Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
SATELLITE CD RADIO, INC.	)	File No. SAT-MOD-2011_____
	)	
Application for Modification of FM-6 Satellite Authorization	)	Call Sign S2812
	)	
	)	

APPLICATION FOR MODIFICATION OF AUTHORIZATION

Satellite CD Radio, Inc., a wholly-owned subsidiary of Sirius XM Radio Inc. ("Sirius XM"), pursuant to Section 25.117 of the Commission's rules,[1] hereby requests modification of its authorization for the FM-6 satellite (call sign S2812). Specifically, this application seeks authority to operate the FM-6 satellite at the 116.15° W.L. orbital location rather than the currently licensed 115.20° W.L. orbital location. In addition, Sirius XM seeks authority to conduct in-orbit testing ("IOT") of the FM-6 satellite at 120.50° W.L. for a thirty day period commencing twelve days following launch and, upon completion of that testing, to move the satellite from 120.50° W.L. to 116.15° W.L.

In accordance with the Commission's rules,[2] this application has been filed electronically as an attachment to FCC Form 312. The technical information previously provided to the Commission for the FM-6 satellite in File No. SAT-LOA-20100409-00072 remains unchanged by the requested slight shift in orbital location and is hereby incorporated by

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1 47 C.F.R. § 25.117.

2 47 C.F.R. § 25.114(c).

reference. The technical information on the uplink/TT&C earth stations and operations has been updated to the extent necessary to reflect the new orbital position and other minor changes reflected in the application. For the Commission's convenience, Sirius XM provides an updated Schedule S and Attachment A (Technical Description) reflecting the satellite's proposed new orbital location of 116.15° W.L.

I. SIRIUS XM REQUESTS AUTHORITY TO OPERATE THE FM-6 SATELLITE AT 116.15° W.L.

Sirius XM is currently authorized to operate the FM-6 satellite at the 115.20° W.L. orbital location.[3] XM Radio Inc.—a sister company to Satellite CD Radio, Inc.—operates the XM-4 satellite (call sign S2616) at 115.25° W.L.[4] This modification application seeks authority to operate the FM-6 satellite at 116.15° W.L.

Grant of this application will serve the public interest because it will allow Sirius XM to continue to provide exceptional satellite radio service, coverage and redundancy. The proposed slight change in orbital location will not delay the planned launch of the FM-6 satellite. As previously reported, Sirius XM expects to launch the FM-6 satellite in the fourth quarter of 2011.

The requested modification will eliminate harmful interference that otherwise may occur between the FM-6 and XM-4 satellites. Although the FM-6 and XM-4 satellites operate in different uplink frequency bands, these bands are adjacent and uplink and TT&C earth station transmissions in these frequencies occur at high power levels. Because of the currently authorized orbital co-location of the satellites and their high power levels, both satellites are expected to receive undesired interference because the out-of-band uplink power entering the

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[3] *See Policy Branch Information; Actions Taken*, Report No. SAT-00757, DA 11-272, File No. SAT-LOA-20100409-00072 (Feb. 11, 2011).

[4] *See Policy Branch Information; Actions Taken*, Report No. SAT-00728, DA 10-1977, File No. SAT-MOD-20100722-00165 (Oct. 15, 2010).

satellite receivers increases the receivers' noise floors. Moving the FM-6 satellite almost a degree away in orbit from the XM-4 satellite will ensure that no harmful interference is caused to either satellite.

Moreover, grant of this modification application will not result in increased risk of harmful interference to any other satellite operators. The FM-6 satellite will transmit in the 2320.0-2332.5 MHz downlink band, which Sirius XM won and paid for at auction, gaining the exclusive U.S. license in that spectrum. Thus, there are no American co-frequency users of the band used for FM-6 downlink transmissions. Similarly, the FM-6 satellite uplink will use the same X-band frequencies (7050.5-7072.5 MHz) as the present Sirius constellation from a primary earth station nearby the existing feeder link antennae. FM-6 tracking, telemetry and control ("TT&C") also will be accomplished "in band," in S-Band and X-band spectrum already licensed to Sirius XM. Finally, no satellites are located within a +/- .05° station-keeping box at the 116.15° W.L. Sirius XM will coordinate with operators of current and future adjacent satellites to avoid the risk of physical collision.

For all of these reasons, grant of the proposed request to operate FM-6 at 116.15° W.L. serves the public interest.

II. SIRIUS XM REQUESTS AUTHORITY TO CONDUCT IN-ORBIT TESTING OF THE FM-6 SATELLITE AT 120.5° W.L.

Sirius XM also seeks authority to conduct IOT of the FM-6 satellite at 120.5° W.L. for a period of thirty days beginning approximately twelve days after successful launch of the satellite from Baikonur in the last quarter of this year. At the conclusion of IOT, Sirius XM seeks authority to drift the FM-6 satellite to 116.15° W.L.

Testing of FM-6 will use Sirius XM's earth station call sign E080168 on the frequencies for which the earth station and FM-6 satellite are authorized, with uplinks in the X-band, 7051.5-

7052.5 MHz, 7055.5-7056.5 MHz, 7060.0-7064.5 MHz, and 7068.0-7072.5 MHz, and downlinks in the S-band, 2320-2332.5 MHz. The payload testing transmissions from call sign E080168 will include intermittent use of an unmodulated carrier operating at the earth station's maximum authorized EIRP of 82.2 dBW.

Sirius XM's earth station call sign E080168 will also be used to perform TT&C while FM-6 is being tested at 120.5° W.L. and during the drift from 120.5° W.L. to 116.15° W.L. While testing and during the drift, Sirius XM will use only the TT&C frequencies authorized for FM-6.[5]

Grant of this request for authority to conduct IOT will serve the public interest by permitting testing to occur without disrupting existing services provided by the XM-4 satellite from the nominal 115.0° W.L. orbital location or provided by other satellites in the existing Sirius XM constellations. In-orbit testing is critical to ensure that the FM-6 satellite is fully functional and will be able to provide quality commercial service at the 116.15° W.L. orbital location.

Moreover, the proposed in-orbit testing and TT&C will not cause harmful interference to the operations of any other spacecraft. No satellites use the S-band or X-band frequencies within two degrees of 120.5° W.L. Sirius XM will follow industry practices for coordinating TT&C transmissions during relocation. If any interference occurs during the drift, Sirius XM will take all reasonable steps to eliminate it.

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[5] *Satellite CD Radio, Inc., Application for Authority to Launch and Operate the FM-6 Satellite*, File No. SAT-LOA-20100409-00072, Attachment A at 17-19 (stamp grant Feb. 4, 2011).

III. ITU FILINGS, COST RECOVERY AND INTERNATIONAL COORDINATION

Sirius XM will prepare the necessary documentation and assist the FCC with notifying the ITU of the change in the FM-6 orbital operating position and any further required coordination with Canada and Mexico. Sirius XM is aware that the ITU currently charges processing fees for satellite filings, and that Commission applicants are responsible for any and all fees charged by the ITU.[6] Sirius XM will prepare the necessary information, as may be required, for submission to the ITU so that it may initiate and complete the international coordination, due diligence, and notification process of its space stations, in accordance with ITU Radio Regulations.

The FM-6 satellite is also designed to, and will, operate in compliance with all relevant international and bilateral agreements between the United States and the Administrations of Canada and the United Mexican States regarding the provision of satellite radio in North America. Because the United Mexican States and Canada have recently agreed upon operating parameters for the FM-6 satellite at 115.20° W.L., concurrence regarding the proposed operation of FM-6 at 116.15° W.L. should be easily obtained. The flux density requirements at the border and within those countries are unchanged by the proposed shift in position.

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[6] *See Implementation of ITU Cost Recovery Charges for Satellite Network Filings*, Public Notice, DA 01-2435 (Oct. 19, 2001).

IV. CONCLUSION

For the foregoing reasons, Sirius XM respectfully requests that the Commission promptly grant this Application for Modification of Authorization.

Respectfully submitted,

/s/ James S. Blitz

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Dated: May 25, 2011

Response to FCC Form 312 Question 39

Sirius XM Radio Inc. is a defendant in a group of consolidated complaints seeking class action status brought pursuant to federal antitrust and state consumer protection laws in the U.S. District Court for the Southern District of New York. The lead case is *Carl Blessing v. Sirius XM Radio Inc.*, No. 09-10035. The related cases are: *Scerbo v. Sirius XM Radio, Inc.*, No. 09-10209; *Bonsignore v. Sirius XM Radio Inc.*, No. 10-526; *Balaguera v. Sirius XM Radio Inc.*, No. 10-01058; *Cronin v. Sirius XM Radio Inc.*, No. 09-10468. On May 12, 2011, Sirius XM reached an agreement to settle the pending case. In connection with the settlement, Sirius XM did not admit any wrongdoing, any violation of statute or law, or the truth of any claims or allegations of the plaintiffs. This settlement is contingent upon final approval by the U.S. District Court for the Southern District of New York.

Response to FCC Form 312 Question 40

The Officers of Satellite CD Radio, Inc. are:

Mel Karmazin, President
David Frear, Treasurer
Patrick Donnelly, Secretary

The Directors of Satellite CD Radio, Inc. are:

Patrick Donnelly
Lawrence Gilberti

Satellite CD Radio, Inc. is a wholly-owned subsidiary of Sirius XM Radio Inc.

An affiliate of Liberty Media Corporation, a Delaware corporation, holds preferred stock which is convertible into an approximately 40% ownership interest in the Sirius XM Radio Inc. The address of Liberty Media Corporation is 12300 Liberty Boulevard, Englewood, Colorado 80112. Dr. John C. Malone, a United States citizen, owns shares of Liberty Media Corporation representing approximately 32.45% of the aggregate voting power of the company. Dr. Malone's business address is 12300 Liberty Boulevard, Englewood, Colorado 80112.

No other entities or individuals own a 10% or greater direct or indirect interest in Sirius XM.

The Executive Officers of Sirius XM Radio Inc. are:

Mel Karmazin, Chief Executive Officer
James E. Meyer, President, Operations and Sales
Scott Greenstein, President and Chief Content Officer
Patrick L. Donnelly, Executive Vice President, General Counsel and Secretary
David J. Frear, Executive Vice President and Chief Financial Officer
Dara Altman, Executive Vice President and Chief Administrative Officer

The Directors of Sirius XM Radio Inc. are:

Joan L. Amble
Leon D. Black
David J.A. Flowers
Lawrence F. Gilberti
Eddy W. Hartenstein
James P. Holden
Mel Karmazin
John C. Malone
Gregory B. Maffei

James F. Mooney
Jack Shaw
Carl E. Vogel
Vanessa A. Wittman

The address of all Satellite CD Radio, Inc. and Sirius XM Radio Inc. officers and directors is:

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