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, Panasonics 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 feature. 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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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 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 20th day of October 2006 at New York, New York.

John Douglas Wilsterman