

E160022 SES-STA-20170728-00834 IE2017002072
SES Americom, Inc.

Approved by OMB
3060-0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
Request for STA to Test E160022 for 30 Days

1. Applicant

Name: SES Americom, Inc. Phone Number: 202-478-7143
DBA Name: Fax Number: 202-478-7111
Street: 1129 20th Street NW E-Mail: petra.vorwig@ses.com
Suite 1000
City: Washington State: DC
Country: USA Zipcode: 20036
Attention: Ms Petra A Vorwig



File # SES-STA-20170728-00834
Call Sign E160022 Grant Date 8-7-17
(or other identifier)
Term Dates From: 8-7-17 To: 9-16-17
Approved: [Signature]

Applicant: SES Americom, Inc.
File No.: SES-STA-20170728-00834
Call Sign: E160022
Special Temporary Authority (STA)



File # SES-STA-20170728-00834
E160022
Call Sign E160022 Grant Date 8-7-17
(or other identifier)
Term Dates
From: 8-7-17 To: 9-6-17
Approved: [Signature]

SES Americom, Inc. ("SES Americom") is granted STA for up to 30 days to test a new 9.2 m antenna, manufactured by SES, at South Mountain, California (34°19' 31.9" N.L./118° 59' 41.4" W.L.) with space station AMC-16 (Call Sign S2181) at orbital location 85 degrees W.L. in the frequency bands: 28.4-28.6 GHz (Earth-to-space), 29.5-30.0 GHz (Earth-to-space); 18.6-18.8 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth) under the following conditions:

1. The 17.8 - 20.2 GHz band is shared with U.S. Government space stations and associated earth stations in the fixed-Satellite Services. Services within the United States over the satellite network of which this is a cooperating earth station are subject to coordination under US334 and operation of the earth station(s) authorized herein will be subject to any technical constraints resulting from this coordination. See 47 C.F.R. Section 2.106, Footnote US334.
2. Operations under STA are limited with transmit and receive emission carriers NON (LHCP and RHCP) at maximum 40.5 dBW/4kHz eirp density not to exceed the proposed level under IBFS File No.: SES-MOD-20170601-00617.
3. SES Americom shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference.
4. Grant of this authorization is without prejudice to any determination that the Commission may make regarding IBFS File No.: SES-MOD-20170601-00617 or any other pending or future application filed by SES Americom.
5. Transmitter(s) must be turned off during antenna maintenance to ensure compliance with the FCC-specified safety guidelines for human exposure to radiofrequency radiation in the region between the antenna feed and the reflector. Appropriate measures must also be taken to restrict access to other regions in which the antennas' power flux-density levels exceed the specified guidelines.
6. The licensee shall take all necessary measures to ensure that the antenna does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR 1.1307(b) and 1.1310 wherever such exposures might occur. Measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Compliance can be accomplished in most cases by appropriate restrictions, such as fencing. Requirements for restrictions can be determined by predictions based on calculations, modeling, or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on

predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.

7. In the event that there is a report of interference, SES Americom must immediately terminate transmissions and notify the FCC in writing.

8. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at SES Americom's own risk.

9. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.

2. Contact	
Name: George Varkey	Phone Number: 609-987-4327
Company: SES Americom, Inc.	Fax Number:
Street: 4 Research Way	E-Mail: george.varkey@ses.com
City: Princeton	State: NJ
Country: USA	Zipcode: 08540 -
Attention:	Relationship: Engineer
(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 application. Please enter only one.)	
3. Reference File Number or Submission ID	
4a. Is a fee submitted with this application?	
<input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).	
<input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee	
<input type="radio"/> Other (please explain):	
4b. Fee Classification CGX - Fixed Satellite Transmit/Receive Earth Station	
5. Type Request	
<input type="radio"/> Use Prior to Grant <input type="radio"/> Change Station Location <input checked="" type="radio"/> Other	
6. Requested Use Prior Date	
7. CitySomis	
8. Latitude (dd mm ss.s h) 34 19 31.9 N	

9. State CA	10. Longitude (dd mm ss.s h) 118 59 41.4 W
11. Please supply any need attachments. Attachment 1: STA Narrative Attachment 2: Attachment 3:	
12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.) SES Americom, Inc. respectfully requests special temporary authority for a period of up to 30 days beginning August 7, 2017 to permit SES Americom to test its newly constructed antenna located at its teleport in South Mountain, California, which is described in File No. SES-MOD-20170601-00617 (Call Sign E160022). See attachment.	
13. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; for these purposes. Yes <input checked="" type="radio"/> No <input type="radio"/>	
14. Name of Person Signing Petra A. Vorwig	15. Title of Person Signing Senior Legal & Regulatory Counsel
WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).	

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

In the Matter of Application by)
)
SES AMERICOM, INC.) Call Sign _____
For Special Temporary Authority to)
Test E160022)

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

By this application, SES Americom, Inc. (“SES Americom”), respectfully requests earth station special temporary authority (“STA”) for a period of up to 30 days commencing August 7, 2017, to permit SES Americom to test its newly constructed antenna located at SES Americom’s South Mountain, California facility, which is described in File No. SES-MOD-20170601-00617 (Call Sign E160022). Specifically, SES Americom requests authority to conduct brief transmissions in the following bands with AMC-16 (Call Sign S2181) to test that the antenna performs in compliance with SES’s specifications and Commission rules:

Transmit	Receive
28.4-28.6 GHz	18.58-18.8 GHz
29.5-30 GHz	19.7-20.2 GHz

A full description of the proposed operations is provided in Attachment 1.

SES Americom received authority to operate the above referenced antenna with the SES-15 satellite and other satellites on the Permitted Space Station List in July 2016,¹ and

¹ SES Americom, Inc., (Call Sign E160022), File No. SES-LIC-20160209-00124, granted July 13, 2016.

recently submitted an application to modify the license to reflect a larger antenna.² That application remains pending.

Grant of STA Will Serve the Public Interest. Grant of SES Americom's request to test its new antenna is in the public interest. Such testing is necessary to ensure both that the antenna is operating within SES specifications but also within the limits of the Commission's rules. Ensuring proper operations is necessary to avoid harmful interference in the future.

No Harmful Interference. The transmissions associated with the proposed antenna tests will not cause harmful interference to the operations of any other spacecraft or terrestrial operators. The antenna will communicate with a U.S. licensed spacecraft, AMC-16 in the conventional Ka-bands. In addition, and in any event, SES Americom will conduct all test operations on a non-harmful interference basis, and will cease transmissions promptly in the event any harmful interference is caused by such operations.

SES Americom 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.

² SES Americom, Inc., (Call Sign E160022), File No. SES-MOD-20170601-00617, filed June 1, 2017.

For the foregoing reasons, SES Americom respectfully requests special temporary authority to communicate with AMC-16 to test its new Ka-band antenna (Call Sign E160022) for a period of up to 30 days, commencing August 7, 2017.

Respectfully submitted,

SES AMERICOM, INC.

By: /s/ Petra A. Vorwig

Of Counsel

Karis A. Hastings
SatCom Law LLC
1317 F St., N.W.
Suite 400
Washington, D.C. 20004
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Petra A. Vorwig
Senior Legal & Regulatory Counsel
SES Americom, Inc.
Four Research Way
Princeton, NJ 08540

Dated: July 28, 2017

Attachment 1

Below is a description of the test operations for which SES Americom seeks special temporary authority:

Site Location: Call Sign E160022

Particulars of Operation

Frequency	Polarization	Emission	Tx/Rx Mode	Max EIRP/Carrier (dBW/MHz)	Max EIRP Density (dBW/4kHz)
18.58-18.8 GHz	LHCP	N0N	Rx		
19.7-20.2 GHz	LHCP	N0N	Rx		
28.4-28.6 GHz	RHCP	N0N	Tx	68.9	45
29.5-30.0 GHz	RHCP	N0N	Tx	68.9	45