepare -- to
19 answer that at this point. So there's no
20 change in the route.

21 MR. MILLER: Thank you, Your
22 Honor. I have no further questions on

1 THE WITNESS: Yes.
2 JUDGE WISNIEWSKI: What I'm trying
3 to get at here, because the underlying
4 information doesn't show this for the
5 projections, it does for the actuals, because
6 you have the 10K. And it looks like to me --
7 I'll ask you to confirm this -- it looks like
8 to me for the actuals from 2001 through 2005
9 the profit and loss line here is in fact
10 after-tax profit and loss.

11 THE WITNESS: Yes.
12 JUDGE WISNIEWSKI: Is that
13 similarly true for the projections?

14 THE WITNESS: Yes. One of the
15 things you're going to find, because of the
16 losses, the company has actually built up a
17 fairly large carry forward, and, you know, our
18 -- given the projections, we will actually not
19 have to pay taxes probably through this
20 period.

21 JUDGE WISNIEWSKI: Right. Well,
22 that's what I wanted to clarify.

1 redirect.

2 CHIEF JUDGE SLEDGE: Any further
3 questions by -- any further questions by any
4 of the services?

5 MR. JOSEPH: No, Your Honor.

6 CHIEF JUDGE SLEDGE: Any further
7 questions, Mr. Schneider?

8 MR. SCHNEIDER: No, Your Honor.

9 CHIEF JUDGE SLEDGE: Thank you,
10 sir.

11 Oh, I'm sorry. I'm cutting off
12 another part of the room.

13 JUDGE WISNIEWSKI: I know you're
14 anxious to be --

15 (Laughter.)

16 Just one question. If you could
17 turn to your Exhibit Number 4. As a matter of
18 clarification, this is the annual profit and
19 loss --

20 THE WITNESS: Yes.

21 JUDGE WISNIEWSKI: -- actual plus
22 projections.

1 THE WITNESS: Okay.
2 JUDGE WISNIEWSKI: Thank you.
3 CHIEF JUDGE SLEDGE: Thank you,
4 sir.
5 (Whereupon, the witness was
6 excused.)
7 Mr. Meyer?

8 MR. MEYER: Your Honor, XM calls
9 as its next witness Mr. Stephen Cook.
10 CHIEF JUDGE SLEDGE: Will you
11 raise your right hand, please, sir?
12 WHEREUPON,
13 STEPHEN COOK
14 was called for examination by Counsel for XM
15 Satellite Radio Inc. and, having been first
16 duly sworn, assumed the witness stand, was
17 examined and testified as follows:

18 DIRECT EXAMINATION
19 BY MR. MEYER:
20 Q Good morning, sir. Could you
21 please state your name for the record?
22 A Sure. I'm Steve Cook.

1 Q Okay. And where are you currently
 2 employed?
 3 A I'm employed at XM Satellite
 4 Radio.
 5 Q What's your current position
 6 there?
 7 A Currently, I'm Executive VP of
 8 Automotive.
 9 Q And when did you join XM?
 10 A I joined XM back in early 1999.
 11 Q And can you just tell us what your
 12 positions have been at XM since you joined?
 13 A Sure. When I was originally
 14 hired, I was hired as Senior VP of Sales and
 15 Marketing, and I was in that position for a
 16 number of years, promoted to Executive VP of
 17 Sales and Marketing. And then, about a year
 18 ago, in the June/July timeframe, I was moved
 19 over to concentrate on the automotive side.
 20 Q Okay. And can you just tell us
 21 your educational background?
 22 A Sure. I graduated from Duke

1 voice paging service called Conexis.
 2 Q Okay. Let me ask you to take a
 3 look, sir, at your direct written testimony.
 4 Actually, in this case, if you could provide
 5 that to the witness. Is this a -- can you
 6 certify that this is a copy of your direct
 7 written testimony in this matter?
 8 A Yes.
 9 Q And the attachments to that
 10 testimony were incorporated by you?
 11 A I'll just take a minute to look at
 12 them briefly here. Yes, these all look
 13 accurate.
 14 MR. MEYER: Your Honors, I'd like
 15 to move the admission of the direct written
 16 testimony of Stephen Cook and the attachments.
 17 And in an abundance of caution, I have three
 18 copies with exhibit stickers and three copies
 19 without exhibit stickers, whatever Your
 20 Honors' pleasure is. It will be XM Exhibit 6.
 21 (Whereupon, the above-
 22 referred to document was

1 University undergrad in 1978 and got my MBA
 2 from North Carolina.
 3 Q Thank you. And just briefly,
 4 prior to your position at XM, just tell us, in
 5 not great detail, please, your employment
 6 history.
 7 A Okay. Coming out of business
 8 school in North Carolina, I started at Procter
 9 & Gamble, and I was there for about five years
 10 working in brand management which is their
 11 consumer marketing.
 12 And left Procter to get into the
 13 cellular telephone business back in the early
 14 days there. I joined a company that had some
 15 of the licenses in the southeastern part of
 16 the U.S. for cellular service. We were
 17 acquired by GTE at the time, so I spent a
 18 number of years with GTE in their cellular
 19 business.
 20 And then, right before joining XM,
 21 I was Chief Operating Officer of a company
 22 that got one of two national licenses for a

1 marked as XM Exhibit
 2 No. 6 for
 3 identification.)
 4 CHIEF JUDGE SLEDGE: Any objection
 5 to XM Exhibit 6?
 6 MR. FREEDMAN: No, Your Honor.
 7 CHIEF JUDGE SLEDGE: Without
 8 objection, Exhibit 6 is admitted.
 9 (Whereupon, the above-
 10 referred to document,
 11 previously marked as XM
 12 Exhibit No. 6 for
 13 identification, was
 14 admitted into evidence.)
 15 MR. MEYER: Which form would you
 16 like?
 17 CHIEF JUDGE SLEDGE: The exhibit.
 18 MR. MEYER: With or without the
 19 sticker?
 20 CHIEF JUDGE SLEDGE: All exhibits
 21 are marked by regulation.
 22 MR. MEYER: Yes, sir.

1 CHIEF JUDGE SLEDGE: Prior to
 2 being offered.
 3 MR. MEYER: I understand, sir. I
 4 think our first, with Mr. Parsons when the
 5 direct written testimony was submitted by Mr.
 6 Rich, it may not have had a sticker, but we
 7 will provide the Judges with a copy that does
 8 have the stickers.

9 BY MR. MEYER:
 10 Q Now, Mr. Cook, you said your
 11 current position is Vice President in charge
 12 of automotive?

13 A Executive VP of Automotive.

14 Q Okay. And can you explain what
 15 your responsibilities are in that position?

16 A In that capacity, the -- our
 17 business is divided into two -- two main
 18 segments. You can think about the retail
 19 after-market side and the automotive side.
 20 And the side of the business that's growing
 21 most rapidly now is the automotive side, so
 22 I'm in charge of managing the relationships

1 have an arrangement with Hyundai?
 2 A Yes.
 3 Q Are there any other major
 4 automobile manufacturers?

5 A Porsche, Suzuki, Ferrari. I mean,
 6 it starts -- the list starts to get smaller
 7 after the big ones.

8 Q I should have known that, because
 9 I have it in my Ferrari.

10 (Laughter.)

11 A I hope you're enjoying it.

12 (Laughter.)

13 Q Okay. I have Sirius in my
 14 Lamborghini, so --

15 (Laughter.)

16 Now, I believe there has been some
 17 testimony about this, sir, but the -- is it
 18 true that the typical arrangement for someone
 19 who buys a vehicle that has XM installed, they
 20 get a trial subscription for a certain period
 21 of time?

22 A Yes. That's key. We try and give

1 with all of our automotive partners. These
 2 are General Motors, Toyota, Honda, Nissan,
 3 etcetera. And really trying to drive factory-
 4 installed penetration into the vehicles and
 5 just working all the day-to-day issues with
 6 the automotive companies.

7 Q Okay. Let's take that a little
 8 more slowly. Can you explain XM's automotive
 9 distribution channel?

10 A Sure. We knew from the very
 11 earliest stages that most radio listenership
 12 takes place in the vehicle. It's sort of a
 13 captive environment. There are fewer
 14 distractions for the consumer's time. And so
 15 that's a key area for us.

16 So we set about trying to work
 17 with the auto manufacturers to get them
 18 comfortable with factory installing XM
 19 Satellite Radio in the vehicles.

20 Q And you mentioned some of the auto
 21 companies that you have arrangements with --
 22 GM, Honda, Toyota, Nissan. Hyundai -- do you

1 the consumer three months of service that they
 2 do not have to pay for, so that they can get
 3 familiarized with the XM service and hopefully
 4 subscribe at the end of the trial period.

5 Q Okay. And do you know
 6 approximately how many of XM's subscribers
 7 come through this avenue of renewing their
 8 trial subscriptions?

9 A Yes. Following the trial, that's
 10 one of the metrics we track very carefully.
 11 It's a key business metric for us, and we're
 12 currently running, you know, between 51, 52
 13 percent of customers following the trial will
 14 subscribe to the XM service.

15 Q So most subscribers are acquired
 16 in this fashion?

17 A Most of the automotive
 18 subscribers, yes.

19 Q Okay.

20 A We also have the retail side of
 21 the house, as I mentioned.

22 Q Okay. Now, who was XM's first

1 automotive partner?
 2 A General Motors.
 3 Q Okay. And were you involved in
 4 negotiating the original deal with General
 5 Motors?
 6 A I was.
 7 Q Okay. And can you just describe,
 8 first of all, the nature of those
 9 negotiations?
 10 A Well, first of all, it was a
 11 complex negotiation, and challenging from the
 12 fact that the big car companies are reluctant
 13 to introduce new technology. So we had to
 14 convince them that this was something that
 15 consumers were going to want, and it would be
 16 -- it would be valuable for them to install it
 17 in their vehicles. They don't like to take a
 18 lot of risk with their vehicles.
 19 So we had to -- we structured the
 20 agreement so there was compensation in a
 21 number of different ways, primarily designed
 22 to help offset their risk and get them

1 was in here, but, Mr. Meyer, can you direct me
 2 to that?
 3 MR. MEYER: Yes, Your Honor. If
 4 you look at Exhibit 1, for example, to his
 5 written testimony, it actually describes the
 6 various economic components that are provided
 7 by the deal.
 8 CHIEF JUDGE SLEDGE: Where is that
 9 in the --
 10 MR. MEYER: With the auto
 11 companies. I'm sorry?
 12 CHIEF JUDGE SLEDGE: Where is that
 13 in the text?
 14 MR. MEYER: Let me find it, Your
 15 Honor. I believe paragraph 19.
 16 MR. RICH: Paragraph 18 is --
 17 MR. MEYER: I'm sorry? 18? 18
 18 and 19. I'm sorry, yes, 19 is the retailers,
 19 18 is the automotive, which incorporates by
 20 reference the exhibit. It's also in paragraph
 21 17, Your Honor.
 22 CHIEF JUDGE SLEDGE: Objection is

1 comfortable with installing the XM service.
 2 Q Okay.
 3 A And XM hardware.
 4 Q So based on your testimony, then,
 5 is it accurate that you had to persuade them
 6 to allow you to put your receivers in their
 7 vehicles?
 8 A Very much so.
 9 Q Okay. And now, in return for
 10 their agreement to do so, can you describe
 11 generally the economic components? I don't
 12 think it's necessary to get into the specific
 13 numbers, but the economic components of your
 14 deal with, for example, GM.
 15 MR. FREEDMAN: Your Honor, I'd
 16 object at this time to that question. The
 17 economic components of XM's deal with GM are
 18 not in the written testimony. I think this is
 19 moving past a summary of the written
 20 testimony, which is allowed under Section
 21 351.10(b).
 22 CHIEF JUDGE SLEDGE: I thought it

1 overruled.
 2 BY MR. MEYER:
 3 Q Mr. Cook, can you explain the
 4 economic components of the deals that you have
 5 with the automotive companies? And if it
 6 would be helpful to make reference to Exhibit
 7 1, please do so.
 8 A Okay. I think it may be helpful,
 9 just so you can see the logic flow. We
 10 typically start with an installation
 11 commission, which is designed to help defray
 12 some of the hardware cost to the car
 13 manufacturer for putting it in the -- putting
 14 XM radios in the vehicle. Then, there's an
 15 activation commission, which we would pay at
 16 the time a customer buys the vehicle, at the
 17 start of their trial period.
 18 And then, following the trial
 19 period, when a customer -- well, during the
 20 trial period, there are certain expenses that
 21 we pay for to contact the customer and try and
 22 convince them to sign up. And then, once we

1 get a customer to sign up following the trial
2 period, we'll typically pay a subscriber
3 activation commission at that point.

4 Q To the car company?

5 A To the car companies, correct.
6 And then, ongoing, as long as that customer
7 stays a customer and continues to pay us
8 revenue, we share a portion of that revenue
9 with the car company.

10 Q Okay. And do you also give the
11 car company some portion of your bandwidth at
12 their request?

13 A We do typically, and it varies by
14 car manufacturer. But that has been a very
15 important component for the car manufacturers,
16 actually.

17 Q Okay.

18 A And by "bandwidth," should I
19 explain what --

20 Q I think the Panel has heard a
21 description from Mr. Logan about bandwidth,
22 unless the Panel --

1 data services. Can you explain what you mean
2 by that?

3 A Yes. That gets back to the
4 bandwidth allocation that we gave the car
5 companies. And the way the car companies
6 think about our service -- I mean, most
7 consumers think about our service as the 170
8 channels of audio entertainment. But the car
9 companies think about our service as the
10 ability to send, you know, digital information
11 to the vehicle.

12 One form of the digital
13 information is the audio service, but other
14 forms are information and data we can send
15 directly to the vehicle. A good example of
16 that is we have a service that we sell through
17 the automotive channel called NavTraffic, and
18 that's where we actually can send traffic flow
19 information for major highways in the major
20 cities around the country to the vehicle, and
21 that can be displayed on the navigation
22 screen, so you can actually see -- like, if

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1 A Okay.

2 Q -- would like to hear more about
3 it.

4 Now, Mr. Cook, in your view, were
5 these expenses in connection with the
6 automotive distribution channel necessary for
7 XM?

8 A Absolutely. I mean, it was the --
9 this distribution channel, as I mentioned, I
10 mean, we're seeing today that it's the biggest
11 area of growth for our company. This year, in
12 2007, roughly nearly 70 percent of our net
13 activations will come through the automotive
14 channel.

15 And so without that, we would not
16 be able to build the scale required to really
17 have a profitable business and a successful
18 business.

19 Q Now, in paragraph 33 of your
20 direct written testimony, you talk about data
21 services as a growth opportunity, and you say
22 that automakers are particularly focused on

1 you are traveling from here to the airport,
2 and you're driving on 66, you can see what the
3 traffic flow looks like before you get there,
4 so you can take an alternate route if it looks
5 congested.

6 Q In your original negotiations with
7 GM, was that a subject of discussion?

8 A Probably. But we talked in more
9 generalities around the range of data
10 applications that could be -- not so much
11 NavTraffic, but the range of data applications
12 that could be -- that could be utilized.

13 Q Okay. Now, let's talk about the
14 retail channel. Can you describe XM's retail
15 distribution channel?

16 A Sure. That's where we sell a
17 retail after-market product to the consumer
18 through major retailers like Best Buy, Circuit
19 City, Wal-Mart, some of the smaller Mom and
20 Pop car audio stores, that sort of thing.

21 Q And do you have an estimate, at
22 least as of the time of your direct written

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1 testimony, of approximately how many
 2 subscribers XM has gained through the retail
 3 channel?
 4 A Yes. I think at the time of the
 5 testimony we had about seven million
 6 customers. About four million of those were
 7 retail, about three million were automotive.
 8 CHIEF JUDGE SLEDGE: Can I ask --
 9 MR. MEYER: Yes, sir.
 10 CHIEF JUDGE SLEDGE: -- how is it
 11 you know about retail? That's not part of
 12 your work, is it?
 13 THE WITNESS: Well, not today.
 14 But when I started with the company I was
 15 heading up automotive and retail and corporate
 16 marketing functions.
 17 CHIEF JUDGE SLEDGE: Until when?
 18 THE WITNESS: Until June/July of
 19 last year.
 20 CHIEF JUDGE SLEDGE: So what is
 21 your information about retail since June/July
 22 of last year? What somebody else has told

1 economic terms of those retailer partnerships?
 2 A Sure thing. With the -- in the
 3 retail channel, of course, you're trying to
 4 sell a separate piece of hardware, so the
 5 retail price point of that important, and so
 6 we would try and first subsidize the
 7 components, the XM componentry, of that
 8 hardware to get to the point where we could
 9 hit the right retail price.
 10 So the first element is the
 11 hardware subsidy. Then, when you get to the
 12 retailer itself, you have market development
 13 funds, which are -- which are marketing funds
 14 designed to pay for in-store merchandising
 15 material, end aisle displays, brochures, that
 16 sort of thing.
 17 Then, once the retailer sells a
 18 radio, they make a margin on the equipment,
 19 but then we also pay an activation commission
 20 at the time they sell the hardware. And then,
 21 with a couple of the larger national
 22 retailers, there is an ongoing revenue share

1 you, or do you have --
 2 THE WITNESS: Yes, but I --
 3 CHIEF JUDGE SLEDGE: -- are you
 4 involved in that?
 5 THE WITNESS: Well, not directly
 6 involved in it, but just in management
 7 briefings and staff meetings, that sort of
 8 thing. But prior -- I guess I was commenting
 9 prior, more prior to the last year.
 10 CHIEF JUDGE SLEDGE: But you're
 11 aware, as of June/July of last year, with the
 12 Automotive Division?
 13 THE WITNESS: Correct. Correct.
 14 CHIEF JUDGE SLEDGE: Okay.
 15 BY MR. MEYER:
 16 Q And, Mr. Cook, were you involved
 17 in the negotiation of some of the retailer
 18 partnerships?
 19 A I was.
 20 Q Okay. And similar to the
 21 automotive -- if you'll take a look at Exhibit
 22 2, can you just describe generally for us the

1 as well.
 2 Q Okay. And, again, as with the
 3 automotive channel, are these economic
 4 concessions necessary in your view for XM?
 5 A Yes, they are, because the
 6 retailers see new gadgets come and go all the
 7 time. And there is a limited amount of space
 8 in their store, so they have to decide which
 9 ones they think can be profitable for them and
 10 which ones the consumers are going to be
 11 interested in.
 12 Q Okay. Now, changing subject, and
 13 I'm looking in your written direct testimony
 14 at --
 15 JUDGE WISNIEWSKI: Before you
 16 change the subject --
 17 MR. MEYER: Yes.
 18 JUDGE WISNIEWSKI: -- so do you
 19 maintain a sizeable inventory at these
 20 establishments?
 21 THE WITNESS: Well, XM doesn't own
 22 the -- doesn't own the inventory. The

1 retailer will buy inventory to stock their
2 stores.

3 JUDGE WISNIEWSKI: Okay. Well,
4 then, let me put the question the other way,
5 then. Do they maintain a sizeable inventory
6 of your product? Or is it more just in time
7 kind of a --

8 THE WITNESS: Well, all the
9 retailers have the goal of trying to be as
10 just in time as possible. But they don't want
11 to -- there's an opportunity cost if -- if, as
12 they approach Christmas, for example, they
13 don't have enough inventory and they can't get
14 the inventory. So I would say it differs by
15 retailer, but most of the retailers try and
16 keep about a three- to four-week supply of
17 inventory on hand.

18 BY MR. MEYER:

19 Q I'd like to ask you about a
20 subject which in your direct written testimony
21 is discussed beginning at paragraph 22. It's
22 a subject beloved to economists, namely the

1 if we first make reference to Exhibit 3 to
2 your direct written testimony, if you could
3 just describe what that --

4 A Sure.

5 Q -- what that shows, please.

6 A Sure. Well, of course, any time
7 you take a rate increase, you are concerned
8 about consumers -- the value perception in
9 their mind changing, and you're concerned
10 about losing customers. So we did everything
11 we could to mitigate the impact. We offered
12 customers the ability to lock in that \$9.99
13 rate for -- if they wanted to buy a year or
14 two years in advance, so we -- we aggressively
15 marketed that.

16 But that notwithstanding, we still
17 saw at the time we took the rate increase,
18 this is a chart that shows churn rate. And
19 churn is a measure of the percent of
20 customers, the percent of our customer base,
21 that elects to leave our service. And so we
22 saw the churn rate spike up at the time we

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1 issue of price elasticity. Now, what was the
2 subscription fee, the monthly fee for XM, when
3 the service was launched in 2001?

4 A When we first launched, we offered
5 100 channels for \$9.99 per month.

6 Q Okay. And currently -- I know
7 this has been mentioned on the record -- but
8 currently the monthly subscription fee is
9 \$12.95?

10 A It's \$12.95 for the first unit.
11 And then, if you buy a second unit for your
12 household, it's \$6.99 for each additional
13 unit. And then, there are some discounts if
14 a consumer is willing to pay multiple years in
15 advance.

16 Q Now, at the time -- when did XM
17 increase the subscription fee from \$9.99 to
18 \$12.95?

19 A It was in April of '05.

20 Q Okay. And what was the effect of
21 the subscription increase on subscribership?
22 And, actually, it may be helpful to everybody

1 announced the rate increase. And as consumers
2 started receiving their bills over the coming
3 months, we did see an elevated level of churn
4 due to the rate increase.

5 Q Okay. And obviously, stating the
6 obvious, as I occasionally want to do, the
7 higher the churn, the worse for XM.

8 A That's correct. It means we are
9 -- more of our paying customers are leaving
10 us.

11 Q Okay. And then --

12 CHIEF JUDGE SLEDGE: Mr. Meyer?
13 I'm still puzzled about the subject matter of
14 your testimony. Why is this part of the
15 Automotive Division?

16 THE WITNESS: Well, at the time we
17 took the rate increase, I was heading up Sales
18 and Marketing, so this fell in my area at the
19 time.

20 CHIEF JUDGE SLEDGE: Well, but
21 this is not -- this is company-wide
22 information you're giving, but not part of

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1 Automotive Division.
 2 THE WITNESS: This -- that's
 3 correct. But I had company-wide
 4 responsibilities back in April.
 5 CHIEF JUDGE SLEDGE: At some time
 6 in the past.
 7 THE WITNESS: Yes. In this
 8 timeframe.
 9 CHIEF JUDGE SLEDGE: Go ahead.
 10 THE WITNESS: Okay.
 11 BY MR. MEYER:
 12 Q Did you have personal knowledge
 13 sufficient to attest to the accuracy of this
 14 chart?
 15 A Yes. This was -- this chart was
 16 tracked by my group, by a group of people
 17 reporting to me at the time.
 18 Q Okay. All right. And then, just
 19 finishing this subject, can you explain to us
 20 what Exhibit 4 shows about the effect of the
 21 increase in the subscription rate?
 22 A Sure. This next chart deals with

1 a three-month billing cycle, some are on six-
 2 month billing cycle or a one-year cycle.
 3 So as their bills came due, you
 4 know, fewer people would -- I'm sorry, that
 5 was more churn. That as they -- as we worked
 6 through the course of the year, the -- we saw,
 7 you know, a decline in our conversion rate,
 8 and it is now hovering in the 52 percent range
 9 or so.
 10 Q And I think you said earlier this
 11 was despite efforts that you made to attempt
 12 to mitigate the effect of the price increase?
 13 A That's correct. We -- right at
 14 the timeframe of the price increase, we also
 15 communicated to people coming off trial that
 16 they could -- that we were taking -- the
 17 normal price was going to be \$12.95. But if
 18 they locked in for a year or two years, they
 19 could get a \$9.99 rate.
 20 MR. MEYER: Okay. I have no
 21 further questions at this time. Thank you.
 22 CHIEF JUDGE SLEDGE: Any questions

1 -- Exhibit 4 deals with automotive trial
 2 conversion. And I mentioned before that when
 3 people buy a new car with XM we give them a
 4 three-month trial. They don't pay for that.
 5 But then, we work very hard to get them to
 6 convert to a paying customer at the end of
 7 that three-month trial period, and we measure
 8 that statistic very carefully.
 9 And prior to the rate increase,
 10 what this is showing is that our automotive
 11 trial conversion rate was on the increase, and
 12 it was tending to run -- the last several
 13 months before the rate increase we were
 14 running around 60 to 62 percent, meaning that
 15 we were getting 60 to 62 percent of customers
 16 coming off trial electing to become a paying
 17 customer.
 18 Immediately following the rate
 19 increase we did see a reduction in the
 20 conversion rate, and that is illustrated by
 21 this chart. And you can see that, as people's
 22 bills came due, you know, some people are on

1 by Sirius?
 2 MR. JOSEPH: No, Your Honor.
 3 CHIEF JUDGE SLEDGE: Music Choice?
 4 MR. FAKLER: No, Your Honor.
 5 CHIEF JUDGE SLEDGE: Any cross by
 6 SoundExchange?
 7 MR. FREEDMAN: Yes, Your Honor.
 8 CROSS EXAMINATION
 9 BY MR. FREEDMAN:
 10 Q Good morning, Mr. Cook. I'm Jared
 11 Freedman from Jenner & Block, and I'll be
 12 asking you some questions on behalf of
 13 SoundExchange today.
 14 A Okay.
 15 Q Do you still have your written
 16 testimony in front of you?
 17 A Yes, I do.
 18 Q If you look at paragraph 2, your
 19 last sentence, you describe that your
 20 testimony will focus primarily on XM's
 21 marketing and sales efforts responsible for
 22 creating your subscriber base, is that right?

1 A Correct.

2 Q And I'd like to have you turn to

3 page 2, if you would. At the end of the first

4 paragraph you're talking about how XM

5 attracts, builds, and maintains its subscriber

6 base, is that right?

7 A Let's see. At the end of the top

8 paragraph?

9 Q Yes.

10 A Yes.

11 Q And you used some bullet points

12 there to list several of the features that XM

13 uses to attract and maintain subscribers, is

14 that right?

15 A That's correct.

16 Q And it's true, isn't it, that XM

17 studies what marketing and advertising

18 messages are likely to attract subscribers?

19 A We do a range of messaging

20 studies. That's true.

21 Q And it's true that XM has studied

22 -- when XM has done these messaging studies,

1 marked as SoundExchange Trial Exhibit 17.

2 (Whereupon, the above-

3 referred to document was

4 marked as SX Exhibit

5 No. 17 for

6 identification.)

7 A Okay. Thank you.

8 Q Mr. Cook, I'll just give you a

9 minute to look at this if you'd like.

10 A Okay.

11 Q Have you seen this document

12 before?

13 A Well, this was -- this study was

14 completed in the June 2006 timeframe. So it

15 was -- this is the timeframe when I was

16 shifting my focus to automotive. So I've seen

17 this as part of my preparation for this

18 litigation, but I haven't -- I don't recall

19 seeing this particular study at the -- back at

20 the time.

21 Q Are messaging studies when you

22 were the -- what was your title in the

1 it has found that commercial-free music is

2 among the most valued features of XM, is that

3 right?

4 MR. MEYER: Your Honor, I'll just

5 object to this as beyond the scope of

6 certainly the live testimony, but, in

7 addition, the written direct testimony as

8 well.

9 CHIEF JUDGE SLEDGE: Overruled.

10 THE WITNESS: Would you repeat the

11 question?

12 BY MR. FREEDMAN:

13 Q Sure. It's true that when XM has

14 done these messaging studies that you

15 mentioned, it has found that commercial-free

16 music is among the most valued features of XM,

17 isn't that right?

18 A People do tend to rate the

19 commercial-free aspect of the music as

20 important, I think the emphasis point being

21 the commercial-free.

22 Q I'd like to show you what we've

1 Marketing Department? Remind me.

2 A I was Executive VP of Sales and

3 Marketing.

4 Q And that ended when?

5 A That ended in the June/July

6 timeframe of 2006.

7 Q So right around the time of this

8 document?

9 A Exactly. I was just going to say

10 that in the May/June timeframe we were -- I

11 was in the -- I had the point on renegotiating

12 an extension to our Toyota agreement and our

13 Honda agreement. So I was very involved in

14 those at the time.

15 Q Is messaging something that the

16 Marketing Department worked on while you were

17 in the Marketing Department?

18 A Yes.

19 Q And are messaging studies

20 conducted by the Marketing Department?

21 A Yes.

22 Q Was this study conducted by the

1 Marketing Department?
2 A Yes, it was conducted by people in
3 my department. But, again, I was being asked
4 to focus more on the automotive aspects and
5 not the corporate marketing.

6 Q But just to be clear, at the time
7 this study was conducted, you were the head of
8 the marketing department, isn't that right?

9 A Well, what -- just to be clear,
10 what I was trying to say is that the -- you
11 know, I was transitioning in the month of June
12 and July, and so this study was complete. And
13 so I never personally reviewed the details of
14 this study.

15 There are elements that I'm
16 familiar with. I'm sure I was briefed on
17 elements. But, you know, you asked me if I
18 recall this specific document.

19 CHIEF JUDGE SLEDGE: No, that
20 wasn't the question.

21 THE WITNESS: Oh, okay.

22 CHIEF JUDGE SLEDGE: You didn't

1 THE WITNESS: Right. There was a
2 market research group within the Marketing
3 Department that would have had the lead on
4 finding a research consultant to conduct the
5 research.

6 JUDGE WISNIEWSKI: Thank you.

7 BY MR. FREEDMAN:

8 Q I'd like you, please, to turn to
9 page 3. And if you look at the second bullet
10 point, the document describes the objective of
11 this research study, which is to determine the
12 communication points that will resonate most
13 with non-subscribers and encourage them to
14 sign on with XM. Do you see that?

15 A Yes, I do.

16 Q And is that a concern -- was that
17 a concern of the Marketing Department while
18 you were the head of it?

19 A Yes. The way studies like this --
20 which you're trying to accomplish with studies
21 like this is to try and get insights into how
22 -- how you might want to tailor the

1 answer the question. The question was: at
2 the time this study was done, were you head of
3 the Marketing Department?

4 THE WITNESS: Well, I guess the
5 official -- right. The official announcement
6 went out that I was over automotive in early
7 July, I believe. So at the time this was
8 done, I would say technically I was head of
9 the Marketing Department.

10 BY MR. FREEDMAN:

11 Q Thank you. I'd like to ask you to
12 turn to page 3, please, of this document.

13 JUDGE WISNIEWSKI: Actually, if I
14 could clarify something. Mr. Cook, you had
15 mentioned that these studies were conducted by
16 that department that you had headed at that
17 time. My question is: were they actually
18 conducted, or were they simply commissioned?

19 THE WITNESS: Commissioned.

20 JUDGE WISNIEWSKI: I notice on the
21 bottom here there seems to be someone called
22 Data Development Worldwide. I assume it's --

1 advertising to encourage adoption of XM.
2 That's correct.

3 Q And if I could have you please
4 turn to page 6 of the document. Do you see at
5 the very bottom of the document -- I'm picking
6 up in the middle of a sentence -- the document
7 says, "The bottom line is commercial-free
8 music is the most appealing theme, no matter
9 how you say it." Do you see that?

10 MR. MEYER: Your Honor, I realize
11 I've tried this objection unsuccessfully once
12 before, but I'm going to make one more shot at
13 it. I don't think it's appropriate to read
14 into the record verbatim portions of the
15 document without the document being in
16 evidence. If that's permitted, then there's
17 really no point in putting the document into
18 evidence at all, and it really circumvents my
19 ability to object to the admissibility of the
20 document.

21 CHIEF JUDGE SLEDGE: Mr. Freedman?

22 MR. FREEDMAN: I'm glad to move

1 the admission of the document right now, Your
2 Honor.

3 CHIEF JUDGE SLEDGE: Any objection
4 to Exhibit 17?

5 MR. MEYER: I would object to the
6 foundation, based on the fact that the witness
7 has testified that he does not recall seeing
8 this specific document.

9 CHIEF JUDGE SLEDGE: Objection is
10 overruled. This is an exhibit authenticated
11 by the witness and part of the witness'
12 testimony. The exhibit is admitted.

13 (Whereupon, the above-
14 referred to document,
15 previously marked as SX
16 Exhibit No. 17 for
17 identification, was
18 admitted into evidence.)

19 BY MR. FREEDMAN:

20 Q Mr. Cook, when you submitted your
21 written testimony, which focuses on XM's
22 marketing efforts, were you aware of this

1 of this document until -- until now, really.

2 Q If I can please have you turn to
3 page 10 of the document.

4 A Okay.

5 Q Do you see at the top this is XM
6 messages?

7 A Yes.

8 Q And is this showing that some
9 different messages were tested, and this shows
10 the results of that testing, is that right?

11 A Yes, that appears to be the case.

12 Q And do you see, if you flip
13 through there, about three pages of different
14 messages that were tested?

15 A Yes. And it's commonplace to test
16 a wide range of messaging themes.

17 Q And the very -- the highest rated
18 message has to do with the 100 percent
19 moneyback guarantee, do you see that?

20 A I do.

21 Q And you'd agree, wouldn't you,
22 that the next -- virtually all of the messages

1 conclusion that commercial-free music is the
2 most appealing theme, no matter how you say
3 it?

4 A Again, this is -- that statement
5 is the conclusion of whoever authored or tried
6 to summarize the findings. I'm not sure I
7 would agree with -- I personally would agree
8 with that personal -- with that particular
9 statement.

10 Q And this was a study, as you say,
11 commissioned by the Department that you were
12 the head of at the time, right?

13 A Right. The market research group
14 would have commissioned this study, that's
15 correct.

16 Q And my question to you was: were
17 you aware of the conclusions of the study when
18 you submitted your written direct testimony in
19 October of 2006?

20 A Again, I'd have to say no, I
21 wasn't, because I hadn't seen -- you know, as
22 I mentioned before, I hadn't seen all elements

1 on the first page, the highest rated ones are
2 otherwise about music, isn't that right?

3 A Well, I would say, again, they are
4 -- commercial-free is a key element of the
5 second one, the third one, the fourth one, the
6 fifth one, the sixth one. Then, you get into
7 superior sound quality, more commercials,
8 breadth of playlist, etcetera.

9 So I do believe that the
10 commercial-free aspect is really a pertinent
11 point, and I know that other research I'm
12 aware of and I've seen in the past seems to
13 highlight that commercial-free is a key
14 element.

15 Q And my question to you is --

16 A Which is important, to be clear,
17 but commercial-free -- I just want to make it
18 clear that commercial-free is a critical
19 element of that.

20 Q I didn't mean to cut you off. You
21 said music is important, is that right?

22 A Yes.

1 Q And my question to you was: isn't
2 it true that virtually all of the successful
3 messages on the first page of these three
4 pages of results all mention music mostly?

5 A Well, I think they all mention
6 music in the context of commercial-free.

7 Q If you would switch to page 12,
8 please. Well, let me ask you this as a --
9 first. Elsewhere in your written direct
10 testimony -- and we'll come to this in a
11 minute -- you discuss XM's deal with Major
12 League Baseball, is that right?

13 A Yes.

14 Q And if you look here on this
15 chart, messages about Major League Baseball
16 towards the very bottom of this study, isn't
17 that right?

18 A Yes, that's correct.

19 Q I'd like to have you turn now --
20 I'm going to put that document aside and have
21 you turn, if you would, please, to your
22 written direct testimony. On page 3, in

1 A I don't recall specifically.

2 Q Do you know why you used the 2005
3 numbers instead of 2006?

4 A I think at the -- at the time of
5 the testimony it was late 2006, so I don't
6 think we had the full year expenses in.

7 Q And you've referred to this budget
8 as a limited marketing budget, isn't that
9 right?

10 A Yes.

11 CHIEF JUDGE SLEDGE: Where is
12 that?

13 MR. FREEDMAN: I'm sorry.

14 BY MR. FREEDMAN:

15 Q And that appears in Cook Exhibit 5
16 to your written direct testimony?

17 A Right.

18 Q Do you see that there?

19 A Yes.

20 Q Are you aware that this so-called
21 limited marketing budget is more than 50 times
22 greater than the royalties that XM has

1 paragraph 5, in the first sentence of your
2 testimony do you see you state, "I believe
3 that a significant increase in royalties from
4 music rights would impose a tremendous burden
5 on XM's ability to market and grow its
6 service," do you see that?

7 A Yes.

8 Q In your written direct testimony,
9 you don't provide any financial data to
10 support that claim, do you?

11 A I don't believe I do. I just talk
12 in general about the -- you know, the
13 significant expense that the marketing side of
14 our business entails.

15 Q I'd like to have you turn, if you
16 would, please, to page 5 of your written
17 testimony. In paragraph 11, you provide a
18 figure that represents XM's marketing budget
19 for 2005. Do you see that?

20 A I do.

21 Q Do you know what XM's marketing
22 budget was for 2006?

1 proposed to pay in this case for 2007 to
2 SoundExchange?

3 A Well, I'm aware of the size of the
4 budget, and we -- it's -- but I also am aware
5 that in the context of trying to accomplish
6 trying to grow the business to the extent we
7 need to and get the scale, that's the -- those
8 are the numbers that are required.

9 Q I think I asked -- simply asked a
10 question which was whether you were aware that
11 that so-called limited budget is more than 50
12 times higher than the rate that XM has
13 proposed in this case to pay SoundExchange in
14 2007.

15 A I'm not aware of that specific
16 ratio.

17 Q I'd like to have you turn, if you
18 would, please, to page 7 of your written
19 direct testimony. And if I could direct your
20 attention, please, to the very last sentence
21 on page 7. You say that XM's goal is to
22 expose a car owner to XM and to convert as

1 many possible into self-paying subscribers.
 2 Do you see that?
 3 A Yes.
 4 Q And is it fair to say that to date
 5 XM has been successful in converting car
 6 purchasers into XM subscribers?
 7 A A percentage of them. I mentioned
 8 the percentage.
 9 Q And I think you mentioned in your
 10 written testimony a percentage of 54 percent?
 11 A It's currently running around 52
 12 percent.
 13 Q I think you mentioned that this
 14 morning.
 15 A Okay.
 16 Q Is that right?
 17 A That's correct.
 18 Q And if you would look on page 8,
 19 and I think you mentioned it this morning as
 20 well, XM has signed up approximately three
 21 million subscribers through its automotive
 22 deals, is that right?

1 you.
 2 BY MR. FREEDMAN:
 3 Q Mr. Cook, I'd like to show you
 4 what we have marked as SoundExchange Trial
 5 Exhibit 18. Mr. Cook, do you have Exhibit --
 6 SoundExchange Trial Exhibit 18 in front of
 7 you?
 8 (Whereupon, the above-
 9 referred to document was
 10 marked as SX Exhibit
 11 No. 18 for
 12 identification.)
 13 A I do.
 14 Q And it's a document entitled XM
 15 Satellite Radio Change Lanes, do you see that?
 16 A Yes.
 17 Q Have you seen this document
 18 before?
 19 A You know, I -- I don't recognize
 20 it, actually. I don't recall seeing this.
 21 Q Let me have you look, if you
 22 would, please, at, for example, page 15 of the

1 A Yes. It's a little more now.
 2 That was at the time of the testimony.
 3 Q How much is it now, do you know?
 4 A It's about three and a half
 5 million.
 6 Q And it's fair to say that XM
 7 expects that number of -- the number of
 8 subscribers it will sign up through the
 9 automotive channel to continue to grow, isn't
 10 that right?
 11 A That's true.
 12 Q I'd like to show you --
 13 CHIEF JUDGE SLEDGE: If I could
 14 ask, on the number you just gave, does that
 15 include the ones that are within the free
 16 period and the ones that have been retained?
 17 Or just the ones that have renewed at the end
 18 of the free period?
 19 THE WITNESS: It does include the
 20 ones in the free period. The ones from --
 21 because -- yes.
 22 CHIEF JUDGE SLEDGE: Okay. Thank

1 document. And do you see there that there's
 2 a bar graph there?
 3 A Yes.
 4 Q And at the bottom of the bar graph
 5 there is a source, and it says XM OEM Finance
 6 Team, August 2006?
 7 A Yes.
 8 Q So would you agree that the
 9 information on this page must post date August
 10 '06?
 11 A What do you mean by "post date"?
 12 MR. MEYER: Objection. It calls
 13 for speculation. He's not familiar with the
 14 document.
 15 CHIEF JUDGE SLEDGE: You are
 16 suggesting he doesn't know. We don't know
 17 that, so at this point overruled.
 18 THE WITNESS: So your question --
 19 explain --
 20 BY MR. FREEDMAN:
 21 Q I may have not phrased it very
 22 artfully. Let me try again. What I was

1 wondering is, based on that date, was this
 2 chart created after August 2006?
 3 A I am speculating, but I would have
 4 to -- I'd have to assume so, or around August
 5 6th, I would say.
 6 Q And when did you become the
 7 Executive Vice President for XM's OEM?
 8 A At the June/July timeframe of '06.
 9 Q Looking at the document, moving
 10 away from that page just for a minute, if you
 11 could turn to page 2, which provides an
 12 agenda. Do you see that?
 13 A Yes.
 14 Q And it mentions XM's OEM business,
 15 do you see that?
 16 A I do.
 17 Q It mentions current and future OEM
 18 customers, do you see that?
 19 A Yes.
 20 Q XM's OEM marketing, do you see
 21 that?
 22 A I do.

1 Cook.
 2 A Oh, okay.
 3 Q In your capacity as the Executive
 4 Vice President of XM's OEM Division, do you
 5 see projections related to the XM's OEM
 6 business?
 7 A I do.
 8 Q And do you see projections in
 9 particular for the number of cars that will be
 10 served with XM's services in them?
 11 A Yes.
 12 Q Let me ask you now to look at
 13 page 15. Do you see this shows XM new and
 14 used vehicle sales from 2002 to 2011?
 15 A Yes.
 16 Q Looking at the numbers here, the
 17 projections here, do those projections look
 18 correct to you?
 19 MR. MEYER: Object, Your Honor,
 20 based on lack of foundation and, again, the
 21 document is not in evidence, and it would --
 22 if it were to be offered, I would object to

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1 Q Is this the kind of document that
 2 you see in the ordinary course of business as
 3 the Executive Vice President for OEM?
 4 A Not always. A lot of times what's
 5 -- you know, I've got a group within my --
 6 within my organization who may, you know,
 7 prepare an overview for another organization
 8 in the company, like the programming group or
 9 something like that. So, you know, this does
 10 look like it was drafted by people on my team.
 11 But, again, I'm not -- I don't recall seeing
 12 this document myself.
 13 Q So this is an OEM Department
 14 document, but you're not -- you don't know if
 15 you've actually seen it before, is that right?
 16 A Yes, and I'm not sure what the
 17 purpose of this was.
 18 Q Let me have you turn back, if you
 19 would, please, to page 15.
 20 A Okay.
 21 Q Let me ask you a question first --
 22 I apologize -- not related to that page, Mr.

1 it, so I think it's inappropriate to use it in
 2 this manner when it's not in evidence.
 3 CHIEF JUDGE SLEDGE: But he has
 4 laid the foundation that this is part of his
 5 department and part of his function as head of
 6 that department.
 7 MR. MEYER: Your Honor, I believe
 8 he said he does not always see information
 9 like this, and he has not seen this particular
 10 document.
 11 CHIEF JUDGE SLEDGE: Overruled.
 12 JUDGE ROBERTS: Mr. Meyer, it
 13 might be quite surprising if Mr. Cook had no
 14 idea what the projections were for new and
 15 used vehicles containing XM radios. I hope,
 16 Mr. Cook, that you would have some idea what
 17 your company's projections are for the future.
 18 THE WITNESS: Yes, I do. Go
 19 ahead. And so was your question, do these
 20 look like the kinds of new vehicle sales
 21 projections we might have had back in the
 22 August '06 timeframe?

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1 BY MR. FREEDMAN:
 2 Q My question was: do these
 3 projections look correct to you?
 4 A Well, again, you know, it's a Data
 5 document, so -- so, and we do update our
 6 projections periodically. So I'm -- but they
 7 look reasonably close to what we would have
 8 projected back in those -- you know, in that
 9 timeframe.
 10 Q Are your projections -- what are
 11 your projections now? You're alluding there
 12 that you may have different projections. What
 13 are your projections now?
 14 A Well, let me give a -- let me give
 15 a little background on how we do our
 16 projections. The car companies, their
 17 planning cycle is quite long, so they provide
 18 us with their expectations for how many
 19 vehicles they are going to be building XM into
 20 in the outyears. And so we take as much
 21 information as they give us.
 22 We take their information, and we

1 between current and 2011, yes. There is -- I
 2 wouldn't say steady, because the 2006 you can
 3 see was a little bit off. But, yes, growth
 4 through the period.
 5 Q And putting aside what you see on
 6 this chart, let's look at this way, seeing
 7 what you see on the chart, is that consistent
 8 with your own understanding of the growth
 9 you're expecting in the vehicle sales over
 10 that time period?
 11 A We do expect quite a bit of growth
 12 over the coming years, yes, in the automotive
 13 side.
 14 Q Do you know the number of sales
 15 you expect by 2012?
 16 A I don't focus on -- on a per year
 17 basis, I don't really focus that much on the
 18 outyears. But, yes, so I couldn't tell you
 19 that number off the top of my head for '12.
 20 Q And you pointed this out a second
 21 ago, but just to be clear, these are sales,
 22 this is not -- to figure out the number of

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1 try and build our information based on new
 2 vehicle sales, and then separately we -- we
 3 run internal estimates on once you get new
 4 vehicles out there, and some of which don't
 5 subscribe, that creates a pool of used
 6 vehicles. And so we make projections on the
 7 used vehicle side as well. So that's how it's
 8 done.
 9 Q My question is: what are the
 10 projections currently?
 11 A So currently they may vary some
 12 from this, but, I mean, I'm looking at 2008.
 13 These look reasonably close, a little less
 14 than \$4 million new vehicle sales in 2008. I
 15 think that's correct. But that's new vehicle
 16 sales, that's not customers, just to be clear.
 17 So --
 18 Q Right. So in terms of new vehicle
 19 and used vehicle sales, would you agree that
 20 this chart shows steady growth over the period
 21 shown here, which is through 2011?
 22 A Certainly -- yes, certainly growth

1 people who you expect to subscribe to XM as a
 2 result of these sales, you'd need to apply a
 3 conversion rate to these numbers, is that
 4 right?
 5 A It's a little more complicated
 6 than that. Because General Motors and Honda
 7 customers are customers at the time of the
 8 sale, the time they go on trial, because we're
 9 being compensated from those car companies for
 10 the trial period, but Toyota, Nissan, other
 11 car companies, we count them at the time they
 12 convert, not when the vehicle is sold. So
 13 there is -- so it's a bit of a mixed
 14 calculation you have to run.
 15 Q And the conversion rate I think
 16 you testified this morning is around 51 or 52
 17 percent, is that right?
 18 A That's what it has been running
 19 the last several quarters.
 20 Q Could you apply the conversion
 21 rate to the predicted number of sales to
 22 determine the number of people who are

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1 projected to subscribe to XM through the OEM
2 channel for the period shown here, which is
3 through 2011?

4 A That would be -- that would be an
5 approximation, because it -- the conversion
6 rate varies a little bit by car manufacturer.
7 And so you -- but you could do that on a top-
8 level basis.

9 Q I'd like to have you turn to page
10 43 of this document, if you would, please.
11 This page includes a slide called XM's OEM
12 Business, do you see that?

13 A I do.

14 Q And it lists 10 automotive
15 companies, do you see that?

16 A Yes.

17 Q Does XM have deals with all 10 of
18 those companies?

19 A With the exception of VW. We used
20 to have VW, and you can see it is zeroed out
21 in the outyears, so Sirius has that deal
22 exclusively, currently.

1 Q And this document, again, shows
2 the projected sales, does it not, from each of
3 those companies and provides a total at the
4 bottom?

5 A Well, this is actually production,
6 so this is calendar year vehicles produced,
7 which is a little different than sales.

8 Q And would you agree with me that
9 the numbers here, the bottom-line numbers, are
10 substantially similar to the numbers on page
11 15?

12 A Let me go back and check. They
13 look similar. They look pretty close.

14 Q Does XM have automotive deals with
15 any of the other -- any companies other than
16 the ones listed here?

17 A Well, I mentioned that since the
18 time of this document we signed Ferrari, and
19 I think that's the only one that's not on
20 here.

21 MR. FREEDMAN: Your Honor?

22 CHIEF JUDGE SLEDGE: What was that

1 word you used, you signed for?

2 THE WITNESS: We signed Ferrari.

3 CHIEF JUDGE SLEDGE: Ferrari.

4 THE WITNESS: It's limited volume,
5 but --

6 MR. FREEDMAN: Your Honor, at this
7 time, I'd like to move the admission of
8 SoundExchange Trial Exhibit 18.

9 CHIEF JUDGE SLEDGE: Any objection
10 to Exhibit 18?

11 MR. MEYER: Yes, Your Honor. I
12 don't believe he testified he was familiar
13 with this specific document. And I'd refer
14 back, again, to the rule of procedure that
15 says that an exhibit -- no evidence may be
16 submitted without a sponsoring witness, except
17 for good cause shown.

18 CHIEF JUDGE SLEDGE: With the
19 foundation laid that this is a document
20 prepared and used as part of the business of
21 his department, the objection is overruled.
22 The exhibit is admitted.

1 (Whereupon, the above-
2 referred to document,
3 previously marked as SX
4 Exhibit No. 18 for
5 identification, was
6 admitted into evidence.)

7 MR. FREEDMAN: Your Honor, I see
8 that we are 10 minutes past 11:00, which I
9 understand to sometimes be the break time.
10 I'm glad to continue or to take a break, if
11 this is a good --

12 CHIEF JUDGE SLEDGE: Is this a
13 good break time?

14 MR. FREEDMAN: Yes, sir.

15 CHIEF JUDGE SLEDGE: Court will
16 recess 10 minutes.

17 (Whereupon, the proceedings in the
18 foregoing matter went off the record at 11:09
19 a.m. and went back on the record at 11:25
20 a.m.)

21 CHIEF JUDGE SLEDGE: We will come
22 to order.

1 BY MR. FREEDMAN:
 2 Q Mr. Cook, could I please have you
 3 turn to page nine of your written direct
 4 testimony?
 5 A Yes.
 6 Q Now on page nine you discuss what
 7 you call XM's exclusive content deals. Do you
 8 see that?
 9 A Yes, paragraph 21?
 10 Q Right. And the main example you
 11 gave of an exclusive XM deal is major league
 12 baseball, is that right?
 13 A That's right.
 14 Q Now you would agree that there are
 15 other services that offer listeners the
 16 ability to listen to every MLB game played by
 17 every team all season long, isn't that right?
 18 A Well, I'm not aware of any unless
 19 you are referring to the internet. But I'm
 20 not aware of any other services where you can
 21 get, particularly in the vehicle, every game
 22 all season long.

1 away team feeds, do you see that?
 2 A I do.
 3 Q And it costs, if you look on the
 4 box that is somewhat obscured by the copy but
 5 it provides a yearly price of \$14.95. Do you
 6 see that?
 7 A I see that.
 8 Q And would you agree with me that
 9 the content that one gets on XM's so-called
 10 exclusive MLB package and this major league
 11 baseball package is the same, isn't it?
 12 A Well, no. I mean the big
 13 difference is this is an internet service
 14 limited to internet connectivity. What we
 15 offer is broadcast media to the vehicle, you
 16 know, to a portable receiver, to home
 17 receiver. So that is the key advantage of our
 18 service.
 19 Q I understand that difference. My
 20 question is about the content provided by the
 21 two services. And whether the content
 22 provided, which is, as I understand it, every

1 Q I'd like to show you what we've
 2 marked as SoundExchange Trial Exhibit 19.
 3 SoundExchange Trial Exhibit 19 shows a service
 4 called Game Day Audio. Do you see that?
 5 A Yes.
 6 Q And when you mentioned a minute
 7 ago the intranet was this a service that you
 8 were thinking of?
 9 A Well, that is the only thing I
 10 could think of where -- because I'm not aware
 11 of any other broadcast media where you can get
 12 every game all season long. I think that is
 13 one of the unique things XM offers.
 14 Q Well, this service that is listed
 15 here in SoundExchange Trial Exhibit 19 states
 16 that it provides -- enables you to listen to
 17 every 2007 regular season and post season
 18 game. Do you see that?
 19 A Over the internet, right?
 20 Q Correct.
 21 A Right.
 22 Q And it let's you choose home or

1 MLB game all season long is the same on your
 2 service and this service.
 3 A It may be. I haven't heard the
 4 service but it may be.
 5 Q If there were a service that
 6 provided every MLB game, home and team feeds,
 7 over a different service, say the internet,
 8 than you offer yours on, wouldn't you agree
 9 that is providing the same content?
 10 A Content? Yes.
 11 Q And in that case, how could the
 12 content on XM be called exclusive?
 13 A Well, I think it's in the
 14 environment we market our radios. It is
 15 exclusive in that environment I think is what
 16 we intend to convey.
 17 Q Do I understand you to mean that
 18 it is exclusive insofar as it is the only way
 19 to get all of the games on the radio? In your
 20 car?
 21 A Yes, yes. On the radio, portable
 22 devices, that sort of thing.

1 Q So there are other ways to get all
2 of the games but it is your testimony that
3 what makes it exclusive is that the device
4 upon which you receive the games?

5 A Well, I actually wasn't aware of
6 this Game Day Audio until you showed it to me.
7 But yes. So it does appear that on the
8 internet, you can get Game Day Audio. Or the
9 live feeds of the games.

10 Q And so what makes your service
11 exclusive?

12 A Again, the environment that we
13 offer it in. I mean you cannot get internet
14 in your vehicle. And I think I mentioned
15 earlier in my testimony that the vehicle is,
16 you know, the key environment for us. It is
17 where most radio listenership occurs.

18 And, you know, the portable audio
19 market is another big market. You know,
20 again, you can't get this kind of feed in that
21 environment. So I think that is what we
22 referred to from a marketing standpoint.

1 Is that right?

2 A That is correct.

3 Q Now it is accurate to say that
4 people can watch Oprah on television every
5 day, right?

6 A They can. But that is different
7 content than what we are offering.

8 Q They can watch Oprah on TV every
9 day. Is that right?

10 A Yes, they can. The Oprah Show,
11 which we don't carry on our service.

12 Q And there is an Oprah Magazine, is
13 that right?

14 A Correct.

15 Q And you say on page nine that XM
16 spent 55 million dollars to acquire the Oprah
17 programming and launch the channel. Do you
18 see that?

19 A Yes, that is over the three-year
20 term of the agreement.

21 Q It is a three-year deal. And that
22 is for one Oprah channel, right?

1 Q And it is true, isn't it, that
2 putting aside this service a minute, it is
3 true that on regular, over-the-air radio,
4 people can get some baseball games in their
5 cars, right?

6 A Typically they would be able to
7 get the local home team. But if you are an
8 Atlanta Braves fan living in Washington, what
9 we offer is the ability to get to follow the
10 Atlanta Braves when you live in a different
11 city.

12 Q So the answer to my question is
13 yes?

14 A You can get the local team, yes.

15 Q Now you also mention in your
16 discussion of XM's exclusive content deals a
17 deal that XM has with Oprah Winfrey. Do you
18 see that sort of on pages nine going up to
19 page ten?

20 A Yes.

21 Q And this is another example,
22 according to you, of exclusive content on XM.

1 A That is correct. One channel,
2 multiple shows. Multiple shows.

3 Q And you don't think that XM
4 overpaid for that content, do you?

5 A I don't. I think Oprah is a
6 unique entertainment property. And what we
7 carry on our service -- a lot of the guests
8 she typically has on her show, they are
9 experts in their fields. I think it is
10 compelling content for the female listener.

11 Q I'd like to show you what we have
12 marked as SoundExchange Trial Exhibit 20.

13 (Whereupon, the above-
14 referred to document was
15 marked as SoundExchange
16 Exhibit No. 20 for
17 identification.)

18 BY MR. FREEDMAN:

19 Q Mr. Cook, if I could have you look
20 at the first page of the document.

21 A Yes.

22 Q At the top, do you see it says

1 Programming Agreement Between Harpo Radio and
 2 XM Satellite Radio?
 3 CHIEF JUDGE SLEDGE: Mr. Meyer?
 4 MR. MEYER: Your Honor, yes,
 5 before we get into a discussion of the content
 6 and certainly before it is offered in
 7 evidence, this represents the agreement
 8 between XM and Oprah Winfrey, at least her and
 9 her entities. It contains financial terms of
 10 that deal, which are confidential and highly
 11 proprietary.
 12 And so I would object at this
 13 point -- I would not object to its admission
 14 if he intends to admit it. But if we are
 15 going to speak about the terms or admit it, it
 16 should be on a restricted record.
 17 CHIEF JUDGE SLEDGE: Any objection
 18 to the motion?
 19 Without objection, the motion is
 20 granted.
 21 (Whereupon, the proceedings went
 22 into Closed Session.)

1 please, to page three. And page three is a
 2 slide that shows Background, Objectives, and
 3 Methodology. Do you see that?
 4 A I do.
 5 Q And under the Background, the
 6 first bullet point under Background it says XM
 7 is interested in measuring the satisfaction
 8 levels of new subscribers and determining the
 9 reasons for subscribing. Do you see that?
 10 A I do.
 11 Q Are those issues that concerned
 12 the Marketing Department when you were the
 13 head of it?
 14 A Yes.
 15 Q You said you had seen some of the
 16 portions of this document. How could you tell
 17 that?
 18 A Well, I remember reviewing some of
 19 this document in the preparation for this
 20 litigation as well. And I flipped through it
 21 when you gave it to me.
 22 Q I'd like to have you turn to page

1 BY MR. FREEDMAN:
 2 Q Mr. Cook, I'd like to show you
 3 what was marked yesterday as SoundExchange
 4 Trial Exhibit 15. Mr. Cook, this is
 5 SoundExchange Trial Exhibit 15. It is a
 6 document called Recent XM Activation
 7 Satisfaction Study Report. Do you see that?
 8 A I do.
 9 Q Have you seen this document
 10 before?
 11 A I'm familiar with sections of this
 12 document.
 13 Q And is that in your capacity as
 14 the -- when you were the Executive Vice
 15 President for Marketing?
 16 A Well, it looks like this was
 17 published right around the time I was
 18 transitioning or had just transitioned to
 19 automotive. But I know that we -- but as I
 20 said, I think I was briefed on sections of
 21 this document.
 22 Q Let me have you turn, if you would

1 35 please. This is a slide that relates the
 2 percentage of time spent listening before and
 3 after getting XM Radio. Do you see that?
 4 A I do.
 5 Q Is that the kind of information
 6 that concerned you when you were the head of
 7 the Marketing Department?
 8 A Actually I had not seen this slide
 9 prior to the preparation for this hearing.
 10 Q Is the subject matter of the
 11 amount of time that people spend listening to
 12 XM a subject matter that concerned you when
 13 you were the head of the Marketing Department?
 14 A Indirectly. It was more of an
 15 issue for Programming and ad sales. I mean
 16 typically our listenership studies were of
 17 more value to the Programming and ad sales
 18 groups.
 19 Q Was it -- is that the kind of data
 20 that would have been provided to you or people
 21 working under your supervision in the
 22 Marketing Department?

1 A Again, not so much the
2 listenership data.
3 JUDGE ROBERTS: Maybe Mr. Freedman
4 can correct me, Mr. Cook, but I believe that
5 when Mr. Logan was up here, he professed not
6 to be aware of this information. And it was
7 represented by Counsel that perhaps you could
8 shed light on this since this was more of a
9 marketing issue.
10 THE WITNESS: Well, I'd be happy
11 to shed light on this document. But the point
12 I was trying to make was that I believe that
13 listenership and what causes somebody to buy
14 an XM Radio are two very different things.
15 And, you know, we've seen that in
16 studies we have run over the years where
17 people may listen to certain channels but if
18 that content is freely available or widely
19 available for free, it is not necessarily a
20 motivating factor to go out and subscribe to
21 XM Radio.
22 And as head of Marketing, when I

1 could, Mr. Cook.
2 A Sure.
3 Q Do you see that the tops of the
4 bar graph show the percentage of time that
5 people listen to music and various products or
6 services before they subscribe to XM?
7 A I do.
8 Q And, for example, there are some
9 diagonal lines that show people listening to
10 AM/FM radio. Do you see that?
11 A Yes.
12 Q And following the bar graph on the
13 top from the left to the right then there are
14 some parts of a grid pattern that shows how
15 much people listen to CDs and cassettes.
16 A I see that.
17 Q Then down below in the second set
18 of three bar graphs, they have added a new
19 feature which is XM. Do you see that
20 represented by the first part of those bar
21 graphs?
22 A Yes.

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1 was in that capacity, my challenge was what
2 are the things that will cause somebody to go
3 out and actually agree to pay \$12.95 a month
4 and agree to buy new hardware.
5 And so that does not always line
6 up directly with listenership is my point.
7 JUDGE ROBERTS: But this
8 particular document, which I see is Annette
9 Hoffman, Director of Research, is that someone
10 who reported to you?
11 THE WITNESS: She did report to me
12 in my capacity as head of Sales and Marketing
13 -- or not directly but she was within the
14 Market Research Group which reported up to me.
15 JUDGE ROBERTS: All right. Thank
16 you.
17 THE WITNESS: Okay.
18 JUDGE ROBERTS: Please continue.
19 MR. FREEDMAN: Thank you, Your
20 Honor.
21 BY MR. FREEDMAN:
22 Q Let me ask you about page 35 if I

1 Q And then the time listening to
2 AM/FM radio has shrunk?
3 A Yes.
4 Q Do you see that? And the time
5 listening to CDs and cassettes has shrunk from
6 33 or 34 percent before people had XM to 11 or
7 12 percent after people had XM. Do you see
8 that/
9 A I see that.
10 Q And you would agree that this is a
11 report prepared by someone who reported up
12 through the chain of command to you when you
13 were the head of the Marketing Department?
14 A Well, it would have been
15 commissioned by that group.
16 Q And just to clarify when you say
17 that group, what do you mean?
18 A The Market Research group.
19 Q Which was under your purview?
20 A Right. Prior to June/July, it was
21 under my purview, right. And I think this
22 came out in late July which may explain why I

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1 had not seen this prior to the preparation for
 2 this.
 3 MR. FREEDMAN: Your Honor, at this
 4 time I'd like to move the admission of
 5 SoundExchange Trial Exhibit 15.
 6 CHIEF JUDGE SLEDGE: Any objection
 7 to that?
 8 THE WITNESS: May I comment -- I
 9 mean --
 10 MR. FREEDMAN: Go ahead.
 11 MR. MEYER: I am going to object
 12 based on lack of foundation, Your Honor.
 13 CHIEF JUDGE SLEDGE: With the
 14 foundation laid that this was prepared by
 15 Marketing personnel under his direction, the
 16 objection is overruled. Exhibit 15 is
 17 admitted.
 18 (Whereupon, the above-
 19 referred to document was
 20 received into the record
 21 as SoundExchange Exhibit
 22 No. 15.)

1 turn to page 58 of the document.
 2 A What page?
 3 Q I'm sorry, 58.
 4 Mr. Cook, do you see in the first
 5 bullet point, the document states as a part of
 6 maintaining and continuing to grow the
 7 subscriber list, XM Satellite Radio has
 8 initiated an ongoing Customer Satisfaction
 9 Program beginning in October 2005. Do you see
 10 that?
 11 A I do.
 12 Q And if you turn to the next page,
 13 which is page 59, the first bullet point
 14 refers to interviews with XM and Sirius
 15 subscribers in October. Do you see that?
 16 A Yes.
 17 Q And in October of 2005, were you
 18 the head of the Marketing Department?
 19 A Yes.
 20 Q And I believe you testified a
 21 moment ago -- and I don't mean to put words in
 22 your mouth -- but this is the kind of study

1 THE WITNESS: Jared, did you want
 2 me to -- maybe you will ask me.
 3 CHIEF JUDGE SLEDGE: Let's wait
 4 for him.
 5 THE WITNESS: Okay.
 6 BY MR. FREEDMAN:
 7 Q Mr. Cook, I'd like to now show you
 8 what was marked yesterday as SoundExchange
 9 Trial Exhibit 1. Mr. Cook, SoundExchange
 10 Trial Exhibit 1 is entitled XM Satellite Radio
 11 Customer Satisfaction Study, Final Report. Do
 12 you see that?
 13 A I do.
 14 Q Have you seen this document
 15 before?
 16 A I have certainly seen sections of
 17 this document. We would perform periodic
 18 satisfaction studies. And often times this
 19 research was 80 to 100 pages. So I would
 20 certainly have been briefed on sections of
 21 this research.
 22 Q And if I could please have you

1 that would have been conducted by the
 2 Marketing Department?
 3 A That is correct.
 4 Q And what was the purpose of
 5 conducting these studies?
 6 A I'm sorry.
 7 Q What was the purpose of conducting
 8 these customer satisfaction studies?
 9 A Well, we would interview our
 10 customers with the hopes of finding out their
 11 impressions of our service on multiple fronts,
 12 how they interacted with our Call Center, our
 13 Listener Care Group, and whether that
 14 interaction was going well. How they liked
 15 the hardware itself if they were aftermarket
 16 customer or an automotive customer, how they
 17 liked the programming, that sort of thing.
 18 Q Let me focus in on the last
 19 comment you made about programming and have
 20 you look at page two of the document. If you
 21 look at the second bullet point -- well, this
 22 page shows the Executive Summary of the study,

1 is that correct?
 2 A Yes.
 3 Q And the second bullet points says
 4 music programming still remains the most
 5 important programming genre for nearly all
 6 satellite radio listeners despite investment
 7 in alternative and differentiating content
 8 such as sports and talk. Do you see that?
 9 A I see that. I'm not sure I agree
 10 with that point. But I see it.
 11 Q But this was at least one of the
 12 conclusions of the study conducted within your
 13 department, right?
 14 A Well, again, this would have --
 15 this Executive Summary was likely written by
 16 a, you know, junior research associated at the
 17 firm that conducted this study. So I did not
 18 proof and author these Executive Conclusions
 19 or Executive Summary Conclusions.
 20 Q When you submitted your written
 21 direct testimony in this case about XM's
 22 marketing work, did you take account of this

1 together and draft their summaries.
 2 JUDGE ROBERTS: Do you have any
 3 idea who would have prepared this for XM? I
 4 was under the impression that it was actually
 5 something prepared by XM.
 6 THE WITNESS: I don't know
 7 specifically. My expectation though is that
 8 this would have been prepared by an outside
 9 firm.
 10 JUDGE ROBERTS: This is something
 11 that you would typically get in your position
 12 as Vice President of Marketing once a year?
 13 Or every month? Every week?
 14 THE WITNESS: Customer
 15 satisfaction surveys, we tried to do on about
 16 an every six months cycle. That sometime
 17 varied a little bit but typically twice a
 18 year.
 19 JUDGE ROBERTS: So typically twice
 20 a year? And I would assume that you would use
 21 pretty much the same firm each time? Or were
 22 you contracting with multiple outside firms to

1 document?
 2 A I don't recall specifically. We
 3 produce so much research.
 4 Q Let me ask you to look at page 24
 5 of the document.
 6 A I'm there. I see it.
 7 Q Okay, great. And --
 8 JUDGE ROBERTS: Before you ask
 9 that question, Mr. Freedman, you mentioned,
 10 Mr. Cook, that this Executive Summary was most
 11 likely was written by a junior person in the
 12 Marketing Department.
 13 Yet I note that the document says
 14 it is the final report. You would have a
 15 junior person in Marketing writing a final
 16 report like this?
 17 THE WITNESS: Well, actually I
 18 thought I said a junior research associate at
 19 the vendor, the research vendor that we would
 20 hire to do a study like this. And it is
 21 customary, believe it or not, for those
 22 organizations to sort of pull the data

1 do these studies?
 2 THE WITNESS: I think this would
 3 typically be with the same firm. But I don't
 4 recall. It is possible that over the course
 5 of several years, we may have changed firms at
 6 one point. But typically we would use the
 7 same firm.
 8 JUDGE ROBERTS: Could you reveal
 9 who that firm is?
 10 THE WITNESS: It may be listed on
 11 the document here somewhere. I don't recall.
 12 JUDGE ROBERTS: I didn't see it
 13 and that's why
 14 MR. MEYER: If it would be helpful
 15 for the Court, I can identify where in the
 16 document it says that.
 17 JUDGE ROBERTS: Please.
 18 MR. MEYER: I believe on the last
 19 page of the document it says IPSOS.
 20 JUDGE ROBERTS: I'm sorry. Where
 21 is that again?
 22 MR. MEYER: In the first line on

1 the very last page. Page 59.

2 JUDGE ROBERTS: Oh, I see. IPSOS,

3 okay. All right. Well, that says IPSOS

4 conducted those interviews that are described

5 in this study. It doesn't say IPSOS did the

6 study.

7 THE WITNESS: That is the research

8 firm.

9 JUDGE ROBERTS: Did they actually

10 prepare the document?

11 THE WITNESS: That is customary.

12 They typically --

13 JUDGE ROBERTS: Is it customary

14 for them to prepare the document without

15 having any identification of them on the

16 document? But only have you identified on

17 each page of the document?

18 THE WITNESS: It is not unusual.

19 JUDGE ROBERTS: All right. As a

20 former consultant, I find that unusual. It is

21 not a good way to market your business.

22 THE WITNESS: Yes, I can tell you

1 A Right. And I think what they are

2 ranking -- again, this is the first time I saw

3 this particular slide was in the preparation

4 for these hearings.

5 But I think what it is saying is

6 that when customers were asked how important

7 each of the following types of programming

8 was, on a scale of one to ten, they could rank

9 order either -- you know, these are people

10 that ranked it either eight, nine, or ten. So

11 that is my understanding of what this says.

12 Q And where do you see the reference

13 to eight, nine, or ten.

14 A Well, just that it talks about --

15 down in the footnote where it says see six, in

16 general, how important. That is listing the

17 question that was asked. And then it says

18 percent top three box stated importance.

19 Q Yes. So if I understand your

20 testimony -- tell me if this is right -- your

21 department commissioned IPSOS to conduct this

22 survey. And IPSOS concluded that music

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1 we didn't have the staff to produce all of

2 these reports. So, I'm quite confident they

3 did.

4 BY MR. MEYER:

5 Q I'm going to direct your attention

6 again to page 24 if I could please.

7 A Twenty-four, yes.

8 Q And the first bullet point there

9 says both XM and Sirius subscribers state that

10 music is by far the most important type of

11 programming for them. Do you see that?

12 A I do.

13 Q Then there is a chart for XM and

14 one for Sirius that shows different types of

15 programming ranked. Do you see that?

16 A I do.

17 Q And for XM, music programming

18 ranks at 92 percent. Do you see that?

19 A Yes, I see that.

20 Q And then the next programming type

21 that comes in second place here is news

22 programming at 64 percent. Do you see that?

1 programming for 92 percent of the people was

2 the most important type of programming for

3 them?

4 A Well, I think what they are, you

5 know what they are saying is that 92 percent

6 of the consumers rated music programming as

7 important or either eight, nine, or ten on the

8 ten-point scale.

9 Q So music programming came in at

10 first in any event according to IPSOS?

11 A In that scale, eight, nine, or

12 ten. And the only reason I am trying to be

13 clear here is because one of the -- you know

14 having conducted and reviewed research for

15 over 20 years, I mean one of the things that

16 I think you have to be careful of is not over-

17 interpreting research.

18 And so what this is saying is that

19 music programming had a higher percentage of

20 people rating it either eight, nine, or ten.

21 It could have been most of the people rated it

22 eight. And news programming most of the

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1 people rated it ten. We just don't know from
2 looking at this.

3 Q And this hopefully will be my last
4 question. What was the reason that XM
5 commissioned IPSOS to do these customer
6 satisfaction surveys?

7 A Again, we typically try and keep a
8 pulse on our customers. And how they are
9 perceiving a range of our service elements
10 from the Call Center interaction to the
11 hardware to the programming.

12 MR. MEYER: Your Honor, at this
13 time, I'd move the admission of SoundExchange
14 Trial Exhibit 1.

15 MR. JOSEPH: I will make my same
16 objection about lack of foundation, Your
17 Honor.

18 CHIEF JUDGE SLEDGE: Mr. Joseph?

19 MR. JOSEPH: And I would add an
20 objection, Your Honor, that this document has
21 information that purports to relate to Sirius
22 with respect to which there has been no

1 Cook. You had said earlier that these type of
2 surveys were typically done twice a year. The
3 results that appear on page 24, this is for
4 the July 2006 time period? I'm not sure
5 exactly what time period this one is for.

6 But if you are getting these twice
7 a year, are these results somewhat consistent
8 with what you see twice a year?

9 THE WITNESS: Well, these results
10 are fairly consistent with listenership
11 surveys, which we do a couple of times a year
12 as well. And I think one of the other points
13 that needs to be made about this document is,
14 you know, you are asking a consumer to comment
15 on how important is the programming.

16 I believe that what they are
17 commenting on is the extent to which they are
18 listening to various programming. That is
19 very different from how important were these
20 different elements of making the decision to
21 subscribe to XM.

22 And the reason I say that is

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1 testimony concerning the significance, the
2 methodology, the statistical significance of
3 the information with respect to Sirius or
4 anything like that.

5 And at a minimum I would ask that
6 any information pertaining to Sirius would not
7 be considered evidence. At least on this --
8 I'm sorry -- with respect to -- I'm looking
9 specifically at page 24, which is the only one
10 they even questioned the witness about.

11 CHIEF JUDGE SLEDGE: Foundation
12 having been established of the report being
13 done as part of the department headed by this
14 witness, the objections are overruled. The
15 exhibit is admitted.

16 (Whereupon, the above-
17 referred to document was
18 received into the record
19 as SoundExchange Trial
20 Exhibit No. 1.)

21 JUDGE ROBERTS: Before we leave
22 this exhibit, another question for you, Mr.

1 because there is another document in this
2 report that asks that specific question. And
3 it draws a different conclusion.

4 You know, music comes in sort of
5 middle of the pack. And, you know, when you
6 ask consumers specifically why did you --
7 thinking back to when you subscribed to XM,
8 why did you subscribe? And they list a range
9 of other things from coast-to-coast, digital
10 sound quality, sports. And music kind of
11 comes in middle of the pack.

12 JUDGE ROBERTS: I was just
13 thinking back to when they subscribed but I'm
14 sure you must have research as well as to why
15 they continue to keep subscribing.

16 THE WITNESS: Well, this -- yes,
17 the satisfaction -- this satisfaction survey
18 is one of the elements we try and monitor. So
19 --

20 JUDGE ROBERTS: And would it be
21 consistent to say that music is quite
22 important to subscribers in their continuing

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1 to subscribe as opposed to their initial
 2 subscription?
 3 THE WITNESS: It's -- well, I said
 4 earlier that music, as one of our programming
 5 elements, is important. We would not deny
 6 that. I just think that people -- again, what
 7 people listen to and what they are willing to
 8 pay for I do believe are two different things.
 9 And I think they tend to pay for
 10 our unique content, not our content that is
 11 widely available for free.
 12 JUDGE ROBERTS: Well, hopefully
 13 there is going to be more testimony solicited
 14 on that very point to support that statement.
 15 All right, Mr. Freedman.
 16 MR. FREEDMAN: Your Honor, may I
 17 have the Court's indulgence for one moment?
 18 CHIEF JUDGE SLEDGE: Sure.
 19 MR. FREEDMAN: With that, I have
 20 no further questions, Your Honor.
 21 CHIEF JUDGE SLEDGE: Any redirect?
 22 MR. MEYER: Yes, please.

1 closer to lunch, you know, it gets harder to
 2 concentrate. Okay, let's start over again.
 3 BY MR. MEYER:
 4 Q Let's take your hypothetical
 5 example of a person who joins XM because they
 6 want to listen to Atlanta Braves games and
 7 they can't them on the radio in Washington,
 8 okay? Now that person decides to subscribe
 9 and pay \$12.95 a month.
 10 Approximately how many hours in a
 11 day do you think that person would have to
 12 listen to an Atlanta Braves game on the radio?
 13 A Well, the ball games are typically
 14 evening games so they might be able to catch
 15 the game a few hours in the evening on a
 16 weekday, for example.
 17 Q And if that person subscribed for
 18 the purpose of getting Atlanta Braves games
 19 and yet nevertheless spent more time listening
 20 to other types of programming, does that
 21 listenership data mean that the real reason
 22 the person subscribed was not to get Atlanta

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1 REDIRECT EXAMINATION
 2 BY MR. MEYER:
 3 Q Hello again, Mr. Cook. Let's pick
 4 up where we left off -- or actually where you
 5 left off with Judge Roberts' questions.
 6 Let's take the hypothetical
 7 example you gave earlier of somebody who lives
 8 in Washington and is a Chicago Cubs fan, do
 9 you recall that? Or was it - I think you used
 10 Atlanta Braves.
 11 A Right.
 12 Q Mr. Logan used the Cubs.
 13 And that person may have
 14 subscribed to Sirius because that would be the
 15 only way --
 16 A Do you mean XM?
 17 Q Sorry.
 18 PARTICIPANT: He's got the wrong
 19 vehicle.
 20 (Laughter.)
 21 MR. MEYER: When you've got the
 22 Lamborghini not the Ferrari. As you get

1 Braves games? Does that make sense to you?
 2 A No. You are hitting on the point
 3 I was trying to make before which is --
 4 Q Oh, good.
 5 A -- that people may, in fact, if I
 6 am an avid baseball fan, I might get XM in
 7 order to listen to the game in the evening.
 8 But I'm not going to keep the radio turned off
 9 when I'm commuting in in the morning. So I
 10 may be listening to news, I may be listening
 11 to music, I may be listening to a range of
 12 things.
 13 But the purpose I was willing --
 14 the reason I was willing to pay \$12.95 a month
 15 and buy the hardware was for the ball games in
 16 that example.
 17 Q And I believe your most popular
 18 programming, at least currently Mr. Logan
 19 testified, is Opie & Anthony. Is that
 20 correct?
 21 A Yes, I think Fox News is way up
 22 there as well.

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1 Q Okay. And if those people also
2 spend most of their time listening to music,
3 does that mean that in any way the reason they
4 subscribed was not for Opie & Anthony?

5 A No.

6 Q Now let's start with the document
7 that Mr. Freedman was last asking you about.
8 And that the Judges were asking about which is
9 SoundExchange Exhibit 1, the customer
10 satisfaction study. Do you have that, sir?

11 A Yes, I do.

12 Q And now the page that Mr. Freedman
13 was asking you about, page 24, the importance
14 of key programming genres, now first of all,
15 with respect to the word genres, do you
16 understand here that the use of the word
17 genres is meant to apply to music programming,
18 news programming, sports programming, et
19 cetera?

20 A That is my understanding.

21 Q Okay. So if you go back for a
22 second to page two, which Mr. Freedman also

1 point on page two to be suggesting the music
2 programming is more important than non-music
3 programming?

4 MR. FREEDMAN: Your Honor, I'm
5 going to object at this time for leading the
6 witness. I'm giving him some leeway on these
7 questions.

8 CHIEF JUDGE SLEDGE: Sustained.
9 It is hard to tell who is testifying here, Mr.
10 Meyers. It sounds like you are.

11 MR. MEYER: Well, I'm trying to
12 save time, Your Honor. But I will obviously
13 take that into account.

14 BY MR. MEYER:

15 Q Going back to page 24 where it
16 lists the key programming genres, do you see
17 underneath in the note you pointed to that
18 said top three box stated importance. And I
19 think you testified about your understanding
20 of that.

21 So do you understand this table to
22 be showing that 92 percent of people say that

1 asked you about, Mr. Freedman asked you about
2 the second bullet which says music programming
3 still remains the most important programming
4 genre.

5 And then looking back at page 24,
6 do you understand that to mean it is the most
7 important compared to each of the other
8 genres? News programming, sports programming,
9 traffic and weather, et cetera?

10 A Correct. In terms of the way the
11 customer answered that question about
12 importance.

13 Q Okay. So do you understand the
14 use of the term genre there when it says music
15 programming is the most important genre to
16 mean that this report is saying music is more
17 important than all of the non-music content
18 put together? As opposed to each individual
19 non-music genre? Do you follow me?

20 A I do. And I think it is referring
21 to each individual genre, not all non-music.

22 Q So you don't read that bullet

1 music programming was the most important
2 genre?

3 A Well, I understand it to mean 92
4 percent rated it either an eight, nine, or ten
5 in importance. They don't pick just one.

6 They can -- these don't add to
7 100. So they can -- they made a similar
8 rating on news, on sports, and I do believe
9 that it is not accurate to say that music is
10 more important than all non-music programming
11 because you would have to sum up those
12 different genre, the news, the sports, the
13 local traffic, et cetera.

14 But when looking at each
15 individual one, more people do rate music an
16 eight, nine, or ten. And again, I believe
17 that is based on listenership.

18 Q Okay. And if you look down in
19 that footnote that you pointed to before when
20 you pointed out the top three boxes stated
21 importance, underneath that it says arrows
22 indicate the value is significantly higher at

1 the 95 percent confidence level. Do you see
2 any arrows on this page?

3 A I don't.

4 Q All right. Now in your answer to
5 Mr. -- I'm sorry, Judge Roberts' question, you
6 made reference to another portion of the
7 document that you said went more directly to
8 the issue of reasons for subscribing. And can
9 you turn to page six please of the document?

10 A Yes, I am there.

11 Q Okay. And was this the page that
12 you were referring to?

13 A It is.

14 Q Okay. And I think we saw this
15 with another witness yesterday but under
16 reason for initial subscription, you see under
17 programming net it says for the music. And
18 can you tell us -- or read into the record
19 what it says for XM AM and XM OEM?

20 A Yes. So this is, again, just as
21 background. So this is the question where
22 they would thinking back to the time you

1 bars that it is titled Percentage of Time
2 Spent Listening Before and After Getting XM
3 Radio. Do you see that?

4 A Yes.

5 Q Now you were asked by Mr. Freedman
6 for your interpretation of this chart. Let me
7 ask you, do you interpret this chart to have
8 anything to do with the amount of CDs
9 purchased by users of the XM service?

10 A No, I don't. Again, this is
11 asking percent of time spent listening. And
12 I do think that time spent listening and
13 purchase are two different things.

14 Q Okay, now --

15 A And I would also point out --

16 Q I apologize. Now with respect to
17 the issue of listening time, which the
18 purports to go to, and this is actually easier
19 if you see this in color, but you see that
20 before getting XM, the crosshatch -- I'm sorry
21 the diagonal lines which show the numbers 59,
22 56, and 58, do you see that, sir?

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1 initially subscribed to XM or Sirius, what was
2 the main reason you subscribed to the service.
3 And so our customers are asked to comment in
4 different areas.

5 And so here it says for the music
6 -- four percent for the XM aftermarket, three
7 percent for the automotive, and Sirius
8 aftermarket was four percent.

9 Q Okay. Putting aside Sirius for
10 the moment -- and then in fairness, if we
11 include for the variety of music, what are
12 those figures?

13 A Four percent for the aftermarket
14 and four percent for the automotive OEM.

15 Q Okay. Now looking if you would
16 please at SoundExchange Exhibit 15, which Mr.
17 Freedman covered with you, that is the July
18 25th, 2006 Recent XM Activation Satisfaction
19 Study Report. Do you have that, sir?

20 A Yes.

21 Q Okay. Now Mr. Freedman asked you
22 about page 35. And this is the chart with the

1 A Yes. That is for AM and FM.

2 Q I'm look at -- okay, you answered
3 my question. Looking at the key on the left,
4 that is for AM/FM listening?

5 A Yes.

6 Q Okay. And then if you go down to
7 after getting XM, you see the checkered bars.
8 Does that represent XM?

9 A Yes.

10 Q Okay. And then next to the
11 checkered bars, you see the diagonal bars.
12 And so, again, is that AM/FM listening?

13 A Yes.

14 Q Okay. And so then is it -- do you
15 understand this chart to show that by far the
16 greater diminution in listening time came not
17 from listening to CDs but from listening to
18 terrestrial radio?

19 A Yes.

20 Q And that would be from, I guess,
21 approximately the mid-50s, before XM, and then
22 19 percent, 12 percent, and 14 percent after

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1 getting XM?
 2 A Correct.
 3 JUDGE WISNIEWSKI: Sir, what is by
 4 far the greater -- percentage terms, absolute
 5 numbers here.
 6 MR. MEYER: Well, I think both,
 7 Your Honor. What this shows is -- and the
 8 part that Mr. Freedman asked about was before
 9 getting XM, the listenership to CDs and
 10 cassettes was in the mid-30s, 34, 34, 33. And
 11 then it went down to 12, 12, and 11.
 12 And then the terrestrial radio
 13 went down from 59, 56, and 58 to 19, 12, and
 14 14.
 15 JUDGE WISNIEWSKI: Right. And
 16 isn't that about one-third in each case?
 17 That's why I'm asking the question.
 18 MR. MEYER: I think the -- well, I
 19 can do the math but --
 20 JUDGE WISNIEWSKI: That's why I'm
 21 asking the question.
 22 MR. MEYER: But the number of

1 CHIEF JUDGE SLEDGE: I'm confused
 2 again. The reduction is the same amount. It
 3 is just you are starting with a bigger amount
 4 for radio so the reduction is greater with
 5 radio. But it still reduces the same amount
 6 for CDs and radio.
 7 THE WITNESS: Well, let's see. I
 8 guess I was referring to -- I mean there is a
 9 -- the biggest shift in terms of the amount of
 10 time a customer -- they are changing habit,
 11 they used to listen to quite a bit of AM and
 12 FM and now they are listening to far less AM
 13 and FM. I mean it is taken the biggest bite
 14 in terms of time listening out of the AM/FM is
 15 sort of the way I was interpreting it.
 16 CHIEF JUDGE SLEDGE: You didn't
 17 respond to my question.
 18 THE WITNESS: Oh, I'm sorry, sir.
 19 CHIEF JUDGE SLEDGE: So the
 20 reduction is the same amount for radio as it
 21 is for CDs?
 22 THE WITNESS: I think in absolute

1 listeners -- we can do the math but certainly
 2 in terms of the number of listeners, more
 3 listeners are coming from terrestrial radio to
 4 subscription radio than from listenership to
 5 CDs.
 6 And as pointed out before, that
 7 actually benefits the record companies since
 8 terrestrial radio pay nothing.
 9 JUDGE WISNIEWSKI: Would you like
 10 to ask the question of the witness again
 11 perhaps?
 12 BY MR. MEYER:
 13 Q Do you understand that the time
 14 spent listening to terrestrial radio actually
 15 declined more than the time spent listening to
 16 CDs according to this chart?
 17 A Again, I think, you know, the
 18 pertinent point is absolute time spent
 19 listening, the AM and FM time spent listening
 20 shrunk significantly more. However --
 21 Q And if you turn to page 17 of this
 22 document please sir.

1 time, no. In percentage time, it is
 2 approximately the same.
 3 CHIEF JUDGE SLEDGE: Thank you.
 4 BY MR. MEYER:
 5 Q Take a look at page 17 of this
 6 document please. Mr. Freedman asked you,
 7 again, about page 35, which we just talked
 8 about. Now you testified at page 35 the part
 9 of time spent listening. And this page it
 10 says reasons for choosing XM. Do you see
 11 that?
 12 A Yes.
 13 Q Okay. And I just want to run
 14 through this with you quickly. In terms of
 15 what this study shows as reasons for choosing
 16 XM -- and I'm now using by bifocals and I'm
 17 still having trouble reading this -- the first
 18 one is I can get content and programming that
 19 I cannot get on AM/FM radio. Do you see that?
 20 A I do.
 21 Q Okay. And do you understand that
 22 to refer to -- well, what do you understand

1 that to refer to?

2 A I think that refers to the breadth
3 of content, you know in particular some of
4 our exclusive and unique content, some of the
5 non-music content.

6 Q Okay. And the second one says
7 there are fewer commercials. The third one
8 says it offers more variety, diversity that
9 interests me. Do you understand to relate
10 only music programming?

11 A I think it relates to the overall
12 diversity of our channel lineup.

13 Q Okay. The next one says there are
14 more stations/formats from which to choose.
15 Same question. Do you understand to relate
16 somehow solely to music?

17 A No, I think it is in the broader
18 breadth of content context.

19 Q Next one is there is less DJ
20 chatter. I think that was covered with Mr.
21 Logan.

22 Next one says better sound quality

1 A No, I don't think so.

2 Q It offers more news coverage that
3 interests me. Do you understand whether that
4 has anything to do with music?

5 A It doesn't appear to.

6 Q How about I want major league
7 baseball?

8 A That's baseball.

9 Q Family recommended -- anything to
10 do with music?

11 A Nope.

12 Q Okay. Opie & Anthony Show?

13 Music?

14 A That is a talk show.

15 Q Bob Edwards Show?

16 A That is a news talk show.

17 Q Thank you. Let me ask you about

18 SoundExchange Exhibit 19 which was the
19 printout from the mlb.com webpage. Do you
20 have that, sir?

21 A Yes.

22 Q And now I think you said that this

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1 than AM/FM. What do you understand
2 contributes to XM's superior sound quality?

3 A Well, we broadcast in digital. AM
4 and FM are analog and you get more hiss and
5 artifacts.

6 Q The next one under reasons for
7 choosing XM is I want uncensored radio. Do
8 you have an understanding as to what that is
9 referring to?

10 A I think that is referring to a
11 combination of comedy and, you know, we have
12 some talk and comedy programming that is
13 uncensored as well as music that is
14 uncensored.

15 Q By talk, are you including Opie &
16 Anthony?

17 A Yes.

18 Q I like XM Radio's devices,
19 equipment -- I think we heard testimony about
20 that from Mr. Parsons.

21 It offers more talk shows. Do you
22 understand to have anything to do with music?

1 is something that is only available on a
2 computer, on the internet?

3 A That is my understanding.

4 Q And is the ability, based on your
5 experience as the head of Marketing at XM, is
6 the ability to have content like this in your
7 car where you can move around important to
8 consumers?

9 A Yes, very important.

10 Q And n that note, if you will look
11 at SoundExchange Exhibit 17, which Mr.
12 Freedman showed you, this is the XM Satellite
13 Radio Messaging Study. Do you have that, sir?

14 A I do.

15 Q Now first of all let me ask you a
16 question about this document. Do you
17 understand this document to be setting forth
18 the reasons why people subscribe to XM?

19 A The message study?

20 Q Yes.

21 A No, not at all. This is done
22 among non-subscribers just trying to get a

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1 sense for what are some advertising messages
2 that might have promise.

3 Q Okay. And did XM actually field
4 this study?

5 A No, it was fielded through a
6 research supplier.

7 Q Okay. And if you take a look at
8 page eight please of this document, do you see
9 in the second sort of hyphenated line, it says
10 potential XM customers report listening to
11 music most frequently in transit either by
12 radio or music CDs. And many agree that they
13 drive outside of their local area, creating an
14 ideal target for satellite radio providers.

15 Are you familiar, in the course of
16 your job, with the term ubiquitous service?

17 A Yes.

18 Q And how do you understand that?

19 A That means that you can literally
20 drive across the country and not lose the
21 satellite coverage.

22 Q So, for example, if you drive from

1 A I do.

2 Q Okay. And he also directed your
3 attention to the number of hours that Oprah
4 and friends of Oprah provide programming. Do
5 you recall that?

6 A I do.

7 Q Are there other benefits that XM
8 gets from this agreement in addition to simply
9 the hours of programming time?

10 A Yes, very much so. I mean she is,
11 from a marketing standpoint, being able to
12 help people understand that they can get Oprah
13 & Friends programming is, you know, a very
14 valuable marketing element for us.

15 Q Is Oprah Winfrey a popular
16 celebrity?

17 A Of course, very popular.

18 Q Take a look at page six of the
19 contract please.

20 A Give me one second to shuffle
21 through these.

22 Q Absolutely.

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1 New York to Boston, as I often do, you can
2 listen to the same channels all the way
3 through?

4 A If you are on XM or Sirius
5 Satellite Radio. That doesn't work that way
6 with AM and FM, of course.

7 Q And is that important, based on
8 your experience, to consumers? People who
9 listen both to music and non-music
10 programming?

11 A It is very important. And, again,
12 that is one of the key distinguishing factors
13 of satellite radio is the coast-to-coast
14 coverage.

15 Q My final questions, which should
16 only take a few minutes, actually relate to
17 the agreement with Oprah Winfrey. And so I
18 guess I would request again that Mr. Donnelly,
19 with all due respect, leave us.

20 Now, Mr. Cook, Mr. Freedman asked
21 you about the financial terms of the contract
22 with Oprah Winfrey, do you recall that?

1 A Okay.

2 Q You see at the top it says
3 magazine pages, Harpo -- and Harpo is Ms.
4 Winfrey's company, is that right?

5 A Yes.

6 Q Okay. Harpo shall provide a page
7 in four O, the Oprah Magazine, monthly
8 editions during the term for purposes of
9 promoting the programming. Is that of value
10 to XM?

11 A Yes, very much so for Oprah
12 enthusiasts.

13 Q Of whom, I take it, there are
14 many.

15 A Right.

16 Q The next paragraph says oprah.com,
17 I take it Oprah has a website called
18 oprah.com, is that your understanding?

19 A That is correct.

20 Q And it says Harpo shall support
21 the launch of the channel, the channel
22 referring to the channel on XM?

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1 A Yes.

2 Q By creating an Oprah & Friends
3 section of oprah.com that provides prominent
4 promotion to Oprah & Friends as available on
5 the XM Satellite Radio service, is that of a
6 promotional benefit to XM?

7 A Yes, it is.

8 Q And you'll see the next paragraph,
9 it says direct marketing, Harpo shall send an
10 email promotion, not necessarily solely
11 dedicated to XM in connection with launching
12 in September Oprah & Friends and at least once
13 per year thereafter to the oprah.com member
14 email addresses, which have indicated their
15 willingness to receive promotions, for use in
16 promoting the programming on the XM service.
17 Is that of a promotional benefit to XM?

18 A Yes, a significant benefit.

19 Q Next is press events. Harpo and
20 XM --

21 JUDGE WISNIEWSKI: Let me stop
22 this right here for a second. Could you

1 number of customers and often times you can
2 get four to five percent take rate on
3 something like that. And then the revenue
4 associated with those customers would be
5 significant.

6 JUDGE WISNIEWSKI: Thank you.

7 CHIEF JUDGE SLEDGE: Mr. Cook, you
8 must appreciate that it is awfully frustrating
9 to Judges who are tasked to set rates and
10 regulations and terms and consider your
11 testimony when you give testimony that refers
12 to phrases that have no way to translate that
13 into rates.

14 When you talk about benefits that
15 are substantial and benefits that are not
16 quantified, we can't use that. And it is
17 surprising to me that a marketing person, who
18 is in the business of putting dollar figures
19 to activities, tells us that you can't
20 quantify what you think we ought to be
21 considering when you know that we can't use it
22 in any way unless it is quantified.

1 quantify that benefit for us?

2 THE WITNESS: Well, one of the --
3 it is always difficult to get the email
4 addresses of people that are interested in a
5 particular form of content. So to the extent
6 that we can send either a direct mail piece or
7 an email promotional offer to people that we
8 know are interested in Oprah content, that is
9 very valuable. You know that targeted
10 marketing approach is some of our most product
11 marketing.

12 JUDGE WISNIEWSKI: While I
13 appreciate that additional information, my
14 question is more directed to how much in
15 dollars.

16 THE WITNESS: How much in dollars?
17 In the case of the -- I'm not that familiar
18 with how many , you know, email addresses we
19 get but let's say it is a million email
20 addresses or several million.

21 To be able to send an email
22 promotion to that group, we could realize a

1 THE WITNESS: Well, I didn't mean
2 to frustrate you, Your Honor. There are ways
3 --

4 CHIEF JUDGE SLEDGE: You are not
5 the only witness that is guilty of this. It
6 is a very -- it spends a lot of time of no
7 benefit to our product.

8 MR. MEYER: Your Honor, may I
9 address that?

10 CHIEF JUDGE SLEDGE: No, sir.

11 THE WITNESS: Things like the
12 print ads, we can -- if that was your
13 question, I didn't mean to not answer your
14 question. I mean we can quantify things like
15 the value of four print ads. And, you know,
16 the value of -- we could get you the number of
17 email addresses we get and quantify it. So
18 there are ways to quantify that.

19 CHIEF JUDGE SLEDGE: Where is that
20 in your testimony?

21 THE WITNESS: That's -- I don't
22 believe that is in my testimony. I didn't go

1 to that level of detail.
2 CHIEF JUDGE SLEDGE: So where is
3 it of any benefit to us in our work that we
4 are doing here?

5 THE WITNESS: Well, I think the
6 other elements, a lot of times the marketing
7 elements are difficult to quantify. For
8 example, these are -- I would consider these
9 just a subset of the full benefit.

10 I mean when Oprah mentions XM on
11 her show, and millions of people, tens of
12 millions of people that watch her show see
13 that, that helps builds awareness for us,
14 which is very expensive to do through
15 traditional media marketing.

16 So there is -- I think the point -
17 -

18 CHIEF JUDGE SLEDGE: That is very
19 reasonable. But how is it of any benefit to
20 what we are here for if you can't quantify?

21 THE WITNESS: Okay. And there are
22 ways to quantify it. So if you -- I'd have to

1 you have been hearing, both on direct and
2 cross, will become apparent when we get to the
3 expert stage.

4 For example, the testimony about
5 Oprah, the reason they elicited it and the
6 reason I am eliciting what I'm eliciting is
7 that their expert, Mr. Pelcovits, basis his
8 rate proposal, in part, on looking at non-
9 music content deals and then saying they yield
10 X number of subscribers. And, therefore, you
11 take that fraction and apply it to music. And
12 that yields a rate.

13 So I think the reason Mr. Freedman
14 asked about this and the reason I'm asking
15 about is we believe that Dr. Pelcovits'
16 analysis doesn't take into account all of
17 these factors such as the promotional benefit,
18 which are, in fact, not easy to measure.

19 So, again, it may be that -- and
20 lawyers will take the blame -- it may be that
21 it is not clear where some of these things fit
22 into the overall picture. But a lot of it

1 ask the Court the best way to circle back with
2 some of that quantification information.

3 JUDGE ROBERTS: The rebuttal
4 statement.

5 THE WITNESS: Okay.

6 JUDGE ROBERTS: Mr. Meyers, you
7 wanted to add something?

8 MR. MEYER: Yes, Your Honor, I
9 think the significance of some of the fact
10 testimony -- and I certainly take the blame
11 for any deficiencies that you find in Mr.
12 Cook's testimony. I think that should be
13 directed at the attorneys, not Mr. Cook.

14 But I think the significance of
15 some of the fact testimony --

16 CHIEF JUDGE SLEDGE: But then I
17 would spend most of my time blaming attorneys
18 because we get an awful lot of testimony that
19 is of no benefit to us.

20 MR. MEYER: Well, what I was going
21 to say, Your Honor, is I think the
22 significance of a lot of the factual testimony

1 goes to the ultimate expert testimony you are
2 going to hear, which goes directly to the
3 rates.

4 CHIEF JUDGE SLEDGE: Following
5 that then, an expert is giving us conclusions
6 based on assumed facts -- don't put your foot
7 please on the wall --

8 PARTICIPANT: I'm sorry.

9 CHIEF JUDGE SLEDGE: -- that is
10 established by fact witnesses. And an expert
11 with no knowledge of the industry testifying
12 as an expert, then is supposed to take these
13 generalities and apply adjustments with those
14 generalities.

15 And so it is impossible to know
16 whether the facts assumed by the experts are
17 reasonable when the witnesses don't give us
18 any information that we can use for those
19 adjustment. To say that this is important, to
20 say that it is significant, it is as if it is
21 not said. It doesn't help anything.

22 MR. MEYER: Well, again, Your

1 Honor, I would say with respect to this
 2 specific example, Mr. Pelcovits, when he
 3 simply translates the value of non-music
 4 content into generating a certain number of
 5 subscribers, we believe that he -- and clearly
 6 he who has the burden of showing the
 7 reliability of his method -- that he has not
 8 taken into account any of the other benefits.

9 And so, therefore, his method is
 10 fundamentally flawed.

11 JUDGE WISNIEWSKI: But, Mr. Meyer,
 12 we don't know if there is another benefit if
 13 you can't produce a quantifiable benefit for
 14 us. That is the whole point here.

15 MR. MEYER: So you are suggesting
 16 that if it is not quantified, it does not
 17 exist you are saying?

18 JUDGE WISNIEWSKI: We can't say
 19 how much of it exists or doesn't exist. And,
 20 therefore, how much that it may undermine the
 21 expert you are trying to undermine or not.

22 MR. MEYER: Okay. Clearly these

1 that we can't use in there, you haven't made
 2 your case. You are not helping yourself.
 3 MR. MEYER: I understand, Your
 4 Honor, I actually this point which, again, was
 5 raised initially on direct and that is the
 6 reason why I am addressing it on cross, if
 7 doesn't actually to our direct case.

8 In other words, Dr. Woodbury, our
 9 expert, doesn't rely on this testimony. This
 10 really goes more towards undercutting their
 11 expert, Dr. Pelcovits.

12 And I would not have gotten into
 13 it on direct testimony were it not for the
 14 fact that it was brought up on cross.

15 So it is actually not something
 16 that we are replying up for Dr. Woodbury's
 17 analysis of rates. It really goes more to
 18 responding to their expert.

19 CHIEF JUDGE SLEDGE: Thank you.

20 BY MR. MEYER:

21 Q Okay. And just to finish this
 22 recitation of non-quantified commercial

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1 are things that we are going to be and, in
 2 fact, actively taking into account in
 3 connection with the rebuttal phase.

4 I mean as you know, the way this
 5 process works, both the direct cases go in
 6 simultaneously. We don't see their case until
 7 ours is already in. And that is why we have
 8 the rebuttal case.

9 So I take your comments --

10 CHIEF JUDGE SLEDGE: But those
 11 comments don't address what we are talking
 12 about.

13 MR. MEYER: Okay.

14 CHIEF JUDGE SLEDGE: What we are
 15 talking about is that your case doesn't
 16 provide us information that we can use when
 17 you don't quantify. And your case is in your
 18 direct case.

19 You are responding to other people
 20 in your rebuttal. But you are trying to make
 21 your case.

22 And if you give us generalities

1 benefits, on page six, there is one for press
 2 events. It talks about doing a joint press
 3 campaign with Oprah Winfrey's company to
 4 promote the programming on XM. Does that
 5 provide a commercial benefit?

6 A Yes, it does because she is very
 7 good at getting press.

8 Q Okay. And then finally, and my
 9 last area, on page seven it talks about
 10 advertising. And it says XM shall have the
 11 right to sell all advertising and sponsorship
 12 inventory on Oprah & Friends. Do you, in
 13 fact, sell advertising on your Oprah show on
 14 XM?

15 A Yes.

16 Q Okay. And you generate revenue
 17 from that?

18 A Right.

19 Q Okay. Anticipating a question you
 20 will probably get from the Panel, do you know
 21 how much that is?

22 A I don't.

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1 Q Okay. Do you know at any point
2 when you were the head of Marketing how that
3 was?
4 A The ad sales group didn't report
5 in to me. So I'm not that familiar with ad
6 sales in a particular channel.
7 MR. MEYER: All right. I have no
8 further questions at this time. Thank you.
9 CHIEF JUDGE SLEDGE: We will
10 recess for an hour and return at 1:37.
11 MR. JOSEPH: Your Honor, we don't
12 need to be on the record for this but we have
13 filed a joint motion on behalf of all the
14 parties. It was just filed officially with
15 the Copyright Office to address this question
16 of duplicative exhibits coming in that may or
17 may not already on the record by virtue of
18 direct case filings.
19 I don't know whether you are
20 interested in considering this now but I would
21 be happy to hand out the motion filed.
22 CHIEF JUDGE SLEDGE: Thank you.

1 XM." Are we on the same page?
2 A Right.
3 Q And Mr. Meyer walked you through
4 some of these reasons. Just very briefly a
5 few quick questions. The first category says,
6 "I can get content and programming that I
7 cannot get on AM/FM radio." Do you see that?
8 A Yes.
9 Q That would apply to music
10 programming, wouldn't it?
11 A I think it applies to a wide range
12 of programming.
13 Q And that would include music
14 programming; isn't that right?
15 A Including music.
16 Q And the next one, "There are fewer
17 commercials," that would include music
18 programming, right?
19 A Yes.
20 Q And the third one, "It offers more
21 variety, diversity that interests me," that
22 could include music programming, right?

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1 MR. MEYER: Also, I'm sorry, Your
2 Honors, can we excuse Mr. Cook?
3 CHIEF JUDGE SLEDGE: No, sir. No,
4 sir. He's still on the stand.
5 (Whereupon, the foregoing matter
6 went off the record at 12:39 p.m. to be
7 reconvened in the afternoon at 1:43 p.m.)
8 CHIEF JUDGE SLEDGE: Thank you.
9 We'll come to order. Mr. Freedman, any
10 recross?
11 MR. FREEDMAN: Very briefly, your
12 Honor. Hello again, Mr. Cook.
13 CHIEF JUDGE SLEDGE: Okay. Wait
14 just a minute. I'll have to get my computer
15 alive. It went to sleep.
16 RE-CROSS EXAMINATION
17 BY MR. FREEDMAN:
18 Q Mr. Cook, Mr. Meyer asked you a
19 few questions about SoundExchange Trial
20 Exhibit 15. I wonder if I could have you look
21 at that, please? And it's page 17. And this
22 was a slide entitled "The Reasons For Choosing

1 A It could.
2 Q And the next one, "There are more
3 station formats from which to choose," that
4 could apply to music programming, right?
5 A It could.
6 Q And the next one, "There's less DJ
7 chatter," that could apply to music
8 programming, as well, couldn't it?
9 A It could.
10 MR. FREEDMAN: No further
11 questions, your Honor.
12 CHIEF JUDGE SLEDGE: If we had
13 known that, we could have maybe gotten you
14 freed for lunch. Any questions from the
15 bench?
16 JUDGE WISNIEWSKI: Yes. For
17 clarification, if you would turn to your
18 exhibits three and four, if I understand the
19 import of your testimony or the implication of
20 your testimony might be more precise, you're
21 trying to tell us that the rate increase that
22 was made back in, was it April of 2000?

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1 THE WITNESS: April of '05.
 2 JUDGE WISNIEWSKI: April of '05
 3 had a negative impact on revenues?
 4 THE WITNESS: Correct. Because it
 5 impacted our churn, which is the percentage of
 6 customers leaving the service, and we saw an
 7 impact to conversion rate.
 8 JUDGE WISNIEWSKI: Now, that's not
 9 so surprising in a sense. I mean, a normal
 10 relationship on a typical demand curve is an
 11 inverse relationship between price and
 12 quantity, so that if the price goes up you
 13 would expect to have fewer units sold at that
 14 new price, wouldn't you?
 15 THE WITNESS: Right. It changes
 16 the value equation for --
 17 JUDGE WISNIEWSKI: The real
 18 question is what happens to total revenue as
 19 a result? Because if prices goes up,
 20 multiplied by the number of new units, even
 21 though the number of units may be less, the
 22 offset in price may make up for that in terms

1 average revenue per unit or per subscription.
 2 CHIEF JUDGE SLEDGE: All right.
 3 Thank you, sir.
 4 THE WITNESS: Thank you.
 5 CHIEF JUDGE SLEDGE: All right.
 6 MR. MILLER: Thank you, your
 7 Honor. We would like to call the last company
 8 witness on behalf of XM, Mr. Anthony Masiello,
 9 who is here to be sworn, your Honor.
 10 WHEREUPON,
 11 ANTHONY MASIELLO
 12 was called as a witness by Counsel for XM
 13 Satellite Radio and, having been first duly
 14 sworn, assumed the witness stand, was examined
 15 and testified as follows:
 16 DIRECT EXAMINATION
 17 BY MR. MILLER:
 18 Q For the record, this is Ralph
 19 Miller here for XM again. Could you state
 20 your name for the record, please, sir?
 21 A Anthony J. Masiello.
 22 Q Where are you currently employed?

1 of the additional revenue; isn't that a fair
 2 statement?
 3 THE WITNESS: That may be,
 4 although it may be that the --
 5 JUDGE WISNIEWSKI: I'm trying to
 6 get to Mr. Meyer's reference, oblique
 7 reference to elasticity earlier.
 8 THE WITNESS: Right. I think that
 9 the thinking was you could, with the rate
 10 increase, you could increase revenue. But the
 11 intention was to spend back some of that
 12 revenue on other marketing funds.
 13 JUDGE WISNIEWSKI: Well, what, in
 14 fact, happened to your annual revenue per
 15 average subscription over this period that's
 16 in the charts, 2004 through 2006?
 17 THE WITNESS: The ARPU, as we call
 18 it, did increase over time gradually.
 19 JUDGE WISNIEWSKI: Thank you.
 20 CHIEF JUDGE SLEDGE: What was the
 21 word you said? The what did increase?
 22 THE WITNESS: We call it ARPU,

1
 2 A XM Satellite Radio.
 3 Q What's your position at XM
 4 Satellite Radio?
 5 A Senior Vice President of
 6 Operations.
 7 Q And how long have you been at XM?
 8 A Since August of 1999.
 9 Q Tell us briefly about your
 10 educational background.
 11 A I attended Fordham University and
 12 also took electronic courses to study for the
 13 FCC First Class License and been involved in
 14 continuing education, particularly in the
 15 field of digital audio and digital audio
 16 compression.
 17 Q Did you receive any government
 18 licenses related to broadcasting?
 19 A Yes. FCC First Class License.
 20 Q And what did that authorize you to
 21 do?
 22 A It will authorize you to operate

PUBLIC VERSION

DESIGNATED DIRECT HEARING
TESTIMONY OF STEPHEN R. COOK
(2006-1)

June 6, 2007 Trial Transcript

**Before the
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LIBRARY OF CONGRESS
Washington, D.C.**

In the Matter of)	
)	
)	
)	Docket No. 2006-1 CRB DSTRA
Adjustment of Rates and Terms for)	
Preexisting Subscription and Satellite)	
Digital Audio Radio Services)	
)	

WRITTEN DIRECT TESTIMONY OF JOHN DOUGLAS WILSTERMAN

(On Behalf of Sirius)

Background of Testimony

1. I began working for Sirius Satellite Radio Inc. ("Sirius") on February 1, 1999. My present position is Senior Vice President and General Manager of the Original Equipment Manufacturing ("OEM") Division; OEM is the industry term for automobile manufacturers and their suppliers. I have held this position for more than four years. Prior to being named Senior Vice President, I held several other positions at Sirius. I submit this statement in support of Sirius' direct case in this matter.

2. Prior to joining Sirius, I worked for Philips Consumer Communications, a joint venture between Lucent Technologies and Philips Electronics, as Director of Wireless Business Planning and development for the Asia/Pacific region. Before that, I was Director, Sales and Marketing at Lucent Technologies, where I led the sales and marketing efforts of the Global Wireless Products Group. I also spent 17 years working for Sony Corporation's Consumer Electronics Group. There, I was Vice President of the

Mobile Electronics Division, in charge of Sony's sales and marketing efforts for the launches of the world's first car CD player, as well as in-vehicle navigation products. Under my leadership, the Sony mobile electronics product line was reinvigorated and achieved the leading market share in 1995. While at Sony, I also created the Automotive OEM Division, becoming a Vice President in 1990. In that capacity, I oversaw division operations, securing long-term agreements with Ford Motor Company and Delco Electronics (a major supplier to General Motors). In 1992, I assumed the overall leadership of the OEM and Aftermarket divisions. During my tenure at Sony, I also established Sony's OEM operations in Detroit, Mexico, and Europe. All told, I have nearly 30 years' experience in consumer and mobile electronics sales, marketing, and business development.

3. As an early employee of Sirius, I have overseen the company's agreements with the world's leading consumer electronics companies. I currently oversee Sirius' arrangements with automotive manufacturers and OEM receiver makers. I manage the teams that are implementing the Sirius automotive and car dealer distribution strategy and programs. I give this testimony based upon my personal knowledge and on information learned through my work.

Summary of Testimony

4. All of the technological and engineering challenges Sirius has overcome in order to create its satellite services would be for naught if consumers could not actually receive the satellite signal in their vehicles. Unlike other audio services, subscribers must purchase special, dedicated, high quality receiving equipment to listen to satellite radio. This equipment is expensive to develop, manufacture and market, and Sirius must

convince potential subscribers to acquire the equipment and install it in their vehicles. Sirius would not have a business unless people were willing and able to purchase the special radios needed to capture the satellite transmissions.

5. Ensuring that radios are widely available to the general public in new vehicles has required extensive work with the major automakers and consumer electronics companies. This testimony describes the substantial time, effort, and expense required to build the relationships necessary to cause these companies to invest in developing receiving equipment and making such equipment available at an affordable price to potential subscribers. It also discusses the time, effort and expense required to give our OEMs an incentive to adequately market Sirius radios to ensure that potential subscribers understand their advantages and are willing to purchase them.

Developing, Marketing and Distributing Sirius Receivers

6. Sirius refers to automobile manufacturers as “Original Equipment Manufacturers” or “OEMs” because they design and install Sirius radios as original equipment in new vehicles. We refer to the development and sale of radios in electronics stores for existing vehicles and portable equipment for home use as our “retail” or “after market” channel. We refer to our remaining markets, such as other types of vehicles including trucks and the marine market, as our “special markets” channel.

7. OEM distribution, which is the subject of my testimony, is critical to Sirius’ business. There is virtually no other audio entertainment service in the market today for which the consumer needs to acquire special dedicated hardware for just that service. AM/FM radios have been standard equipment in vehicles for decades.

Consumers can receive webcast streams over normal home computers. Cable and satellite TV subscribers can receive the subscription cable audio services over the same system they use to receive television, and can listen to those services on their existing television sets and home stereo equipment.

8. A consumer's decision to purchase a subscription to Sirius' service depends in no small part upon the availability of affordable, high quality hardware through which the consumer can receive and enjoy the service. While Sirius (with its partners) has developed the core technology that is incorporated into every Sirius radio, the development of final products is done by a vast network of automakers and consumer electronics companies, working within the engineering parameters set by Sirius. These companies include many well-known brands, such as Ford, DaimlerChrysler, BMW, Volkswagen, Audi, Kenwood, Panasonic, Delphi, and Visteon, to name just a few.

9. Particularly in view of the difficult business environment for the automotive industry, and the intense pressure to cut costs, these companies have little incentive to expend their own engineering and monetary resources to create receivers specifically for a fledgling subscription service. Creation and distribution of such high-quality consumer-end products is an expensive proposition. OEMs would not undertake the necessary development and integration of Sirius radios without large subsidies from Sirius. Further, they would not perform the end-consumer marketing activities that are essential to our ability to inform consumers about the availability and benefits of Sirius radios without additional subsidies and programs from Sirius.

Sirius' OEM Efforts

10. Our OEM marketing efforts require Sirius to be involved and provide subsidies at every step of the development and marketing chain. All Sirius radios start with the Sirius chipset. The chipset – the technology of which is explained in the testimony of my colleague, Terry Smith – provides the basic decoding of the programming signal received from the satellite or repeater when activated by a subscription. In order to ensure that the price of the final product is affordable to the consumer, and to provide the manufacturer with an incentive to invest in creating a Sirius radio incorporating the chipset, Sirius fully subsidizes the wholesale cost of chipsets to OEMs.

11. Automotive engineers need to take many factors into account as they develop radios incorporating the Sirius chipset, often in conjunction with a manufacturer, such as Alpine, Delphi, Visteon, Panasonic or Kenwood. Automotive engineers have to understand the Sirius technology and decide how best to integrate it into their vehicle. The solution for one manufacturer is almost certainly not the same for another manufacturer, because each OEM uses its own unique communications protocol within the vehicle with which the radios must be compatible. Even amongst different product lines made by the same OEM, the manufacturer will have varied engineering requirements. For example, each vehicle has unique mounting challenges for the Sirius components, such as determining the best place on the vehicle to mount the antenna to ensure that it has an unbroken line of sight to the satellites. Moreover, different vehicles have different requirements for the so-called “head unit” – the “radio” through which the customer controls the operation of the Sirius system. In addition to Sirius' exacting

engineering requirements, OEM engineers must ensure that the device will work in harmony with the rest of the vehicle's electrical and other systems.

12. In designing the head units, both Sirius and the manufacturers are concerned with ensuring that the end product will meet customer satisfaction standards. If the interface is not logical, easy to use, and otherwise well-designed, consumers will balk at purchasing the Sirius system. In addition, buyers are generally polled by JD Powers regarding their satisfaction with the vehicle, including its sound system. If the Sirius interface were to receive a poor JD Powers report, that result could harm the sales efforts of the car companies' most valuable products – their cars. Accordingly, OEMs are extremely concerned about the ease of use and the reliability of the Sirius radio and its integration with the overall design of the car.

13. The development process typically involves an exhaustive 3-4 year cycle before the devices are ready to be installed and sold in vehicles. The expenses during this development curve are considered nonrecoverable expenses by the OEMs, and thus they are quite reluctant to expend these resources without extensive subsidies from Sirius. During this development time, Sirius provides, in addition to monetary support, the facilities for extensive testing of the prototype products. For example, unlike receivers in the home, Sirius radios must work despite extreme temperature swings, and must be tested under various weather conditions. Testing is required to ensure there is no interference with other electronic devices – both the systems built into the automobile, and the variety of electronic devices customers could bring into the vehicle, such as a mobile telephone, personal digital assistant (PDA), or other wireless device. Sirius provides the facilities and equipment for such testing, often bringing the equipment to test

sites for the convenience of the manufacturer. In addition, the devices are tested under “real world” conditions. That is, the vehicles with Sirius radios installed are drive-tested over many thousands of miles in different areas of the country. This includes hot weather (desert) testing, cold weather testing, etc.

14. Integration challenges have increased in recent years, particularly as the electronics systems in vehicles (especially high end vehicles) become even more complex and interactive with other systems in the car. For example, BMW, one of our largest exclusive OEMs, uses what is known as the “I-Drive” controller to govern a wide range of ancillary functions, including HVAC, audio, telephone, navigation, as well as certain vehicle functions. A major purpose of the I-Drive system was to relieve dashboard clutter and provide a cleaner, more austere interior look by combining the functions that had been performed by numerous buttons, knobs, rotary switches, etc. into a single controller that functions somewhat like a computer mouse in conjunction with a video screen. In view of this overriding stylistic and engineering goal, it would have been unacceptable to BMW for Sirius to require a head unit controlled by ordinary buttons; Sirius was required to integrate its unit with the I-Drive and accept control inputs from the I-Drive controller via vehicle electronics. Our other exclusive OEMs likewise have unique requirements to which Sirius must conform.

15. Because the lead time for a well-integrated OEM installation is so long, Sirius radio did not become available even as an option in an OEM installation until 2002. In 2002, only one of our partners – Nissan – offered Sirius radios as an option for new car purchases, and even then, it was only available in its Pathfinder model. In 2006, Sirius radios are available in approximately 150 different car models from 27

manufacturers, including both factory and dealer installed models. That number will continue to grow. Achieving this level of market penetration, however, has cost Sirius dearly in developmental subsidies.

16. Sirius' marketing efforts only intensify once the radios are developed and ready to be installed in vehicles. The manufacturers require incentives to make Sirius radios available in their vehicles. Sirius provides these incentives in the form of marketing dollars as well as offering the manufacturers a significant portion of the ongoing revenue generated by subscriptions. Sirius pays the companies to entice them to promote the Sirius service in their direct-to-consumer marketing. Sirius also subsidizes dealer training material, salesperson training materials, consumer ads, regional promotions, and even provides salesperson reward programs. Sirius also provides discounted subscription fees (free months).

17. Payment of these developmental and marketing expenses is critical to creating a market for the Sirius service. Sirius faces a classic chicken-egg problem: without the broad availability of radios, it cannot sell subscriptions to its service, but without a strong subscription base to prove that the Sirius radio will provide added value to the car manufacturer, manufacturers have little incentive to direct resources toward creating and marketing radios.

18. Initially, Sirius radios were available only as a dealer-installed accessory. Although a necessary first step, this status resulted in relatively few sales, because dealers order from the factory the vast majority (over 90%) of the vehicles that are sold in the United States and a dealer installed accessory is generally more expensive and difficult

to install than a factory installed device. Later, Sirius became a “free flow” or stand alone option that could be installed in the factory based on a dealer’s order. This represented a step forward, because at least some cars on a dealer’s lot would be equipped with a Sirius radio. Most recently, Sirius radios have been included in “premium” and other frequently-selected trim level and options packages, leading to substantially more dealer orders. At every step of the way, however, Sirius had to provide financial support to the OEMs. Sirius’ goal is to develop momentum so that consumers ultimately grow to expect that a car will have a Sirius radio available in the same way they now expect to have an AM/FM receiver available as standard equipment.

19. Sirius is well aware that creating such a level of demand will take a long time. When I was an executive at Sony, I helped oversee the installation of the first compact disc players in automobiles. The first vehicle to have the option of a CD player was the 1987 Model Year Lincoln Towncar. Although it seems like CD players are now ubiquitous, in fact they are only factory installed in about 75% of new vehicles today – and CD players are considered to be one of the fastest-penetrating audio technologies of all time. Given these numbers for CD players, Sirius expects that it will be in the business of incentivizing manufacturers to sell Sirius radios in their vehicles for the foreseeable future. Moreover, under the existing agreements, Sirius will continue to be responsible for payment of an ongoing share of the revenue from all previously-installed OEM radios for as long as the radios are in use by a consumer (in many instances, for the entire life of the car).

20. The subsidies that Sirius pays to OEMs are also heavily influenced by the fact that Sirius must compete with XM for every manufacturer. For the reasons stated

above, an exclusive arrangement with a manufacturer is extremely valuable to Sirius, just as it is to our competitor XM, because an installed radio has a good chance of generating a substantial revenue stream for many years to come, even as the vehicle in which the radio is installed changes hands over the years. We also believe that customers who are exposed to Sirius through an OEM installation are more likely to buy a Sirius radio for their home, and more likely to look for Sirius radio availability in their next car. Automobile manufacturers are highly sophisticated and well aware of this leverage they have over both Sirius and XM. Accordingly, every time that an agreement with a manufacturer is up for renewal, Sirius is pitted against XM by the manufacturer, and Sirius must bid aggressively with incentives in order to maintain (and hopefully increase) its market share.

Sirius' Special Markets Efforts

21. While the majority of Sirius' marketing is concentrated on the OEM and aftermarket automobile markets, Sirius is also vigorously exploring what we refer to as special markets for our products. These markets include the commercial trucking market, the recreational vehicle (RV) market, the maritime vehicle market, and even the farm industry.

22. The commercial trucking market is the biggest of Sirius' special markets. Truckers spend an enormous amount of time in their vehicles, and our dependable, nationwide service is a natural fit for their mobile lifestyle. Just as with automobiles, Sirius is working with consumer electronics manufacturers to create radios both for direct factory installation into new truck cabs, and for after market installation at the driver's or trucking company's choosing. The requirements for providing manufacturing and sales

incentives in the trucking market is very similar to those outlined above for the automobile market. Our commercial truck marketing efforts has many similar elements to the OEM channel (such as factory installed radios), as well as many elements similar to the after market channel (such as retail sales at truck stops and truck dealerships). In addition, Sirius has installed working kiosks at popular truck stops to help introduce the service to drivers. Sirius undertakes similar marketing techniques, on a much smaller scale, for the RV and maritime markets.

Conclusion

23. The process of creating a new market for musical works by translating Sirius' cutting edge technology into a salable consumer service requires Sirius to invest millions of dollars in development and marketing of radios. Among audio services, these kinds of development and marketing expenses are unique to satellite digital audio – AM/FM radio stations, music subscription services piggybacked on pre-existing infrastructure (such as cable or satellite TV services), and internet-based music services do not have the same need to invest in the development and marketing of user hardware.

Before the
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Washington, D.C.

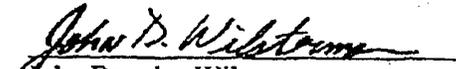
In the Matter of

Adjustment of Rates and Terms for
Preexisting Subscription and Satellite
Digital Audio Radio Services

Docket No. 2006-1 CRB DSTRA

DECLARATION OF JOHN DOUGLAS WILSTERMAN

I, John Douglas Wilsterman, declare under penalty of perjury that the statements contained in my Written Direct Testimony in the above-captioned matter are true and correct to the best of my knowledge, information and belief. Executed this 28th day of October 2006 at New York, New York.


John Douglas Wilsterman

Before the
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Washington, D.C.

APPEARANCES: (CONT.)
On Behalf of Music Choice
PAUL M. FAKLER, ESQ
Moses & Singer LLP
406 Lexington Avenue
New York, New York 10174-1299
(212) 554-7800
pfakler@mosessinger.com

In the matter of:)
)
Adjustment of Rates and Terms)
for Preexisting Subscriptions) Docket No.
Services,) 2006-1
and) CRB DSTR
Satellite Digital Audio Radio)
Services)
)

Room LM-408
Library of Congress
First and Independence
Avenue, S.E.
Washington, D.C. 20540
Thursday,
June 7, 2007

The above-entitled matter came on for hearing,
pursuant to notice, at 9:30 a.m.

BEFORE:

THE HONORABLE JAMES SLEDGE, Chief Judge
THE HONORABLE WILLIAM J. ROBERTS, JR., Judge
THE HONORABLE STAN WISNIEWSKI, Judge

APPEARANCES
On Behalf of SoundExchange
DAVID A. HANDZO, ESQ
MICHAEL B. DeSANCTIS, ESQ
JARED O. FREEDMAN, ESQ
THOMAS J. PERRELLI, ESQ
MARK D. SCHNEIDER, ESQ
Jenner & Block
601 Thirteenth Street, N.W.
Suite 1200 South
Washington, D.C. 20005
(202) 639-6060
dhandzo@jenner.com
On Behalf of XM Satellite Radio Inc.
BRUCE RICH, ESQ
JONATHAN BLOOM, ESQ
TODD LARSON, ESQ
BRUCE S. MEYER, ESQ
RALPH MILLER, ESQ
Weil Gotshal & Manges
567 5th Avenue
New York, New York 10016
(212) 310-8238
On Behalf of Sirius Satellite Radio Inc.
BRUCE G. JOSEPH, ESQ
KARYN K. ABLIN, ESQ
MATT J. ASTLE, ESQ
JENNIFER L. ELGIN, ESQ
THOMAS W. KIRBY, ESQ
MICHAEL L. STURM, ESQ
JOHN WYSS, ESQ
Wiley Rein
1776 K Street, N.W.
Washington, D.C. 20006
(202) 719-7528
bjoseph@wileyrein.com

WITNESS	DIR	CROSS	REDIR	RECCROSS
Mel Karmazin				
By Mr. Wyss			29	
Terrence Smith				
By Mr. Kirby	36		130	
By Mr. DeSanctis		90		
Doug Wilsterman				
By Mr. Sturm	143			
Jeremy Coleman				
By Mr. Sturm	197		285	
By Mr. DeSanctis	226		305	
Steve Cohen				
By Ms. Elgin	333			
EXHIBIT NO.	DESCRIPTION	MARK	RECD	
SoundExchange				
24	Sirius contract with NBA			withdrawn
26	Sirius contract with NBA with 2 Amendments	6	8	
27	Sirius contract with 112 (Stern)	9	10	
28	5/1/07 Sirius Earnings Guidance	14	15	
29	12/08/04 email Ryan to Karmazin	23	26	
30	Satellite Orbit		90	
31	Satellite Update Report	103	108	
32	Martha Stewart Agreement	227	230	
33	Fox News Study	243	244	
34	June 2006 Sirius Satellite Radio Listener Study	251	253	
35	August 2006 Customer Satisfaction Survey		262	
Sirius				
32	Written testimony of T. Smith	39	40	
33	August 2005 Sirius News Channel Evaluation	144	144	
34	June 2006 Sirius Satellite Radio Listener Study	199	199	

1 THE WITNESS: Flying at that time
2 would be FM-5, FM-6 and FM-7. What we also
3 believe is that, by launching FM-5, FM-1, 2
4 and 3 would still have useful life, and so our
5 ability to manage at that time in the future
6 exactly when to launch would be a decision
7 that we could make based upon the current
8 health of those satellites.

9 JUDGE ROBERTS: So there is
10 nothing planned for 2013 or 2015?

11 THE WITNESS: No. I believe that
12 reflects what we believe the useful -- the
13 current useful life of those satellites are.
14 I believe that is what I am recalling from our
15 10K.

16 JUDGE ROBERTS: Of 1, 2 and 3?

17 THE WITNESS: Yes, sir.

18 JUDGE ROBERTS: Thank you for
19 clarifying that.

20 CHIEF JUDGE SLEDGE: Judge
21 Wisniewski, anything else? Any other comments
22 in response to the Judges' comments?

1 Questions?

2 Thank you, sir.

3 THE WITNESS: Thank you.

4 CHIEF JUDGE SLEDGE: Would it
5 interrupt anyone's schedule to change our
6 break, now as opposed to 15 minutes from now?

7 MR. JOSEPH: No, Your Honor. That
8 would be fine with Sirius.

9 CHIEF JUDGE SLEDGE: All right.
10 We will recess for an hour.

11 (Whereupon, the foregoing matter
12 went off the record at 12:15 p.m.)

13 CHIEF JUDGE SLEDGE: Thank you.
14 We'll come to order.

15 All right, Mr. Joseph.

16 MR. JOSEPH: Your Honor, I'd like
17 to introduce my partner, Michael Sturm, whom
18 I actually introduced earlier, who will be
19 calling our net witness.

20 CHIEF JUDGE SLEDGE: Thank you.

21 MR. STURM: Your Honor, Sirius
22 calls Doug Wilsterman.

1 CHIEF JUDGE SLEDGE: Mr.
2 Wilsterman, will you please raise your right
3 hand?

4 Whereupon,
5 DOUG WILSTERMAN
6 was called as a witness by counsel for the
7 Sirius Satellite Radio, Inc., and, having been
8 first duly sworn, was examined and testified
9 as follows:

10 CHIEF JUDGE SLEDGE: Thank you.
11 Please be seated.

12 DIRECT EXAMINATION

13 BY MR. STURM:

14 Q Will you state your name, please?

15 A Doug Wilsterman.

16 Q You have in front of you Exhibit
17 33, which is your written direct testimony.

18 Can you identify that as your testimony?

19 A Yes, this is my testimony.

20 Q Right. Have you reviewed that
21 testimony again recently?

22 A Yes, I have.

1 Q Okay, and do the statements you
2 made there remain true to the best of your
3 knowledge, sir?

4 A Yes, to the best of my knowledge
5 they remain true.

6 MR. STURM: I would move the
7 admission of Sirius Exhibit 33, Your Honor.

8 CHIEF JUDGE SLEDGE: Any objection
9 to Exhibit 33?

10 MR. DeSANCTIS: No objection, Your
11 Honor.

12 CHIEF JUDGE SLEDGE: Without
13 objection it's admitted.

14 (Whereupon, the document
15 referred to was marked
16 as Sirius Exhibit No. 33
17 for identification and
18 received in evidence.)

19 BY MR. STURM:

20 Q Mr. Wilsterman, before we get into
21 the meat of your testimony, just so the Judges
22 have a little bit of context, could you tell

1 them a little bit about what you were doing
2 before you joined Sirius?

3 A Yes. Before I joined Sirius, I
4 was at Phillips Consumer Communications, which
5 was a joint venture between Lucien
6 Technologies and Phillips, and I --

7 Q What did you do there?

8 A Yes. I was the Director of the
9 business development for the Wireless Group in
10 the Asia Pacific Region.

11 Q And what kind of products were you
12 working on?

13 A We were mostly promoting handheld
14 cell phones, GSM cell phones.

15 Q And where did you go after

16 Phillips?

17 A I came immediately to Sirius. I
18 joined February 1st in 1999.

19 Q Where did you work before you were
20 at Phillips?

21 A I worked at Lucien Technologies
22 before they formed a merger with Phillips, and

1 A I don't think many. I believe
2 when I joined I was maybe the 30th or 31st
3 employee, and I believe I'm somewhere around
4 eight right now, I think, in terms of
5 longevity.

6 Q So you're in the top ten in
7 seniority in the company?

8 A Yes.

9 Q Your current responsibilities are
10 on the OEM side of the business, right?

11 A That is correct.

12 Q And what is your title?

13 A My title is Senior Vice President
14 and General Manager of the Automotive OEM
15 Division.

16 Q Have your responsibilities always
17 included the OEM relationships?

18 A I've always had one particular
19 dealing on the OEM side, but in general prior
20 to this responsibility I did have other
21 responsibilities, yes.

22 Q Okay, and what were some of those

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1 prior to that I was at Sony Corporation for 17
2 years.

3 Q What kind of responsibilities did
4 you have at Sony?

5 A I was -- my last responsibility
6 there was the Vice President for the Mobile
7 Electronics Group, and I was responsible for
8 both the after market and for the OEM business
9 at Sony.

10 Q And what is the OEM business?

11 A It's the original equipment
12 manufacture. It's the automotive business.
13 So dealing with the car partners.

14 Q When did you join Sirius?

15 A I joined, as I said, in February
16 1st, 1999.

17 Q Okay. That was several years
18 before Sirius actually had any satellites in
19 the sky, right?

20 A That's correct, yes.

21 Q How many people have been around
22 Sirius as long as you have then?

1 other responsibilities?

2 A I was initially brought on to set
3 up the distribution for the retail after
4 market side and to make all of the
5 arrangements with the hardware manufacturers
6 that would be ultimately putting Sirius
7 receivers together.

8 Q Okay, and did you have at least
9 some responsibility on the OEM side?

10 A Yes. I had one particular account
11 that I brought to Sirius and have maintained
12 since then, which was BMW.

13 Q Okay, and why did you have that
14 longstanding account?

15 A Because I just had a long
16 relationship going back to my days at Sony,
17 and they thought it was appropriate sine they
18 were based in New Jersey, too.

19 Q Can you tell us a little bit about
20 the -- I assume you have an organization that
21 works for you and reports to you.

22 A Yes, I do.

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1 Q Could you tell me what the major
2 functional areas are that are under your area
3 of responsibility?

4 A Yeah, there's a few. One is the
5 business development or the sales side, which
6 is really the group that's responsible for
7 generating and administering the relationships
8 with the actual automotive partners. So these
9 are the folks that interface on the business
10 side with the automotive partners.

11 Q And who are Sirius' major
12 automotive partners?

13 A Well, our longstanding exclusive
14 partners are what used to be known as the
15 Chrysler Corporation, which is basically
16 Chrysler-Dodge-Jeep brands. It's also BMW,
17 BMW Group, which is BMW, Mini, Rolls Royce,
18 and the entire Ford Motor company, which is
19 Ford, Lincoln-Mercury, and all of their
20 affiliated brands.

21 Q Okay. Do you also have a
22 relationship with VW-Audi now?

1 JUDGE WISNIEWSKI: I have my own
2 satellite.

3 (Laughter.)

4 BY MR. STURM:

5 Q And his Bentley?

6 A No, we have Rolls Royce, Bentley.
7 We have many.

8 Q So if he's taking his family
9 out --

10 A right. We have Maybach if you
11 happened to have a Maybach. We could do that,
12 too.

13 Q All right. You're talking about
14 the sort of areas of responsibility, and one
15 of them was a group that works these business
16 relationships --

17 A Yes.

18 Q -- with your OEM partners. Where
19 are those people located?

20 A Those people are located in New
21 York, New Jersey, and in Detroit, Michigan
22 primarily.

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1 A Yes, we have many other
2 relationships. VW-Audi is one of them. KIA,
3 others, many.

4 Q I believe Mr. Meyer, when he was
5 asking questions of your counterpart at Sound,
6 wanted to know if, I think, XM had a
7 relationship with Ferrari, and so now on Mr.
8 Meyer's other car, if he has an Astin Martin,
9 what kind of radio will he have in that?

10 A Well, if he has an Astin Martin,
11 depending on the model, he'll have a Sirius.
12 So we have other high end, you know, brands,
13 too.

14 JUDGE WISNIEWSKI: What does he
15 have in his Masserati?

16 THE WITNESS: Pardon?

17 JUDGE WISNIEWSKI: What does he
18 have in his Masserati?

19 THE WITNESS: He doesn't have
20 anything in his Masserati at this point.
21 Hopefully he'll have ours since there's an
22 affiliation with Volkswagen and Audi.

1 Q Okay, and do you also have people
2 overseas as well?

3 A Yes, I do. They're in a support
4 function on the product side, and you know, I
5 understand that we just heard from Terry
6 Smith, who is my counterpart on the technology
7 side, and you understand that he develops the
8 core technology, and then my job in our group
9 is to take that technology and have it put
10 into a product and have the product
11 application take place at the OE level.

12 So we have a whole group that
13 reports to me that is responsible for
14 facilitating that, and they're located all
15 over the -- wherever our partners are located,
16 including Japan, Korea, Germany, the U.K.,
17 here.

18 Q What are the other groups that are
19 within your area of responsibility?

20 A Yeah, there's an operational side
21 that is responsible for all the data exchange
22 between the two, between the automotive

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1 partner and Sirius, which is an incredible
2 amount of data that has to get shared.

3 Q Why does so much data have to go
4 back and forth?

5 A It's understanding who the
6 subscribers are, matching the ESN, the
7 electronic serial number of the receiver
8 itself to the VIN, the vehicle identification
9 number, taking care of all of the revenue
10 sharing, the subsidy payments, all of the NRE
11 and things like that that are part of the
12 agreements that the business side puts in
13 place. We need an administrative side to make
14 that all happen.

15 Q Now, you talk a little bit about
16 the product application group. What do they
17 do?

18 A Yeah, their primary function is to
19 take the chipset and in partnership with the
20 OE and the selected vendor -- in many cases
21 the OE is the vendor, is the person
22 determining what we call the Tier 1 supplier,

1 we've tried to transition and had some success
2 in getting into what we call an integrated
3 head unit, which means taking what most people
4 think of as the radio and putting the chipset
5 right in that radio.

6 Q What else does the Product
7 Application Group do in terms of testing and
8 validation?

9 A Well, with these lead times that
10 they always have, a good portion of the time
11 in some of these programs take three to four
12 years to develop a typical program.

13 Q Why does it take so long?

14 A Well, because of the testing and
15 validation. That must go forward. So the
16 vehicle, as you can imagine, is a very
17 difficult for an electronic product to operate
18 in, and you have to go through a lot of
19 testing, temperature, humidity, vibration, you
20 know, 1,000 hour life test. They go on long
21 drives, you know, to test the system, and
22 that whole process, you know, is not only time

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1 who is going to actually build the receiver,
2 either the black box or the integrated head
3 unit that the chipset goes in, and to work
4 with our suppliers and make sure that that all
5 gets put together and then ultimately to
6 manage the program.

7 And these long, long lead time
8 programs that the automotive business is well
9 known for, to get the Sirius receiver in the
10 vehicle.

11 Q Okay. Now, you mentioned this
12 black box versus integrated head unit.

13 A Yes.

14 Q What is the difference in --

15 A Okay. So I apologize for that.
16 We have a term that we use. We call it a DLP,
17 which it stands for down link processor. It's
18 also kind of commonly known as the black box,
19 and that is a receiver that would go in the
20 trunk of the vehicle typically.

21 In the earlier stages, that was
22 all there was available for Sirius. Over time

1 consuming. It's also quite expensive, too.

2 Q What other aspects do you have?

3 A Yeah, and then the last side would
4 be the dealer, direct dealer contact. We have
5 a whole organization. We have 28 people that
6 are field reps. It's a consulting group that
7 we've hired. They're managed by three direct
8 employees and then a vice president over them
9 whose sole responsibility is to go into the
10 dealership, to go into the Ford dealers, the
11 Chrysler dealers and interface directly with
12 the sales folks, with the general managers,
13 with the people that order the vehicles
14 actually.

15 Q Why do you care about that?

16 A Well, because we have to -- first
17 and foremost, I don't know if we understand
18 that here, but most vehicles, I'd say over 90
19 percent of the vehicles in this country are
20 not ordered by the customer that ultimately
21 ends up buying it. They're ordered by the
22 dealer themselves. So when you go into a

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1 dealer, into a store and buy your new Ford,
2 very likely that it was ordered by the sales
3 manager.

4 So most of our product is
5 available in what we call free flow option,
6 and meaning that the dealer has to check it
7 off on the order sheet. So he wants now that
8 Ford Explorer, the blue one, and he wants the
9 satellite radio option.

10 So we teach them how to order it.
11 We teach them how to activate it when it comes
12 in if it's not activated. We put up POP. We
13 do sales training with the salesmen
14 themselves.

15 There's an incredible turnover
16 rate in the dealerships. You know on the
17 order of 50 percent. So we're constantly
18 retraining these people and introducing them
19 to satellite radio.

20 Q Why are you training the sales
21 people in the dealerships?

22 A Well, because we need to generate

1 And at the end of that trial
2 period if the consumer, the actual owner of
3 the vehicle hasn't signed up for the
4 subscription service, then we've invested all
5 of that money and effort, and we don't have a
6 subscriber to show for it.

7 Q Step back a little bit and just
8 explain to the judges why are these OEM
9 relationships so critical to Sirius.

10 A Well, yeah, they're critical to
11 Sirius because, you know, without them I guess
12 you could say we wouldn't have a company. I
13 mean, they're vitally important to our
14 company. It's one of the, you know, main areas
15 where we can get subscribers from, of course.

16 And I think if you listen to
17 satellite radio, you know that the experience
18 on the vehicle is really kind of a special
19 thing. It really is a special experience,
20 particularly in the OEM world where there's no
21 wires hanging down. You're not using a
22 cigarette lighter adapter. There's no Velcro.

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1 the subscriber. Without a subscriber attached
2 to the radio, we don't have any business, and
3 when the customer comes in, they're coming in
4 to buy a car. They're not coming in to buy
5 satellite radio. So we need the sales people
6 and the people that deliver the vehicle to the
7 customer to show them how the radio works, to
8 preset one of their favorite channels, to go
9 through the effort of actually showing, you
10 know, the whole system to them.

11 Q And why do you want to do that?

12 A Well, again, without having a
13 customer understand, you know, the receiver,
14 he may not even know he has it in his vehicle,
15 and ultimately, you know, we have to keep them
16 as a subscriber. One of the things that we do
17 is we will give a trial period, and the trial
18 period in our case may run from three months
19 to a year, and in some cases the automotive
20 manufacturer actually pays us for a discount
21 on the subscription for that period, whether
22 it's 12 months or six months.

1 You know, you're not using suction cups to
2 hold a device in place. It's a much more
3 elegant and pristine, you know, kind of
4 application. And I think that really does
5 enhance the overall experience.

6 So once it's installed in the
7 factory and it comes completely integrated
8 into the vehicle, it's a much better listening
9 experience for the subscriber.

10 Q When you first started talking to
11 the OEMs back in 1999, what were the main
12 challenges that you faced?

13 A The main challenges that we faced
14 at that point were, first and foremost, to
15 explain to them what satellite radio was, what
16 the concept of satellite radio was, and in
17 order to do that, you know, at that point in
18 time we were really talking about an idea on
19 a piece of paper. We hadn't built anything
20 yet. We hadn't launched any satellites. We
21 had nothing to demonstrate to them how it
22 worked. So that was one of the biggest

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1 challenges.

2 And then we embarked upon -- if we
3 got them to say yes, this is something I'd be
4 interested and something I think may enhance,
5 you know, the driving experience of our
6 vehicle. Then what we have to do is go
7 through this developmental process, which we
8 kind of touched on a little bit before.

9 And in our case you had to
10 actually create the prior to begin with. We
11 had, you know, the technology, you know, in
12 partnership. Get the chips that's made, get
13 them incorporated into a receiver, and get
14 that receiver in the vehicle and go through
15 all of that testing and validation process and
16 everything else.

17 Q Were the companies concerned that
18 the system just wouldn't work?

19 A The companies were very concerned.
20 I mean, again, we were talking about something
21 that hadn't been done before. So I mentioned
22 earlier about, you know, some test drives and

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1 thing like that. Something that comes to
2 mind, Chrysler, which put Sirius through one
3 of its most rigorous testing, you know,
4 processes, actually ran a 10,000 mile test all
5 over the country in every kind of terrain, the
6 mountains and the prairies and, you know, in
7 different weather conditions and temperature
8 and everything else to try to figure out
9 whether this thing worked.

10 Q And this is after the satellite
11 had been launched?

12 A This was after the satellites have
13 been launched. This was after the receivers
14 had been built, and they actually had, you
15 know, a go/no go kind of decision that they
16 were holding pending the outcome of that test.

17 Q And what were they doing on this
18 10,000 mile test?

19 A They were determining whether or
20 not the receiver actually worked properly and
21 received the signal in the various conditions
22 that the vehicle was put through.

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1 Q How have the challenges changed
2 dealing with the OEMs?

3 A Yeah, you're still kind of dealing
4 with that long-term timing that I talked about
5 before, you know, these three, four-year
6 development cycles. So as time has evolved
7 from when we first started talking to them,
8 probably the biggest change I would say is
9 that the whole automotive electronic systems
10 have kind of shifted from analog to digital.
11 So you've got, you know, older vehicles that
12 had these analog electronic systems now
13 shifting over to digital, and in the process
14 of doing that, the interface between our
15 receivers and their vehicle entertainment
16 systems becomes quite complex. You know,
17 they're very proprietary systems with these
18 protocols that they use. The software
19 required to make the devices talk to each
20 other, you know, is quite extensive.

21 In addition to that, as we've
22 grown our business, each vehicle is unique.

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1 So you're always going through tooling
2 exercises to make sure that they have the
3 right pieces being inserted, that they have
4 the right -- remember each system has an
5 antenna. You have wiring harnesses. If it's
6 not an integrated head unit, you've got the
7 bracketry and everything else that goes with
8 it.

9 Q You mentioned the I Drive System,
10 the NW I Drive System --

11 A Yes.

12 Q -- in your indirect testimony.

13 A Yes.

14 Q How does that relate to the --

15 A Yeah, well, that's a good example
16 of what the automotive OEs are actually trying
17 to -- how they're trying to handle these kinds
18 of things. There are so many different
19 devices and so many different kinds of
20 electronics and services that are now coming
21 into the vehicle. How do you handle that?

22 And if you had a dedicated button

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1 or a dedicated device for each one of those
2 things in the dashboard, say, you would
3 overwhelm, you know, the driver and you
4 wouldn't be able to figure out what was going
5 on.

6 So BMW's solution to this and
7 others have followed, of course, is to do like
8 a computer driven menu, and the I Drive is the
9 trade name that they gave to that computer
10 driven menu type of a device.

11 So not only do we have to
12 communicate with the electronics --

13 Q Let me just interrupt you. How
14 does the thing work for the user?

15 A Well, the way it works for the
16 user is that there's a display or screen, and
17 again, there's a menu. There's a selection.
18 You can go entertainment, communications,
19 climate, that kind of a thing. When you pick
20 entertainment, then you have to select between
21 AM, FM, radio, the disc change, CD disc
22 changer, a single play CD, and then, you know,

1 know, they kind of know now that Sally Rados
2 is kind of a neat product and their customers
3 seem to like it, but it hasn't changed in the
4 fact that they're still asking for us to work
5 with their suppliers and their vendors when we
6 make these new devices.

7 So we're still paying NRE. We're
8 still paying in the case of the hardware
9 incredible subsidies on the hardware. We're
10 still giving them a free chipset. We're still
11 doing all of the things that we have done, you
12 know, from the beginning of this business to
13 get this product into the vehicle.

14 Q Let's say I go and buy a new
15 Mustang.

16 A Okay.

17 Q With satellite radio. Without
18 getting into specific numbers yet, can you
19 tell me the various things that you will have
20 paid for to get that radio into my Mustang?

21 A All right. From the beginning we
22 pay something we call NRE, which it stands for

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1 satellite.

2 Q What do you use to make --

3 A You're using a little like a
4 joystick kind of controller, and there's kind
5 of an amount of software logic that needs to
6 take place between our device and their device
7 to make that interface work.

8 Q Are there other companies willing
9 to put their own money into having satellite
10 radios in their cars?

11 A Well, I've been working with them
12 for, you know, quite a while and I've never
13 seen them, you know, willing to do that on
14 something like this. They, you know, viewed
15 satellite video in its initial stage as quite
16 risky, and since there was no business at that
17 time, they didn't and weren't prepared to
18 spend their own money to develop and test and
19 integrate the stuff. So, you know, we kind of
20 got stuck footing the bill on that one.

21 Q And has that changed since then?

22 A It's changed only in that, you

1 non-recoverable expense, and it's actually an
2 engineering expense. So in the case of Ford
3 with the mustang, they'll come to us and say,
4 you know, "We figure it's going to cost X
5 millions of dollars for us to develop the
6 product and the program in the Mustang, and we
7 want you to pay some portion of that. We have
8 tooling expenses associated with our factories
9 in order to get the antenna and the brackets
10 and everything in place. We want you to pay
11 for that."

12 We then sit down, and we say,
13 "Okay. Here's the device. We're going to
14 give you the chipset for free that goes in
15 that device."

16 And they come back and say, "Well,
17 that's not good enough. You have to actually
18 pay for the device or some significant portion
19 of that."

20 So we pay a subsidy on the actual
21 hardware. You then get the device into the
22 vehicle, and then they ask you to contribute

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1 to the marketing expenses because they want
2 you to help underwrite, you know, advertising
3 and marketing efforts that they've got. So
4 you're then paying for that.

5 And then even after the vehicle is
6 sold, so you said when you go and buy your new
7 Mustang, we're still paying them. We're
8 paying them revenue sharing. We give them a
9 portion of all the revenue that we generate
10 off this subscription, and the way these deals
11 are kind of structured, we're paying that
12 regardless of who the owner of the vehicle is.
13 So it's not only you as the first owner, but
14 if you turn that vehicle in and it becomes a
15 used vehicle and someone else in the room here
16 was going to drive away in that car, if they
17 subscribe to the satellite service, then we're
18 paying revenue sharing on that, too.

19 Q Now, if I in the end don't end up
20 signing up on my satellite radio for whatever
21 reason, I don't know about --

22 A Right.

1 come from the contracts. They are highly
2 confidential. They are very competitively
3 sensitive, and so we would need to go into
4 restricted session to do that, and I would
5 request leave to do that.

6 CHIEF JUDGE SLEDGE: Judge Roberts
7 has double time allocated for this.

8 Any objection to applying the
9 protective order to the questions outlined by
10 Mr. Sturm?

11 MR. DeSANCTIS: To the protective
12 order, no, Your Honor.

13 CHIEF JUDGE SLEDGE: Without
14 objection, the motion is granted.

15 MR. STURM: Thank you.

16 (Whereupon, at 1:41 p.m., the
17 hearing was recessed, to reconvene immediately
18 in closed session.)

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1 Q -- whatever, do you recover those
2 costs?

3 A It depends on when you say no, and
4 it depends on which maker you're talking
5 about. So, you know, in some of our cases we
6 get a prepaid subscription from the auto
7 maker. In those cases, they buy on a
8 discounted basis some length of time, six
9 months, a year of service at a discounted
10 basis. They go and then sell that through to
11 the consumer. So when you buy that Mustang it
12 comes with in that case six months, and at the
13 end of that six months you say, "No, this
14 isn't for me," then we're out of luck. We
15 have no revenue coming in to offset all of the
16 up-front expenses that we had with it.

17 So the answer to your question
18 would be, no, we don't recover it.

19 MR. STURM: Your Honor, I'd like
20 to present some testimony from Mr. Wilsterman
21 regarding the amount of these expenses to put
22 some specific numbers on it. Those numbers

1 MR. STURM: May I proceed?

2 CHIEF JUDGE SLEDGE: Yes.

3 BY MR. STURM:

4 Q That's obviously a lot of money to
5 be paying these car companies. Why are you
6 paying them so much?

7 A Well, I guess the answer to that
8 would be we're paying them because we have to
9 to get the business. We don't have any
10 leverage with these people. These car
11 companies are not required by contract to put
12 satellite radio in their vehicles. It is very
13 much an option in most cases, and if they
14 elect to put some other device in there
15 instead of ours, iPod adapters, HD radio, you
16 know are current things that are very popular,
17 they are already putting AF and FM radios and
18 CD players without any kind of support because
19 that has been amortized over so many years.
20 We're left holding the bag. We don't have a
21 subscriber. We don't have any business. We
22 literally would not have a company unless we

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1 had these deals.

2 Q Are any of your partners putting
3 in things like HD radios?

4 A Yes, they are, absolutely. And in
5 fact, one of -- you know, the company that you
6 mentioned, you asked me to talk about that I
7 had had the longest standing relationship
8 with, BMW, they actually are already
9 installing HD radios in their vehicles, and
10 a number of others have plans to, although at
11 this point they haven't made them public
12 information.

13 Q Are there also other devices that
14 are coming on to take your place?

15 A I hope this number is accurate,
16 but I believe somewhere in the current
17 calendar year, and there's an estimate that
18 about 70 percent of the vehicles out there
19 will have an iPOD adapter or iPOD jack so that
20 you can take your MP3 player or your iPOD into
21 the vehicle.

22 And then as we well know every

1 kind of a service that you're getting in
2 addition to the cell phone, the music
3 services, the navigation systems, you know,
4 traffic, any of that kind of stuff, sports
5 scores, you can get all of that into the
6 vehicle seamlessly integrated, and it's not
7 just cell. It's iPODs and everything else.

8 So any kind of handheld device
9 that you can bring into the vehicle, you know.

10 Q And that's all competition for
11 your spot on the dashboard?

12 A Absolutely. It's absolutely
13 competition for us, yes.

14 MR. STURM: Thank you, Your Honor.
15 I have no further questions.

16 CHIEF JUDGE SLEDGE: Any questions
17 by XM?

18 MR. MEYER: No, Your Honor.

19 CHIEF JUDGE SLEDGE: Any questions
20 by Music Choice?

21 MR. FAKLER: No, Your Honor.

22 CHIEF JUDGE SLEDGE: Any cross by

1 vehicle has got an AM or FM radio. You know,
2 I would say probably on the order of about 75
3 percent of them have CD players or multiple CD
4 players.

5 Q And are there other newer devices
6 that are coming in as well?

7 A There's one in particular that
8 comes to mind, and again, you know, it's one
9 of our partners. Ford Motor Company announced
10 a device that they call Synch and the word
11 "synch" for them means that you can synch up
12 with the vehicle's electronic system, with
13 their entertainment system any device that you
14 bring into the vehicle, any handheld device.

15 So if you bring your cell phone
16 and through a Blue Tooth connection they'll be
17 able to have that work seamlessly with the
18 vehicle's electronics. Unlike Sirius where we
19 have to put the actual radio in the car, do
20 the wiring, put in the antenna, you just bring
21 that handheld device into the vehicle, and
22 when you do that, you're able if you have any

1 SoundExchange?

2 MR. DeSANCTIS: No, Your Honor.

3 CHIEF JUDGE SLEDGE: Any questions
4 from the bench?

5 (No response.)

6 CHIEF JUDGE SLEDGE: Thank you,
7 sir.

8 THE WITNESS: Okay. Thank you.
9 (The witness was excused.)

10 CHIEF JUDGE SLEDGE: All right.
11 Mr. Sturm.

12 MR. STURM: Your Honor, Sirius
13 calls Jeremy Coleman.

14 CHIEF JUDGE SLEDGE: Are you going
15 to skip and not call Law and Moore?

16 MR. STURM: Yes, Your Honor. Mr.
17 Law, we advised the Court the other day was
18 being submitted on the written testimony only.

19 CHIEF JUDGE SLEDGE: So you're not
20 going to call Law.

21 MR. STURM: We're not going to
22 call Law, and Mr. Moore advised SoundExchange,