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Callsign:

## APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY FEDERAL COMMUNICATIONS COMMISSION

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## APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:

Request for Special Temporary Authority to Operate a Terrestrial Repeater in Cincinnati, OH

Name: XM Radio Inc.  DBA Name: Street: 1500 Eckingtor  City: Washington	XM Radio Inc. 1500 Eckington Place, NE Washington	Phone Number: Fax Number: E-Mail: State:	202–380–4000 202–380–4981 james.blitz@xmradio.com DC
Country. IISA		Zipcode:	20002

Call Sign Approved: From /0/ International Bureau GRANTED

To: 30 day Term Dates Grant Date File# SAT- STA- 2008 · 对于大学 (or other identifier)

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### Application of XM Radio Inc. IBFS File No. SAT-STA-20081002-00198

Special temporary authority (STA) is granted to XM Radio Inc. (XM) to continue to operate for a period of 30 days the Satellite Digital Audio Radio Service (SDARS) terrestrial repeater in Cincinnati, OH, specified in Attachment C to the Consent Decree adopted on July 25, 2008 (FCC 08-177) before bringing this repeater into compliance with existing authorized parameters . This grant of STA is subject to the terms and conditions below.

- 1. Any actions taken as a result of this STA are solely at the applicant's own risk. This STA shall not prejudice the outcome of the final rules adopted by the Commission in IB Docket No. 95-91. The issue concerning average versus peak EIRP raised by the WCS Coalition will be addressed in that proceeding. Operations prior to such action will be subject to condition 2 below.
- 2. Operation of terrestrial repeaters authorized pursuant to this STA is on a non-interference basis with respect to all permanently authorized radiocommunication facilities. XM shall provide the information and follow the process set forth in paragraphs 14 and 17 in 16 FCC Rcd 16773 (Int'l Bur. 2001) and 16 FCC Rcd 16781 (Int'l Bur. 2001), as modified by 16 FCC Rcd 18481 (Int'l Bur. 2001) and 16 FCC Rcd 18484 (Int'l Bur. 2001).
- 3. Terrestrial repeaters are restricted to the simultaneous retransmission of the complete programming, and only that programming, transmitted by the satellite directly to SDARS receivers.
- 4. Coordination of terrestrial repeater operations shall be completed with all affected Administrations prior to operation, in accordance with all applicable international agreements including those with Canada and Mexico.
- 5. Terrestrial repeaters shall comply with Part 17 of the Commission's rules Construction, Marking, and Lighting of Antenna Structures.
- 6. Terrestrial repeaters shall comply with Part 1 of the Commission's rules, Subpart I Procedures Implementing the National Environmental Policy Act of 1969, including the guidelines for human exposure to radio frequency electromagnetic fields as defined in Sections 1.1307(b) and 1.13 10 of the Commission's rules.
- 7. The out-of-band emissions of terrestrial repeaters shall be limited to 75+log(EIRP) dB less than the transmitter EIRP.

COMMU.	File # SAT - STA-20081002-00198
	Call Sign Grant Date
OMMISSION .	(or other identifier)  Term Dates
OF NIED	To: 30 days
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2. Contact			
Name:	James S. Blitz	Phone Number:	202–380–4000
Company:	XM Satellite Radio Inc.	Fax Number:	202–380–4981
Street:	1500 Eckington Place NE	E-Mail:	james.blitz@xmradio.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20002 -
Attention:		Relationship:	Same
(If your application is related to a application. Please enter only one.) 3. Reference File Number or Su	(If your application is related to an application filed with plication. Please enter only one.)  3. Reference File Number or Submission ID	the Commission, enter either the	(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 plication. Please enter only one.)  3. Reference File Number or Submission ID
4a. Is a fee submitted  If Yes, complete an	4a. Is a fee submitted with this application?  If Yes, complete and attach FCC Form 159. If No, inc	If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).	se 47 C.F.R.Section 1.1114).
O Governmental Entity O Other(please explain):	y <b>O</b> Noncommercial educational licensee n):	ıl licensee	
4b. Fee Classification	CRY - Space Station (Geostationary)	(y)	
5. Type Request			
Change Station Location		<b>O</b> Extend Expiration Date	Other
6. Temporary Orbit Location	ation	7. Requested Exten	7. Requested Extended Expiration Date

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### Request for Special Temporary Authority

XM Radio Inc. ("XM"), pursuant to 47 C.F.R. § 25.120<sup>1</sup> of the Commission's Rules, hereby requests Special Temporary Authority ("STA") to continue to operate a single repeater in Cincinnati, OH at its current technical parameters<sup>2</sup> for 30-days while certain unanticipated leasing issues are resolved. As detailed below, XM faces extraordinary and unforeseen circumstances that support immediate grant of this STA.<sup>3</sup>

As the Commission is aware, XM entered into a Consent Decree which ended the Commission's investigation into XM's operation of certain terrestrial repeaters at technical parameters in variance from its existing STAs.<sup>4</sup> As part of this Consent Decree, XM agreed to shut off fifty repeaters and bring an additional fifty repeaters into compliance with existing authorized parameters by October 4, 2008.<sup>5</sup> The repeater that is the subject of this request was among the fifty that XM has been working diligently to bring into compliance and is designated as CIN025C on Attachment C of the XM Radio Consent Decree. Specifically, this repeater which is located in downtown Cincinnati, requires modifications to the antenna model and downtilt and a 50 foot increase in the antenna height to comply with the existing authorization.

Unfortunately, due to circumstances out of XM's control, and despite XM's diligent efforts, XM has been unable to implement the necessary modifications and will not be able to do so by the October 4 deadline. XM's lease to use this tower precludes XM from making any changes to its facilities without the landlord's express prior written consent. XM first contacted the landlord to procure its consent on July 28, 2008 – only days after the Commission adopted the *XM Radio Consent Decree* – expressly noting the likely need to perform a structural analysis in connection with the proposed changes.

Since that time, XM has continued negotiations with the landlord on legal issues relating to the lease. As of early this week, XM believed those issues had been resolved such that XM would be able to make the necessary modifications to bring this repeater into STA compliance before October 4. However, on September 30, the landlord informed XM that it would not consent to any changes to XM's equipment on the tower

Because XM is requesting STA for less than 30 days, the Commission can grant this application without placing it on Public Notice. 47 C.F.R. § 25.120(b)(4).

The current technical parameters of this repeater are provided in Exhibit A.

See 47 C.F.R. § 25.120(a) (stating that an STA "request received within less than 3 working days [prior to the date of proposed construction or operation] may be accepted only upon due showing of extraordinary reasons for the delay in submitting the request which could not have been earlier foreseen by the applicant").

<sup>&</sup>lt;sup>4</sup> XM Radio, Inc., Consent Decree, File Nos. EB-06-SE-148 and EB-06-SE-356, 23 FCC Rcd 12327, FCC 08-177 (rel. Aug. 5, 2008) ("XM Radio Consent Decree").

<sup>5</sup> XM Radio Consent Decree at ¶ 9.

unless XM agreed to unreasonable terms regarding improvements to the tower's structural integrity that are well beyond XM's responsibility to finance. The landlord further informed XM that it would not know more about the tower's structural integrity and the need for any improvements until it had completed a structural analysis, which had not been conducted and could not be finalized until October 21, 2008 due to scheduling issues for the company that can perform the analysis most expeditiously.

As a result, the landlord has not consented to XM's proposed changes and it will be another three weeks before the parties can more fully understand the extent of structural improvements that may be needed to the tower. Moreover, due to concerns that have been raised about the tower's structural integrity, the landlord cannot provide assurances that it is safe for XM personnel to ascend the tower to make the necessary changes until that analysis has been completed.

XM hereby requests that the Commission allow it to continue to operate this repeater at the current technical parameters for an additional 30 days while it continues to negotiate these issues with the tower owner and obtains an updated structural analysis. This 30-day STA will allow XM to avoid shutting down the repeater, which is essential to providing uninterrupted service to XM subscribers in downtown Cincinnati. If XM is required to shut down this repeater without an adequate alternative site, thousands of subscribers could lose reliable service, yet absent grant of this STA, temporarily shutting down the repeater is the only other way that XM can comply with the Consent Decree.

XM does not anticipate any in-band or out of band interference from the continued operation of this repeater which has operated at the requested parameters for nearly 7 years. Indeed, XM has never received any complaint of interference regarding the operation of this repeater. Therefore, XM respectfully requests that the Commission promptly grant its proposed STA.

XM understands that the operation of this repeater continues to be subject to the conditions placed upon that operation by the 2004 STA Grant Order. Grant of the requested STA will not alter XM's obligations to protect authorized radiocommunications facilities from interference. Further, the final characteristics of this and the other XM terrestrial repeaters remain subject to the outcome of the Commission's rulemaking proceeding.

See XM Radio Inc. Request to Modify Special Temporary Authority To Operate Satellite Digital Audio Radio Service Terrestrial Repeaters, Order and Authorization, 19 FCC Rcd 18140 (2004) ("2004 STA Grant Order").

See Amendment of Part 27 of the Commission's Rules to Govern the Operation of Wireless Communications Services in the 2.3 GHz Band, Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, WT Docket No. 07-293, IB Docket No. 95-91, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, 22 FCC Rcd 22123 (2007).

∠∐	SITE NO.	ANTENNA NO.	LATITUDE	LONGITUDE   A	INTENNA TYPE	ANT ORIENTATION (DEG AZ)	ANT. HEIGHT (FT. AGL)	ANT. DOWNTILT	T   TOTAL AVERAGE EIRP (W)
Cincinnati	CIN025C	Tx1	39-06-59 N	84-30-07 W	HMD8-V360-R05-H	0	790	0	5738



### Antenna Type: HMD8V360-R05-H

**Description:** 

HMD Antenna, R Band Narrow, 8 Bay, Vertical

Polarization, Omnidirectional Pattern, High Power, 0.5

**Degrees Beamtilt** 

**Electrical Specifications** 

Frequency Designation Frequency Band, MHz

Number of Bays Gain, dBi

**Azimuth Pattern Type** 

Elevation Beamwidth, degrees

Polarization Type

Beamtilt, degrees Impedance, nominal ohms

Return Loss, dB (VSWR)
Maximum Input Power, Watts

**Lightning Protection** 

Connector

**Connector Position** 

R Band Narrow 2320 - 2345

8 11.0

Omnidirectional

7

Single, Vertical

0.5 50

> 14 (< 1.5) 1000 \*\*

**Top Mounted Finial Included** 

7/8" EIA Bottom

**Mechanical Specifications** 

Dimensions H x Radome Diameter, mm (in)

Weight, kg (lb)

Radome Material Radome Color

Pressurization, kPa (lb / sq in)

1118 (44.0) x 127 (5.0)

25.0 (55.0)

Fiberglass, Pressurizable

White 70 (10)

**Environmental Specifications** 

Survival Wind Speed, km/h (mph)

Wind Shear, N (lbf)

Overturning Moment, N.m (ft-lb)

Temperature Range

Humidity

180 (112) 614 (138)

495 (367)

- 40° C to + 50° C \*\*

Up to 100%

**Mounting Information** 

Mount Type \*

**Mount Description** 

Mounting Pipe Diameter, mm (in)

A Type Special With Adjustment Side Mounted at Top of Tower

76 (3.0)

<sup>\*</sup> See Catalog 38, pp 305 to 310 for further information

<sup>\*\*</sup> Maximum input power derates linearly from 1000 to 750 watts as temperature increases from 25 to 50° C