

Applicant: SES Americom, Inc.
Call Sign: E170197
File No.: SES-STA-20181018-03240
Special Temporary Authority (STA)



File # SES-STA-20181018-03240
E170197
Call Sign E170197 Grant Date 2-6-19
(or other identifier)
Term Dates
From: 2-6-19 To: 8-5-19
Approved: [Signature]

SES Americom, Inc. is granted STA, for 180 days, to conduct antenna testing with the SES-14 (S2974) satellite at orbital location 47.5° W from its fixed licensed earth station (Call sign E170197) in Mt. Airy, MD located at 39° 22' 36.52" N, 077° 04' 49.40" W using frequency band 13750-14000 MHz (Earth-to-space) under the following conditions:

1. Operations shall be with antenna ID WDB-K13, GD Satcom/9.0m model, 9-meter antenna, transmit antenna gain of 60.1 dBi at 14.125 GHz center frequency; within the coordinated frequency ranges: 13750-14000 MHz (H,V); requested emission designators: 648KG7W, 6M00G7W, 10M0G7W, 20M0G7W, 50M2G7W, 72M0G7W, 152MG7W, and 225MG7W; requested maximum eirp per carrier and maximum eirp density per carrier levels which shall comply with the eirp limitations established in the Code of Federal Regulations 47 C.F.R. § 2.106, International Footnotes US356 (eirp level shall be at least 68 dBW and not exceed 85 dBW for 13750-13772 MHz and 13778-14000 MHz frequency bands) and US357 (eirp density level not exceed 71 dBW/6MHz for the 648KG7W emission carrier on 13772-13780 MHz frequency band).
2. Operations shall comply with the input power density per carrier of -14.00 dBW/4KHz for routinely licensed digitally modulated carriers on frequency 14000 MHz with respect to the Code of Federal Regulations 47 C.F.R. § 25.212(c)(2).
3. Operations 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. In the event of any harmful interference under this grant of STA, SES Americom, Inc., E170197 must cease operations immediately upon notification of such interference, and must inform the Commission, in writing, immediately of such an event.
5. Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future SES Americom, Inc. applications.
6. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at SES Americom, Inc.'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 immediately.

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

By this application, SES Americom, Inc. ("SES") respectfully requests special temporary authority ("STA") for a period of 180 days to operate the station with call sign #E170197, in the Ext. Ku-band frequency on a non-interference basis as the license application to operate the antenna in the frequency has been in pending since 9/20/2017. The carriers in the frequency band will be operated within the EIRP & EIRP density limit as specified in the interference study that was submitted with the license application. The antenna will communicate with SES-14 (call sign S2974), Brazil-licensed satellite that is on the Commission's Permitted Space Station List. The technical details of the proposed operations are provided below, and the antenna will be operated in compliance with the Commission's radiation hazard limits. Grant of the requested authority will avoid numerous filings of STAs to allow SES to continue the services offered with the antenna.

Site Details

Contact Information:

Mark Rathert
410-970-7501

Address:

2323 Grmville Rd
Mt.Airy, MD 21771

Geographic Coordinates:

Latitude: 39deg 22' 36.52"N

Longitude: 77deg 4'49.40"W

Site Elevation:

190 meters

Antenna Details

Antenna ID:	WBN-K13
Manufacture/Model:	General Dynamics/9.0m Casegrain
Antenna Size:	9 meters
Antenna Gain Transmit:	59.9 dBi at 13.8 GHz
Antenna Gain Receive:	58.5 dBi at 11.725 GHz
Height Above Ground Level:	9.7 meters
Height Above Sea Level:	199.7 meters
Total Input Power at the Flange:	750 watts
Total EIRP for all Carriers:	88.65 dBW

Operational Details

Frequency (MHz)	Transmit/ Receive	Polarization	Emissions Designator	Max EIRP per Carrier (dBW)	Max EIRP Density per Carrier (dBW/4kHz)
13780-14000	T	Horizontal and Vertical	72M0G7W	85.0	42.4
13780-14000	T	Horizontal and Vertical	50M2G7W	85.0	44.0
13770-13780	T	Horizontal and Vertical	10M0G7W	73.2	39.2
13770-13780	T	Horizontal and Vertical	6M00G7W	71.0	39.2
13750-14000	T	Horizontal and Vertical	152M G7W	85.0	39.2
13750-14000	T	Horizontal and Vertical	225MG7W	85.0	37.5
13750-14000	T	Horizontal and Vertical	648KG7W	68.0	45.90
13750-13770	T	Horizontal and Vertical	20M0G7W	82.9	45.9

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 <http://www.comsearch.com>

Date: 10/29/2018
Job Number: 180926COMSGE08

Administrative Information

Status: TEMPORARY (Operation from 11/01/2018 to 05/01/2019)
Call Sign:
Licensee Code: RCASTR
Licensee Name: Lockheed Martin Corporation-Phillipsburg

Site Information

VENUE NAME: CARPENTERSVILLE, NJ
Venue Name:
Latitude (NAD 83): 40° 38' 41.0" N
Longitude (NAD 83): 75° 11' 28.0" W
Climate Zone: A
Rain Zone: 2
Ground Elevation (AMSL): 54.86 m / 180.0 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: Digital
Satellite Arc: 4° W to 147° West Longitude
Azimuth Range: 102.5° to 257.9°
Corresponding Elevation Angles: 5.5° / 5.0°
Antenna Centerline (AGL): 2.74 m / 9.0 ft

Antenna Information

Transmit - FCC32
Manufacturer: Prodelin
Model: 2.4 meter
Gain / Diameter: 42.0 dBi / 2.4 m
3-dB / 15-dB Beamwidth: 1.20° / 2.40°

Max Available RF Power (dBW/4 kHz): -10.7
(dBW/MHz): 13.3

Maximum EIRP (dBW/4 kHz): 31.3
(dBW/MHz): 55.3

Interference Objectives: Long Term: -154.0 dBW/4 kHz 20%
Short Term: -131.0 dBW/4 kHz 0.0025%

Frequency Information

Transmit 6.1 GHz
Emission / Frequency Range (MHz): 1M44G7W / 5949.22
1M44G7W / 5950.67
1M44G7W / 5963.03
1M44G7W / 5964.49

Max Great Circle Coordination Distance: 234.8 km / 145.9 mi
Precipitation Scatter Contour Radius: 100.0 km / 62.1 mi