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

In the Matter of Application by)
)
SES AMERICOM, INC.)
)
For Special Temporary Authority to)
Communicate with QuetzSat-1 to Perform TT&C)
And Additional In-Orbit Testing at 77.05° W.L.)

Call Sign E970336

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

By this application, SES Americom, Inc. ("SES Americom," doing business as "SES") respectfully requests special temporary authority ("STA") for a period of up to 60 days, commencing no later than January 18, 2013, to permit SES to use its South Mountain, CA earth station E970336 to perform additional in-orbit testing ("IOT") of the QuetzSat-1 spacecraft following its arrival at 77.05° W.L. and to continue performing TT&C for the satellite at that location. SES Americom has already been granted a 60-day STA to use E970336 to relocate QuetzSat-1 to 77.05° W.L. and to perform TT&C with that spacecraft at that location, ¹ pending the grant of an application to add QuetzSat-1 as a long-term point of communication to the E970336 license.² The present STA application seeks authority to use E970336 to perform additional IOT (as described herein) and to extend the existing TT&C authority.

QuetzSat-1 is a foreign-licensed Direct Broadcast Satellite ("DBS") spacecraft.³ The Commission previously authorized the use of the E970336 earth for initial operational

¹ See File No. SES-STA-20121127-01046, grant-stamped Dec. 10, 2012.

² *See* File No. SES-MFS-20121128-01044.

³ QuetzSat-1 is currently operating under a U.K. Outer Space Act license and will be registered as a U.K. space object.

testing of QuetzSat-1 at 67.1° W.L. after it was successfully launched on September 29, 2011.⁴ In late 2012, SES received instructions from its customer, EchoStar 77 Corporation ("EchoStar"), to relocate the satellite to 77.05° W.L. to provide DBS service to the United States and Mexico under a concession granted by Mexico to QuetzSat, S de R.L. de C.V., an affiliate of SES. EchoStar (and its affiliates) have already been granted Commission authority to provide DBS service to the United States using the QuetzSat-1 satellite at 77.05° W.L.⁵

The additional IOT proposed here will verify the configuration of QuetzSat-1 described in EchoStar's application to use the satellite to provide service in the United States at 77.05° W.L. The additional IOT will involve verifying the performance characteristics and antenna patterns of this configuration, and include antenna mapping and gain transfer tests. Some tests will involve transmitting saturating CW carriers to the satellite in the DBS bands for short periods of time.

The proposed operations will not adversely affect adjacent satellite operators. Coordination of the additional IOT is underway with adjacent DBS satellite operators. The nearest operational DBS satellites are the Telesat Canada spacecraft – Nimiq 5 and Nimiq 4 – at 72.7° W.L. and 82° W.L., respectively. SES expects to be able to successfully coordinate the proposed IOT with the operations of both satellites. SES notes that EchoStar (or an affiliate thereof) is the sole customer on QuetzSat-1 and the sole customer of all of the DBS capacity on Nimiq 5 at 72.7° W.L. Accordingly, SES expects coordination of IOT to be completed before testing begins.

See File No. SES-STA-20110729-00873, grant-stamped Sept. 12, 2011 ("E970336 STA").
The authority was extended in File No. SES-STA-20110928-01151, grant-stamped Oct. 24, 2011.

⁵ See File No. SES-MFS-20110707-00793, Call Sign E050196, granted Nov. 10, 2011.

As with the original E970336 STA, SES will accept interference from any regularly authorized network and will terminate operations if SES is notified that such a network is experiencing harmful interference.⁶

Grant of this request is in the public interest. The additional QuetzSat-1 testing will verify the configuration of QuetzSat-1 at 77.05° W.L. on which U.S. market access was previously granted. In addition, the requested extension of TT&C authority will facilitate the continued safe operation of QuetzSat-1 pending the addition of QuetzSat-1 to the E970336 license as a point of communication.

SES 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, SES respectfully requests special temporary authority to communicate with QuetzSat-1 for a period of up to 60 days in order to perform additional inorbit testing and conduct TT&C as described herein.

Respectfully submitted,

SES AMERICOM, INC.

By: /s/ Daniel C.H. Mah

<u>Of Counsel</u> Karis A. Hastings SatCom Law LLC 1317 F Street, N.W., Suite 400 Washington, D.C. 20004 Tel: (202) 599-0975 Daniel C.H. Mah Regulatory Counsel SES Americom, Inc. Four Research Way Princeton, NJ 08540

Dated: January 9, 2012

⁶ See id.

ATTACHMENT A E970336 Technical Information

TT&C Emissions

Emission Designator: 1M00G7W Max uplink EIRP: 86.5 dBW Max uplink EIRP Density: 62.5 dBW/4kHz Tx Frequency Range: 17300-17800 MHz Rx Frequency Range: 12200-12700 MHz Polarization: Left and Right Circular

IOT Emissions

Satellite Beacon Frequencies: 12698.5 MHz and 12692 MHz Emission Designator: NON Max satellite EIRP: 25 dBW Polarization: Right Hand Circular

Emission Designator: 1K00K3N Max uplink EIRP: 86.5 dBW Max uplink EIRP Density: 92.5 dBW/4kHz Tx Frequency Range: 17300-17800 MHz Rx Frequency Range: 12200-12700 MHz Polarization: Left and Right Circular

Emission Designator: N0N Max uplink EIRP: 86.5 dBW Max uplink EIRP Density: 92.5 dBW/4kHz Tx Frequency Range: 17300-17800 MHz Rx Frequency Range: 12200-12700 MHz Polarization: Left and Right Circular

Emission Designator: 24M0G7W Max uplink EIRP: 86.5 dBW Max uplink EIRP Density: 48.7 dBW/4kHz Tx Frequency Range: 17300-17800 MHz Rx Frequency Range: 12200-12700 MHz Polarization: Left and Right Circular

Emission Designator: 24M0F3D Max uplink EIRP: 86.5 dBW Max uplink EIRP Density: 48.7 dBW/4kHz Tx Frequency Range: 17300-17800 MHz Rx Frequency Range: 12200-12700 MHz Polarization: Left and Right Circular