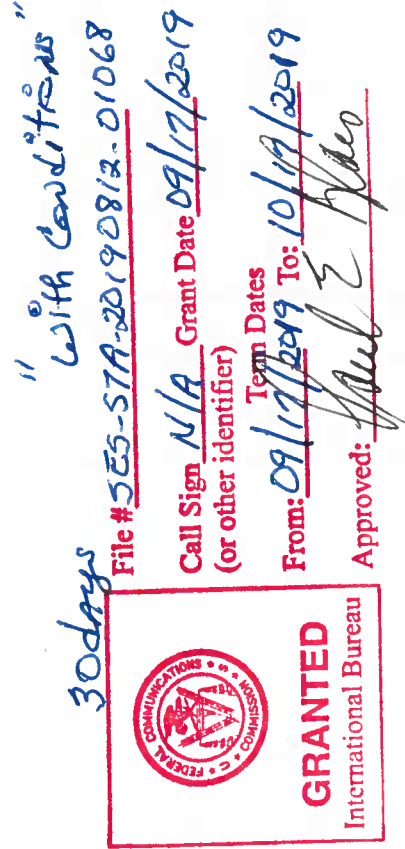


APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
SES STA Ku-band demo terminal

1. Applicant

Name:	SES Americom, Inc.	Phone Number:	571-229-0879
DBA Name:		Fax Number:	202-478-7111
Street:	1129 20th Street NW Suite 1000	E-Mail:	noah.cherry@ses.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036
Attention:	Mr Noah Cherry		



2. Contact	
Name: Noah Cherry Company: SES Americom, Inc. Street: 1129 20th Street NW Suite 1000 City: Washington Country: USA Attention:	Phone Number: 571-229-0879 Fax Number: E-Mail: noah.cherry@ses.com State: DC Zipcode: 20036 - Relationship: Legal Counsel
(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? ☒ If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114). ☐ Governmental Entity ☐ Noncommercial educational licensee ☐ Other (please explain):	
4b. Fee Classification CGX - Fixed Satellite Transmit/Receive Earth Station	
5. Type Request	
☒ Use Prior to Grant	☐ Change Station Location ☐ Other
6. Requested Use Prior Date 09/09/2019	
7. City Port St. Lucie	
8. Latitude (dd mm ss.s h) 27 16 57.0 N	

9. State	FL	10. Longitude (dd mm ss.s h)	80 28 57.0 W
11. Please supply any need attachments. Attachment 1: 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 request Special Temporary Authority for 30 days from September 9, 2019 to test 131.2x 141.8 x 29.8 centimeter antenna designated RaySat ER7000 for compatibility with SES's satellites in the conventional Ku-band.			
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.			
14. Name of Person Signing Noah Cherry		15. Title of Person Signing Legal 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).			

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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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.

Applicant: SES Americom, Inc
Call Sign: N/A
File No.: SES-STA-20190812-01068
Special Temporary Authority ("STA")

SES Americom, Inc. ("SES") is granted special temporary authorization for 30 days, beginning September 17, 2019 to test its RaySat ER7000 antenna(s) with SES-10 ("S2950") satellite at the 66.9 W orbital location to support testing of terminals used for mobile connectivity for ESIMs in the 14000-14500 MHz (Earth-to-space); and 10950-11200 MHz, and 11450 – 11700 MHz (space-to-Earth) frequency bands under the following conditions:

1. Operations must comply the existing station authorization.
2. Operations shall comply pursuant to 47 C.F.R. § 25.212(c)(2).
3. All operations shall be on an unprotected and non-harmful interference basis, SES, 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 and must inform the Commission, in writing, immediately of such an event.
4. All operators of satellites will be provided with an emergency phone number where the licensee can be reached in the event that harmful interference occurs, Currently the 24x7 contact information for the SES-10 satellite testing mission is as follows: Ph.: (410) 970-7580- SES Network Operation Center. NOC Email: PMOC@ses.com
5. Grant of this STA is without prejudice to any determination that the Commission may make regarding pending or future SES applications.
6. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at SES's risk.

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 upon release.



"with conditions"

File # SES-STA-20190812-01068

Call Sign N/A Grant Date 09/17/2019
(or other identifier)

Term Dates
From: 09/17/2019 To: 10/17/2019

Approved: Paul E. Haeb

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

SES Americom, Inc. ("SES") respectfully requests earth station Special Temporary Authority ("STA") for 30 days to test 131.2x 141.8 x 29.8 centimeter antenna designated RaySat ER7000 for compatibility with SES's satellites in the conventional Ku-band.¹ The testing will occur in Port St. Lucie, FL, USA, and the antenna will communicate with the SES-10 spacecraft at 66.9W (Call Sign S2950).² SES seeks STA to conduct the testing beginning September 9, 2019 and asks for Commission action consistent with that timing. Grant of the requested STA is in the public interest because it will accelerate testing of a terminal used for mobile connectivity for ESIMs in remote areas, specifically for railway connectivity in Alaska. Furthermore, the proposed testing in the conventional Ku-band will be limited and will not cause harmful interference to any terrestrial or satellite operators. SES will also conduct operations on an unprotected, non-interference basis. For the foregoing reasons, SES Americom respectfully requests that the Commission grant it a 30-day STA to test its RaySat ER7000 antenna with SES-10 in the conventional Ku-band beginning September 9, 2019.

¹ The proposed operations are summarized in Attachment 1.

² New Skies Satellites B.V., Call Sign S2950 (modification granted Mar. 10, 2017).

Attachment 1

Call Sign: New Antenna

Contact Information:

**Mike Hance
+1 (321) 586-7253**

Address:

**1129 20th Street, NW, Suite 1000
Washington, DC 20036**

Site Details

Geographic Coordinates (WGS84):³

Latitude: 27.282479 deg Longitude: -80.482403 deg

Site Elevation:

38ft

Antenna ID: RaySat1

Manufacture/Model: RaySat ER7000

Antenna Size: 131.2 x 141.8 x 29.8 cm

Antenna Gain Transmit: 36 dBi at 14.25GHz

Antenna Gain Receive: 35.7 dBi at 11.85GHz

Height Above Ground Level: 5ft

Height Above Sea Level: 33ft

Total Input Power at the Flange: 32W

Total EIRP for all Carriers: 51.05 dBW

³ See attached Google Map screenshot.

Operational Details⁴

Frequency (MHz)	Transmit/Receive	Polarization	Emissions Designator	Max EIRP per Carrier (dBW)	Max EIRP Density per Carrier (dBW/4kHz)
14000-14500	T	Vertical	10M0G2D	51.05	17.02
10950-11700	R	Horizontal	33M0G2D	47.31	8.92

Frequency Coordination

Range of Satellite Arc	Azimuth	Elevation Angle	Maximum EIRP Density Toward the Horizon
020.5 W-130.5 W	152.2	54.8	21.98

⁴ SES confirms that the antenna will operate in compliance with Section 25.209 of the Commission's rules.

Map Screen Shot

