

S2118  
XM Radio LLC  
XM-1

SAT-STA-20111011-00200

IB2011004561

File # SAT-STA-20111011-00200

Call Sign S2118 Grant Date 11/03/11  
(or other identifier)

Term Dates From 11/07/11 To: 30 days  
period of

Approved by OMB  
3060-0678

Date & Time Filed: Oct 11 2011 3:26:48:156PM  
File Number: SAT-STA-20111011-00200  
Callsign:

Approved: *Stephen J. Duall*

Stephen J. Duall  
Chief, Satellite Policy Branch



FEDERAL COMMUNICATIONS COMMISSION  
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY

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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:  
XM-1 (call sign S2118) 30 day STA to conduct tests

1. Applicant

Name:	XM Radio LLC	Phone Number:	202-380-4000
DBA Name:		Fax Number:	202-380-4500
Street:	1221 Avenue of the Americas 36th Floor	E-Mail:	James.Blitz@siriusxm.com
City:	New York	State:	NY
Country:	USA	Zipcode:	10020
Attention:	James S. Blitz		

**Attachment to Grant**  
**Application of XM Radio LLC for Special Temporary Authority**  
**IBFS File No. SAT-STA-20111011-00200**

The request of XM Radio LLC (XM Radio) for special temporary authority (STA), File No. SAT-STA-20111011-00200, to activate the communications payload of its Satellite Digital Audio Radio Service (SDARS) space station, XM-1 (Call Sign S2118), at the 115.25° W.L. orbital location for performance testing purposes using the 2332.5-2345.0 MHz (space-to-Earth) frequency band is granted for a period of up to 30 days, commencing on November 7, 2011. Operations under this STA are for the sole purpose of evaluating XM-1's ability to provide replacement capacity in the event of an outage of the primary space stations that it supports and do not include the provision of commercial services. Operations under this STA shall comply with conditions 5, 8, and 9 of the current authorization for the operations of XM-1 at 115.25° W.L., IBFS File No. SAT-MOD-20101216-00262 (granted March 8, 2011). This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.

 <b>GRANTED*</b> International Bureau *with conditions	File # <u>SAT-STA-20111011-00200</u>
	Call Sign <u>S2118</u> Grant Date <u>11/03/11</u> (or other identifier)
	Term Dates period of From <u>11/07/11</u> To: <u>30 days</u>
	Approved: <u>Stephen J. Duall</u> Stephen J. Duall Chief, Satellite Policy Branch

<b>2. Contact</b>	
<b>Name:</b>	Karis A. Hastings
<b>Company:</b>	SatCom Law LLC
<b>Street:</b>	1317 F Street, N.W., Suite 400
<b>City:</b>	Washington
<b>Country:</b>	USA
<b>Attention:</b>	
<b>Phone Number:</b>	202-599-0975
<b>Fax Number:</b>	
<b>E-Mail:</b>	karis@satcomlaw.com
<b>State:</b>	DC
<b>Zipcode:</b>	20004 -
<b>Relationship:</b>	Legal Counsel
(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)	
3. Reference File Number or Submission ID	
4a. Is a fee submitted with this application?	
<input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).	
<input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee	
<input type="radio"/> Other (please explain):	
4b. Fee Classification CRY - Space Station (Geostationary)	
5. Type Request	
<input type="radio"/> Change Station Location	<input type="radio"/> Extend Expiration Date
<input type="radio"/> Change Station Location	<input checked="" type="radio"/> Other
6. Temporary Orbit Location	
7. Requested Extended Expiration Date	

8. Description (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

XM Radio LLC requests authority for 30 days beginning November 7 to conduct tests to measure the performance of its XM-1 (S2118) and XM-2 (S2119) spacecraft using its Ellenwood, GA earth station (E040204).

9. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; for these purposes.

Yes  No

10. Name of Person Signing  
James S. Blitz

11. Title of Person Signing  
Vice President, Regulatory Counsel

12. Please supply any need attachments.

Attachment 1: STA Request

Attachment 2:

Attachment 3:

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT  
(U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION  
(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

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

In the Matter of Application by )  
 )  
XM RADIO LLC ) Call Signs S2118, S2119 & E040204  
 )  
For Special Temporary Authority to )  
Conduct Testing of XM-1 and XM-2 )

**REQUEST FOR SPECIAL TEMPORARY AUTHORITY**

By this application, XM Radio LLC (“XM Radio”)<sup>1</sup> respectfully requests special temporary authority (“STA”) for a period of up to 30 days commencing November 7, 2011 to permit XM Radio to perform tests to measure the performance of its XM-1 and XM-2 satellites using XM Radio’s Ellenwood, GA feeder link earth station. XM-1 and XM-2 are in-orbit spare spacecraft that are currently positioned at 115.25° W.L. +/- 0.1 degrees, where they fly in formation with XM-4. XM Radio proposes to test XM-1 and XM-2 to measure their performance and evaluate their continuing ability to provide back-up capacity in the event of an anomaly affecting XM-4, one of XM Radio’s primary operating spacecraft. The call signs of the space stations and earth station for which STA is requested are listed in the caption above.

XM-1 and XM-2 are authorized to serve as in-orbit spares for XM Radio’s fleet of satellite digital audio radio service (“SDARS”) spacecraft that provide a high-quality, continuous, multi-channel audio service throughout the United States.<sup>2</sup> The XM-1 and XM-2

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<sup>1</sup> XM Radio is a wholly-owned subsidiary of Sirius XM Radio Inc. (“Sirius XM”).

<sup>2</sup> See File Nos. SAT-MOD-20101216-00262, grant-stamped Mar. 8, 2011 (“XM-1 Grant”); SAT-MOD-20101001-00205, grant-stamped Nov. 9, 2010 (“XM-2 Grant”).

licenses authorize activation of the satellite's communications payloads only "in the event of a service outage of the XM-3 or XM-4 space stations (Call Signs S2617 and S2616)."<sup>3</sup>

XM Radio seeks to conduct tests to verify the performance of XM-1 and XM-2 at their current orbital location in order to be better prepared if a future anomaly affecting the XM-4 operating satellite requires activation of these satellites. The tests will allow XM Radio to evaluate the accuracy of the satellites' antenna pointing mechanism.

During the testing period, XM Radio's existing feeder link earth station in Ellenwood, GA (Call Sign: E040204) will alternately transmit to XM-1 and XM-2.<sup>4</sup> Testing will use the frequencies for which that earth station and XM-1 and XM-2 are authorized. The testing transmissions from the feeder link earth station will use an unmodulated carrier operating at or below the earth station's maximum authorized EIRP. In all other respects, the transmissions for purposes of testing will conform to the technical specifications of the earth station license.

The temporary testing is expected to have no impact customers receiving XM Radio's satellite radio transmissions. Furthermore, the testing will not cause harmful interference to the operations of any other spacecraft. No satellites using either S-band or X-band frequencies operate within two degrees of 115.25° W.L., other than satellites licensed to XM Radio and commonly owned entities. XM Radio does not share S-band spectrum with other satellite systems (except its affiliate, Satellite CD Radio), and the SDARS downlink frequencies are not subject to two degree spacing rules.

The testing will not result in harmful interference to regularly authorized terrestrial operations. The feeder link earth station that will communicate with XM-1 and XM-2

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<sup>3</sup> See XM-1 Grant, Attachment at ¶ 2; XM-2 Grant, Attachment at ¶ 3.

<sup>4</sup> This earth station is authorized to communicate with XM-1 and XM-2 at their current location. See File No. SES-MOD-20101022-01324, granted Jan. 4, 2011.

has been coordinated with terrestrial licensees for the frequency and EIRP level proposed for use here, and the coordination arc included the 115.25° W.L. orbital location.<sup>5</sup> XM Radio will not exceed the previously coordinated parameters during the proposed testing.

For the foregoing reasons, XM Radio respectfully requests special temporary authority for a period of up to 30 days commencing November 7, 2011 to perform tests to measure the performance of its XM-1 and XM-2 satellites using XM Radio's Ellenwood, GA feeder link earth station. Grant of the requested authority will serve the public interest by facilitating XM Radio's ability to evaluate the performance of the XM-1 and XM-2 space stations and will not result in harmful interference to any other regularly authorized operations.

Respectfully submitted,

XM Radio LLC

/s/ James S. Blitz

James S. Blitz

Vice President, Regulatory Counsel

XM Radio LLC

1500 Eckington Place, N.E.

Washington, D.C. 20002

(202) 380-4000

Of Counsel

Karis A. Hastings

SatCom Law LLC

1317 F Street, N.W., Suite 400

Washington, D.C. 20004

(202) 599-0975

October 11, 2011

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<sup>5</sup> See Exhibit B to File No. SES-MOD-20101022-01324 (E040204).