

**SIRIUS SATELLITE RADIO INC.**  
1221 Avenue of the America, 36<sup>th</sup> Floor  
New York, NY 10020

**XM RADIO INC.**  
1500 Eckington Place, NE  
Washington, DC 20002

**Filed Electronically**

June 4, 2008

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20054

**Re: IB Docket No. 95-91, WT Docket No. 07-293, GEN. Docket No. 90-357,  
RM No. 8610**

Dear Ms. Dortch:

On June 3, 2008, James Blitz, of XM Radio Inc. ("XM"), Alan Pate and Terrence Smith of Sirius Satellite Radio Inc. ("Sirius"), Robert Pettit, of Wiley Rein LLP, counsel for Sirius, and Peter Rohrbach of Hogan & Hartson LLP, counsel for XM, met with Brent Greenfield, of Chairman Martin's office.

XM and Sirius discussed the technical issues arising in the above-captioned proceedings as summarized in the attached document, which was provided to Mr. Greenfield. In particular, XM and Sirius focused on the desirability, and the practicality of a joint testing program, as a means of expediting resolution of this docket.

Sincerely,

*/s/ Patrick L. Donnelly*  
Patrick L. Donnelly  
Executive Vice President, General Counsel  
& Secretary  
Sirius Satellite Radio Inc.  
1221 Avenue of the Americas, 36<sup>th</sup> Floor  
New York, NY 10020  
(212) 584-5100

*/s/ James S. Blitz*  
James S. Blitz  
Vice President, Regulatory Counsel  
XM Radio Inc.  
1500 Eckington Place, NE  
Washington, DC 20002  
(202) 380-4000

cc: Brent Greenfield



# **The Case for Joint Testing to Assess Satellite Radio and WCS Compatibility**

**June 3<sup>rd</sup> FCC Meetings**

**IB Docket No. 95-91**

**WT Docket No. 07-293**

## Why Joint Testing is Needed

- **The existing record is wildly inconsistent with respect to the question of whether WCS mobile devices will cause harmful interference to satellite reception.**

Issue		Satellite Radio	WCS
Overload Interference	Measurement Data	250 mw WCS devices cause muting at distances between 55 and 128 feet.	No muting at distances greater than 13 feet from a 250 mw WCS device
	Proposal for Control	WCS mobile devices under 10 mw.	Allow 2 watt WCS mobile devices.
Out-of-band Interference	Measurement Data	Using the WCS Coalition proposed mask, a 250 mw WCS device increases the sat. noise floor by 1 db at 860 m.	Using the WCS Coalition proposed mask, no impairment to sat. receivers from WCS devices.
	Proposal for Control	Relax OOB mask to $103 + 10 \log(P)$ if proposed power limits are adopted.	Relax OOB mask to $55 + 10 \log(P)$ unconditionally.

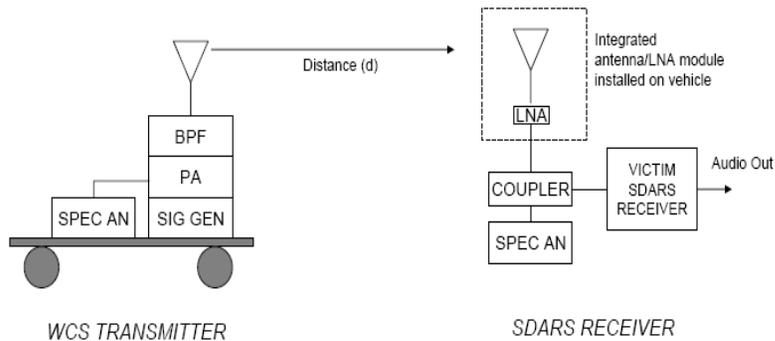
- **The existing record contains little data on how satellite radio terrestrial repeaters interfere with WCS receivers.**
- **Without further joint testing, the FCC would be required to assess the quality and accuracy of two sets of data without full knowledge of methodology. Joint testing can reduce the gulf in the submitted data.**
- **Results can be delivered to the FCC in less than 4 months if all parties cooperate.**

## **Scope of Joint Testing**

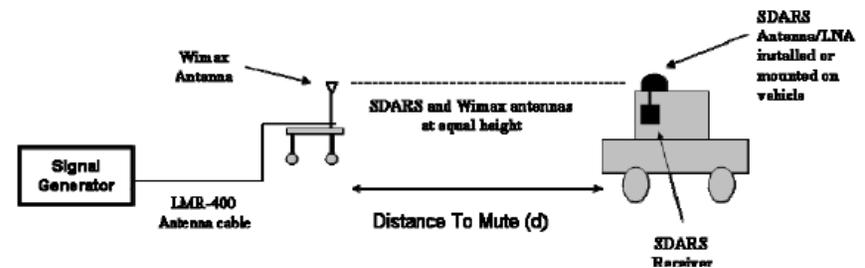
- Collect New Experimental Data on Satellite Repeater Interference to WCS Receivers
  - Use existing 2.3 GHz fixed receivers and 2.3 GHz international (or Nextwave prototype) mobile equipment.
  - Execute standard lab tests for blocking and OOBE to establish basic interference parameters.
  - Measure satellite radio repeater ground based levels in two selected markets (2 m above ground level and rooftop).
- Improve the Rigor and Completeness of Part 27 Rule Change Test Data
  - Four basic use cases:
    - vehicle to vehicle (static)
    - vehicle to vehicle (moving)
    - WCS pedestrian to satellite vehicle (static)
    - WCS pedestrian to satellite vehicle (moving)
- Use test equipment to emulate WCS mobile fundamental and OOBE transmissions
- XM and Sirius will each provide 2 representative automotive receiver platforms
- Two serving conditions; Satellite only and Terrestrial
- Parameters recorded
  - Distance where satellite radio service is impaired for varying mobile EIRP and OOBE levels.
  - EIRP and OOBE levels that impair satellite radio at 3 meters.
  - Effect of vehicle motion and duty cycle.

## Scope of Joint Testing

- Both sides used similar test set-up to measure WCS user units-to-satellite radio interference:
  - Each moved WCS transmitter toward/away satellite radio receiver.
  - Both sides tested in two different locations without reporting differences (no need to test in multiple markets).



Sirius Comments, Exhibit C, page 5 (Feb. 14, 2008)



WCS Coalition Reply Comments, Attachment B, page 15 (March 17, 2008)

- Joint plan should test impairment criteria from *both* parties

## What's Next

- Select 3<sup>rd</sup> party independent consultant to assist with the following tasks:
  - Consolidate use case and test plan contributions from each party.
  - Dispute resolution.
  - Procure/rent required equipment.
  - Conduct lab tests at consultant's facilities.
  - Conduct field tests at selected locations.
  - Prepare final report.

# TEST SET-UP



Sirius Comments, Appendix C, page 6  
(Feb. 14, 2008)



WCS Coalition Comments, Attachment B, page 12  
(Feb. 14, 2008)