

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

In the Matter of	)	
	)	
SES AMERICOM, INC.	)	File No. SES-STA-_____
	)	Call Sign E170138
Request for Special Temporary Authority to	)	
Support Early Orbit Raising for SES-15	)	

**REQUEST OF SES AMERICOM, INC.**

SES Americom, Inc. (“SES”) respectfully requests special temporary authority (“STA”) for 60 days, commencing September 19, 2017, to utilize a Ku-band antenna located at its Woodbine, Maryland teleport<sup>1</sup> to provide Tracking, Telemetry and Command (“TT&C”) to support early orbit raising (“EOR”) of the SES-15 satellite. SES-15 was launched on May 18, 2017 and has been transiting toward its in-orbit test location of 137° W.L. The EOR period is expected to last up to 60 days.

SES Satellites (Gibraltar) Ltd., an affiliate of SES Americom, has been granted market access authority to provide service using SES-15 at the 129.15° W.L. orbital location.<sup>2</sup> Prior to commencing operations at 129.15° W.L., SES-15 will undergo in-orbit testing at 137° W.L. The authority requested in this application is necessary to complete orbit raising for the satellite from its transfer orbit to its test location.

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<sup>1</sup> A license application for this antenna is pending before the Commission. *See* SES Americom, Inc., Call Sign E170138, File No. SES-LIC-20170726-00805, filed July 26, 2017. The application was placed on public notice as acceptable for filing on August 9, 2017, *see* Report No. SES-01980, and no comments were filed, so the application is ripe for action.

<sup>2</sup> SES Satellites (Gibraltar) Limited, (Call Sign S2951), File No. SAT-MPL-20160718-00063, granted Dec. 14, 2016.

The SES-15 TT&C operations for EOR will be performed at the following frequencies: 10700.5 MHz and 12199.5 MHz (space-to-Earth) and 13999 MHz, 14001 MHz, and 14499 MHz (Earth-to-space) using a linear polarization.<sup>3</sup> SES will coordinate the TT&C transmissions with all operators of satellites that use the same frequency bands and are in the EOR path and will provide them with an emergency number where the licensee can be reached in the event that harmful interference occurs.

The 24x7 contact information for the SES-15 EOR mission is as follows: Payload Management Operations Center Level 1, +1 410 970 7570; +1 800 772 2363; pmocl1@ses.com.

In connection with this STA request, SES seeks any necessary waiver of the international-service-only restriction in footnote NG52 of Section 2.106 of the Commission's rules<sup>4</sup> to permit reception of a telemetry beacon in the 10.7-11.7 GHz band on an unprotected, non-interference basis. Such a waiver is warranted in the circumstances for the limited purpose of TT&C. As the Commission has recognized, TT&C operations generally require uplink and downlink capability from the same earth station. For this reason, the Commission has previously granted waivers of the international service restriction to enable TT&C to be performed in the U.S. using the extended Ku-band frequencies.<sup>5</sup>

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<sup>3</sup> An analysis of the proposed operations in the 13.75-14.0 GHz band conducted by Comsearch was submitted in the pending license application, File Number SES-LIC-20170726-00805, and is incorporated by reference herein.

<sup>4</sup> 47 U.S.C. § 2.106 Footnote NG52.

<sup>5</sup> See, e.g., EchoStar KuX Corporation, 20 FCC Rcd 919 (Int'l Bur. 2004) ("*EchoStar 83W Order*"); EchoStar Satellite LLC, 20 FCC Rcd 930 (Int'l Bur. 2004) ("*EchoStar109W Order*"); EchoStar KuX Corporation, 20 FCC Rcd 942 (2004) ("*EchoStar 121W Order*"). These decisions granted waivers of the international only restriction in Footnote NG104, which has been replaced by Footnote NG52.

Grant of the requested waiver would not undermine the purpose of the restriction, which is to ensure that earth station deployments in the extended Ku-band do not negatively impact the deployment of fixed service (“FS”) in the same band or cause interference to such operations. The telemetry downlink signals from SES-15 in the extended Ku-band are narrow in bandwidth, and will comply with the power flux density limits in the Commission’s rules and, thus, will not interfere with FS station operations. Moreover, only a small number of U.S. earth stations will be used to perform TT&C in the extended Ku-band.<sup>6</sup> The TT&C to support EOR will be performed by the antenna in Woodbine, Maryland and one additional U.S. earth station. As a result, there will be no significant restrictions placed on the deployment of FS in this band.

For the foregoing reasons, SES respectfully requests special temporary authority to communicate with SES-15 for a period of up to 60 days in order to provide TT&C in support of EOR for the satellite as described herein.

Respectfully submitted,

SES AMERICOM, INC.

By: /s/ Petra A. Vorwig

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<sup>6</sup> See *EchoStar 83W Order*, at ¶ 16 (“The Commission has waived this [international only] requirement where the number of potential earth stations in a particular service is inherently small.”); *EchoStar 109W Order*, at ¶ 16 (same); *EchoStar 121W Order*, at ¶ 17 (same).