

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
STA - SES-14-VSATs-Customer Readiness Tests

1. Applicant

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

30 days "With Conditions"

File # SES-STA-20180806-02093
Call Sign N/A Grant Date 08/29/2018
(or other identifier) Term Dates
From: 08/28/2018 To: 09/29/2018
Approved: [Signature]



2. Contact	
Name: George Varkey	Phone Number: 609 987 4327
Company: SES	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. City Various	8. Latitude (dd mm ss.s h) 0 0 0.0

9. State	10. Longitude (dd mm ss.s h) 0 0 0.0
11. Please supply any need attachments. Attachment 1: STA - Description Attachment 2: Attachment 3: 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.) <div style="border: 1px solid black; padding: 5px;">SES Americom requests extension of the Special Temporary Authority granted to operate 1.2m VSAT antennas at Rumford-ME, Charleston-SC, Woodbine-MD, Port St. Lucie-FL for a period of 30 days beginning on Aug 18th, 2018. The VSATs will communicate with NSS 806 & SES-14 (call sign S2974) at the orbital position 47.5 deg W.L. It will transmit in the conventional Ku-</div>	
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"; 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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THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

12. Description

SES Americom requests extension of the Special Temporary Authority granted to operate 1.2m VSAT antennas at Rumford-ME, Charleston-SC, Woodbine-MD, Port St. Lucie-FL for a period of 30 days beginning on Aug 18th, 2018. The VSATs will communicate with NSS 806 & SES-14 (call sign S2974) at the orbital position 47.5 deg W.L. It will transmit in the conventional Ku-band and receive in the conventional and extended Ku-band. A description of the proposed operations are attached.

Applicant: SES Americom, Inc.
CaliSign: N/A
File No.: SES-STA-20180806-02093
Special Temporary Authority

SES Americom, Inc. is granted a special temporary authorization to operate for 30 days, from August 28, to conduct testing of VSAT network system of 1.2-m Skyware Global antennas in Maine, South Carolina, Maryland, Florida, and Puerto Rico with hub stations in Maryland and Florida to communicate with the SES-14 (Call Sign S2974) satellite at orbital location 47.5°W.L. orbital locations on frequencies 14000-14500 MHz (Earth-to-space), and 10950-11200 MHz, 11450-12200 MHz (space-to-Earth) and NSS-806 (Call Sign S2591) satellite at orbital location 47.5°W on frequencies 14000-14500 MHz (Earth-to-space), and 11700-11950 MHz (space-to-Earth) under the following conditions:

- 1) Hub stations: Call Sign E170197 located at 2323 Grimville Rd, Mt. Airy, Maryland 21771 geographical coordinates 39° 22' 36.52" NI 77° 04' 49.4"W (NAD-83); Call Sign E170198 located at 10161 Range Line Rd, Port St. Lucie, Florida 34987 geographical coordinates 27°16'56"N/ 80°28' 58"W (NAD-83) shall comply with Section 25.212(c)(2) of the Commission's rules, 47 C.F.R. § 25.212(c)(2), for Permitted List satellite authority.
- 2) Operations of the VSAT network with transmit antenna gain of 43.3 dBi at Rumford, Maine; Charleston, South Carolina; Woodbine, Maryland, Port St. Lucie, Florida, and Juana Diaz, Puerto Rico.
- 3) Operations under STA are limited to the proposed total eirp for test carriers of 49.3 dBW, proposed transmit emission carriers NON, 400KG7W, 3MOOG7W, 6MOOG7W, 86M0G7W (H, V) on 14000-14500 MHz with maximum eirp density per carrier of 29.3 dBW/4kHz and input power density per carrier level of 14 dBW/4kHz to comply with 47 C.F.R. 25.2 12(c) (2) and receive emission carriers NON and 225MG7W (H,V).
- 4) 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.
- 5) All operations shall be on an unprotected and non-harmful interference basis, i.e. the applicant 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. In the event that there is a report of interference, SES Americom must immediately terminate transmissions and notify the FCC in writing.

6) Operations during the period of August 18, 2018 to the date of this grant were authorized pursuant to Section 1.62 of the Commission's rules 47 C.F.R.

7) Any action taken or expense incurred as a result of STA operation is solely at SES Americom's own risk.

This action is issued pursuant to Section 0.26 1 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.

30 days *"with conditions"*

 GRANTED International Bureau	File # <u>SES-STA-20180806-02093</u>
	Call Sign <u>N/A</u> Grant Date <u>08/29/2018</u> (or other identifier)
	Term Dates From: <u>08/28/2018</u> To: <u>09/29/2018</u>
	Approved: <u><i>[Signature]</i></u>

SES-14-Customer Readiness Tests

Site Details

Contact Information:

George Varkey
Tel: 1 609 987 4327

Address:

4 Research Way
Princeton, NJ

Geographic Coordinates:

Various-CONUS, see below

Site Elevation:

Various

Antenna Details

Antenna ID: 1.2m
Manufacture/Model: Skyware Global
Antenna Size: 1.2 meters (operating within 47 CFR §25.209)
Antenna Gain Transmit: 43.3 dBi at 14.3 GHz
Antenna Gain Receive: 41.8 dBi at 12.0 GHz
Height Above Ground Level: Various
Height Above Sea Level: Various
Total Input Power at the Flange: 4 watts
Total EIRP for the test Carriers: 49.3 dBW

Operational Details

Frequency (GHz)	Transmit/Receive	Polarization	Emission Designator	Max EIRP per Carrier (dBW)	Max EIRP Density per Carrier (dBw/4kHz)
10.7-10.95	R	H and V	N0N	0.0	0.0
10.7-10.95	R	H and V	225MG7W	0.0	0.0
10.95-11.2	R	H and V	N0N	0.0	0.0
10.95-11.2	R	H and V	225MG7W	0.0	0.0
11.2-11.45	R	H and V	N0N	0.0	0.0
11.2-11.45	R	H and V	225MG7W	0.0	0.0
11.45-11.7	R	H and V	N0N	0.0	0.0
11.45-11.7	R	H and V	225MG7W	0.0	0.0
11.7-12.2	R	H and V	N0N	0.0	0.0
11.7-12.2	R	H and V	225MG7W	0.0	0.0
14.0-14.5	T	H and V	N0N	29.3	29.3
14.0-14.5	T	H and V	400KG7W	49.3	29.3
14.0-14.5	T	H and V	3M00G7W	49.3	20.55
14.0-14.5	T	H and V	6M00G7W	49.3	17.55
14.0-14.5	T	H and V	86M0G7W	49.3	5.97

VSAT network/ Site and Hub locations:

Site	Lat. (Deg. N.)	Long (Deg. W.)	Hub for Dry Run with NSS806 (Ku/Ku)(Hub/VSAT)	Hub for SES-14 Tests (Ku/Ku) (Hub/VSAT)
Rumford, Maine	44.633	-70.699	Woodbine (E170197)	Woodbine (E170197)
Juana Diaz, Puerto Rico	18.149	-65.788	PSL (E170198)	PSL(E170198)
Charleston, SC	32.787	-79.927	Woodbine (E170197)	Woodbine (E170197)
Port St. Lucie	27.28	-80.483	PSL (E170198)	PSL (170198)
Woodbine, MD	39.376	-77.081	Woodbine(E170197)	Woodbine (E170197)