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

| In the Matter of |) | | |
|---|-------------|---------|--|
| SES Americom, Inc. |) | SES-STA | |
| Request for Special Temporary Authority to Test New Antenna in the Conventional Ku-band and Ku BSS band |))) | | |

Expedited Action Requested

APPLICATION FOR SPECIAL TEMPORARY AUTHORITY

SES Americom, Inc. ("SES") respectfully requests Special Temporary Authority ("STA") for 30 days to test a new nine meter antenna, located at SES's facility in South Mountain, CA (SM K-6) in the conventional Ku-band with the AMC-15 satellite at 105° W.L. (Call Sign S2180) and in the and Ku BSS bands with the SES-10 satellite once it arrives at 66.9° W.L. (Call Sign S2950). SES is preparing and will shortly file an application seeking a license for this antenna, which will be used to provide commercial service and telemetry, tracking and control operations for the SES-15 satellite to be operated by SES Satellites (Gibraltar) Ltd. ("SES-GIB") at 129.15° W.L.¹ SES seeks STA to test the new antenna in the conventional and BSS Ku-band frequencies beginning May 15, 2017, and asks for Commission action consistent with that timing.

¹ See SES Satellites (Gibraltar) Limited, Call Sign S2951, File Nos. SAT-PPL-20160126-00007, SAT-MPL-20160718-00063, granted Dec. 14, 2016 ("SES-15 Grant").

Specifically, SES requests authority to test the SM K-6 antenna on the following frequencies with AMC-15: 11.7-12.2 GHz (downlink) and 14.0-14.5 GHz (uplink). SES also requests authority to test the antenna on the following frequencies with SES-10: 17.3-17.55 GHz (uplink). SES will not use downlink transmission from SES-10 during the tests. Testing will consist of an unmodulated CW carrier operating for a few hours several times during the requested 30-day STA term. All operations will be conducted within the technical parameters set forth in Attachment 1 and on an unprotected, non-interference basis.

Grant of the requested STA on an expedited basis is in the public interest because it will allow SES Americom to ensure its earth station is capable of providing a high level of service in support of the SES-15 operations in advance of the satellite's launch, which is scheduled for later in May.

Waiver Request

SES requests a limited waiver of the Commission's requirements in connection with the instant application. Grant of this waiver is consistent with Commission policy:

The Commission may waive a rule for good cause shown. Waiver is appropriate if special circumstances warrant a deviation from the general rule and such deviation would better serve the public interest than would strict adherence to the general rule. Generally, 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.²

Section 2.106 and Footnote US271. The SES-10 Grant included a waiver of Section

2.106 and footnote US271 permitting New Skies Satellites B.V. to provide service into the

United States at 67° W.L. using the 17.3-17.55 GHz band, which is allocated for the fixed-

² PanAmSat Licensee Corp., 17 FCC Rcd 10483, 10492 (Sat. Div. 2002) (footnotes omitted).

satellite service but limited to use by broadcasting-satellite service ("BSS") feeder links.³ At 66.9° W.L., the SES-10 spacecraft will be located 2.3° from the nearest BSS Feeder link Plan assignment and 5.4° from the nearest operational BSS Feeder links at the nominal 61.5° W.L. location. As described in the SES-10 Petition, BSS feeder links are similar to other FSS operations using large earth station antennas that can share on a roughly two degree spacing basis. Furthermore, operations in the 17.3-17.55 GHz band will be on an unprotected, non-interference basis. Thus, granting a waiver will not undermine Commission policy because BSS operations will be fully protected.

For the foregoing reasons, SES Americom respectfully requests that the Commission grant it a 30-day STA on an expedited basis to test its SM K-6 antenna with AMC-15 in the conventional Ku-band and with SES-10 in the Ku BSS band.

Respectfully submitted,

SES Americom, Inc.

By: <u>/s/ Petra A. Vorwig</u>

<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 Petra A. Vorwig Senior Legal & Regulatory Counsel SES Americom, Inc. 1129 20th Street N.W., Suite 1000 Washington, D.C. 20036

Dated: May 9, 2017

³ See New Skies Satellites B.V. Market Access Application, File No. SAT-PPL-20160117-00005 ("SES Petition"), Attachment to Grant at 2, ¶ 5, granted on June 23, 2016 ("SES-10 Grant").

Attachment 1

Site Details

Contact Information: David Coyle 805-386-2712

Geographic Coordinates: Latitude: 34 °19 '32.27 "N

Site Elevation: 313.0 meters

Antenna Details

Address: 5990 Solano Verde Dr. Somis, California 93066

Longitude: 118 °59 '43.18 "W

| Antenna ID: | K-6 |
|-----------------------------------|----------------------------------|
| Manufacture/Model: | General Dynamics/9.0m Cassegrain |
| Antenna Size: | 9.0 meters |
| Antenna Gain Transmit: | 60.1 dBi at 14.125 GHz |
| | 61.96 dBi at 17.5 GHz |
| Antenna Gain Receive: | 58.5 dBi at 11.725 GHz |
| Height Above Ground Level: | 9.7 meters |
| Height Above Sea Level: | 322.7 meters |
| Total Input Power at the Flange: | 650 watts |
| Total EIRP for the test Carriers: | 88.23 dBW |

Operational Details

| Frequency (GHz) | Transmit/Receive | Polarization | Emissions Designator | Max EIRP per Carrier (dBW) | Max EIRP Density per Carrier (dBw/4kHz) |
|--------------------|------------------|----------------------------|-------------------------|-------------------------------------|--|
| 11.7-12.2 | R | Horizontal and Vertical | 1M00F9D | 0.0 | 0.0 |
| 11.7-12.2 | R | Horizontal and Vertical | 100KG7W | 0.0 | 0.0 |
| 11.7-12.2 | R | Horizontal | NON | 0.0 | 0.0 |

| | | and Vertical | | | |
|------------|---|--------------|---------|-------|-------|
| 14.0-14.5 | Т | Horizontal | 1M00F9D | 76.08 | 52.1 |
| | | and Vertical | | | |
| 14.0-14.5 | Т | Horizontal | 100KG7W | 60.08 | 46.1 |
| | | and Vertical | | | |
| 14.0-14.5 | Т | Horizontal | NON | 52.1 | 52.1 |
| | | and Vertical | | | |
| 17.3-17.55 | Т | Horizontal | 1M00F9D | 68.36 | 44.38 |
| | | and Vertical | | | |
| 17.3-17.55 | Т | Horizontal | 100KG7W | 58.36 | 44.38 |
| | | and Vertical | | | |
| 17.3-17.55 | Т | Horizontal | NON | 44.38 | 44.38 |
| | | and Vertical | | | |