

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

Sirius XM Radio Inc. (“Sirius XM”) hereby requests special temporary authority (“STA”) for a period of 30 days to permit its Ellenwood, Georgia earth station (Call Sign E080168) to provide telemetry, tracking and control (“TT&C”) for the XM-2 satellite licensed to Sirius XM’s affiliate, XM Radio LLC (“XM Radio”). Pursuant to Commission authority, XM-2 has been relocated to 27° W.L. in preparation for removal to a disposal orbit.¹ XM Radio expected to rely on Canadian-licensed earth stations in connection with this process but due to performance issues with those facilities, Sirius XM has had to use the E080168 antenna to communicate with XM-2. STA is required since that station’s license does not provide authority for all the frequencies required for the necessary operations. Continued use of the E089168 facility at the requested frequencies is critical to support the TT&C functionality needed to safely maintain XM-2 at its current position and to support orbit-raising in accordance with Commission requirements. Accordingly, Sirius XM seeks expedited action on this request.

Sirius XM will conduct TT&C operations for XM-2 in the satellite’s authorized bands:

Command: 7049.0 MHz and 7074.0 MHz

Telemetry: 2339.2 MHz, 2339.7 MHz, 2344.0 MHz, and 2344.5 MHz

In the XM-2 STA Request, XM Radio advised the Commission that it intended to rely on Canadian-licensed earth stations to perform TT&C during and after the satellite’s relocation to 27° W.L.² However, beginning soon after the relocation started in May, performance issues

¹ See *XM Radio LLC*, File No. SAT-STA-20140204-00018, Call Sign S2119 (“XM-2 STA Request”), grant-stamped Mar. 28, 2014 (authorizing extension of the XM-2 license term and permitting relocation of the satellite from 115.25° W.L. to 27° W.L. to prepare for orbit-raising maneuvers).

² See XM-2 STA Request, Narrative at 4.

arose with the Canadian antenna, and that facility was unable to provide the automated tracking capability needed to supply accurate ranging data from the satellite. This capability failed entirely in early June. Since these problems began, Sirius XM has been using the E080168 antenna to ensure that the XM-2 ranging information is correct. This involves transmitting to XM-2 on the command frequencies and receiving on the telemetry frequencies in order to accurately determine the satellite's position. At the time it commenced use of the antenna in May, Sirius XM believed that such operations were consistent with the terms of the E080168 license and only recently learned that was not the case.

Grant of the requested STA will not result in harmful interference to other authorized communications systems. Sirius XM and XM Radio hold exclusive rights to the S-band satellite digital audio radio service ("SDARS") frequencies used for telemetry. Sirius XM and XM Radio will coordinate the XM-2 TT&C operations internally to ensure that no interference is caused to any of the companies' other in-orbit satellites. No other satellite operators have been or will be affected by the proposed use of these telemetry frequencies.

Similarly, grant of this request should not cause harmful interference to existing or proposed terrestrial facilities operating in the X-band frequencies. The E080168 earth station has been fully coordinated in the X-band with terrestrial users. However, the upper command frequency for XM-2, 7074.0 MHz, is 1.5 MHz beyond the upper bound of the frequency range for which E080168 was coordinated, 7072.5 MHz. Although E080168 has not been coordinated for this frequency, the E080168 antenna is located at the same facility in Ellenwood as XM Radio's E040204 earth station,³ and the latter earth station has been coordinated with terrestrial licensees for the XM-2 TT&C frequencies proposed for use here. Accordingly, no additional

³ The coordinates for E080168 and E040204 are the same, and the E080168 antenna proposed for TT&C use is within approximately 80 meters of the closest E040204 antenna at the facility.

coordination should be required to permit temporary use of the E080168 antenna during the brief period of the requested STA.⁴

Sirius XM has previously used the E080168 antenna to communicate with satellites in the Sirius XM and XM Radio fleets, including using the 7074.0 MHz upper command frequency, to provide launch and early orbit phase (“LEOP”) services⁵ and has never received a complaint of interference from these operations. In the extremely unlikely event that harmful interference should occur due to transmissions to or from its earth station, Sirius XM will take all reasonable steps to eliminate the interference. The 24/7 contact person for the XM-2 mission is:

Intelsat Long Beach Satellite Operations Center: (310) 525-5590

Sirius XM hereby certifies that no party to this application is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862.

For the foregoing reasons, Sirius XM respectfully requests expedited grant of authority for use of the E080168 earth station to provide TT&C for XM-2.

⁴ To the extent necessary, Sirius XM seeks a waiver of Section 25.203(c) to permit temporary use of call sign E080168 for TT&C operations with XM-2 as described herein without the requirement to conduct a prior coordination with terrestrial licensees or applicants. Grant of a waiver is justified here because it would not conflict with the underlying purpose of the rule’s coordination requirement. *See PanAmSat Licensee Corp.*, 17 FCC Rcd 10483, 10492 (Sat. Div. 2002) (“the Commission may grant a waiver of its rules in a particular case if the relief requested would not undermine the policy objective of the rule in question and would otherwise serve the public interest”) (footnotes omitted). Here, the purpose of the rule is to avoid interference to terrestrial licensees, and that purpose is achieved because the antenna to be used is co-located with facilities that have previously been coordinated with terrestrial licensees for the frequencies and power levels proposed.

⁵ *See, e.g., Sirius XM Radio Inc.*, File No. SES-STA-20101012-01280, Call Sign E080168, grant-stamped Oct. 14, 2010 (authorizing use of antenna to support LEOP services for XM-5 using TT&C frequencies that included 7074 MHz); *Sirius XM Radio Inc.*, File No. SES-STA-20130701-00562, Call Sign E080168, grant-stamped Sept. 27, 2013 (authorizing use of antenna to support LEOP services for FM-6).