

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:  
STA Request to use E120055 for SES-6 C-band In-orbit Testing

1. Applicant

Name: SES Americom, Inc. Phone Number: 202-478-7137  
DBA Name: Fax Number: 202-478-7101  
Street: 1129 20th Street NW E-Mail: daniel.mah@ses.com  
Suite 1000  
City: Washington State: DC  
Country: USA Zipcode: 20036  
Attention: Daniel C.H. Mah



File # SES-STA 20130603-00468  
E120055  
Call Sign Grant Date 6-12-13  
(or other identifier) Term Dates 7-14-13  
From To: 7-14-13  
Approved: [Signature]

Applicant: SES Americom, Inc.  
Call Sign: E120055  
File No.: SES-STA-20130603-00468  
Special Temporary Authority (STA)

SES Americom, Inc. (SES) is granted, under the following conditions, STA for 30 days, to conduct in-orbit testing (IOT) for the Netherlands licensed SES-6 satellite at orbital location 26° W.L prior to it relocating to its permanent orbital location 40.5° W.L. (File No. SAT-PPL-20120717-00117).

1. This authorization is limited to operations within coordinated parameters defined in those specified in this STA application narrative.
2. Waiver of 47 C.F.R. § 25.208(a) within certain narrow bandwidths for CW carrier during C-band IOT that may result in satellite emissions in the 3.65-4.2 GHz frequency band that exceed the Commission's PFD limits is authorized for only for IOT testing and must cease if interference is reported.
3. All operations shall be on an unprotected and non-harmful interference basis, SES, E120055, 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 that any harmful interference is caused as a result of operations of the SES-6 satellite, SES shall cease operations immediately upon notification of such an event, and shall inform the Commission immediately, in writing, of the event.
5. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at SES's own risk.
6. SES point of contact during proposed IOT operations will be Dewey Courtright, phone 410-970-7571, dewey.courtight@ses.com.
7. Grant of this authorization is without prejudice to any determination that the Commission may make regarding SES's pending application IBFS File No. SAT-PPL-20120717-00117.
8. This grant 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.



File: SES-STA 2013 0603-00468  
Call Sign: E120055 Grant Date: 6-12-13  
(or other identifier)  
From: 6-11-13 Term Dates: 7-11-13 To: 7-11-13  
Approved: [Signature]

<b>2. Contact</b>	
<b>Name:</b> SES Americom, Inc.	<b>Phone Number:</b> 202-478-7137
<b>Company:</b> 1129 20th Street NW Suite 1000	<b>Fax Number:</b> 202-478-7101
<b>Street:</b> Washington	<b>E-Mail:</b> daniel.mah@ses.com
<b>City:</b> USA	<b>State:</b> DC
<b>Country:</b> Daniel C.H. Mah	<b>Zipcode:</b> 20036
<b>Attention:</b>	<b>Relationship:</b> 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?	
<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. CityMt. Airy	
8. Latitude (dd mm ss.s h) 39 22 37.0 N	

9. State MD	10. Longitude (dd mm ss.s h) 77 4 46.0 W
11. Please supply any need attachments. Attachment 1: E120055 Narrative Attachment 2: E120055 CoordRept 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.) SES requests an STA to use E120055 for SES-6 C-band In-orbit Testing. SES respectfully requests expedited action by June 14, 2013. See attached narrative.	
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 Daniel C.H. Mah	15. Title of Person Signing 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).	

**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.**

**APPLICATION FOR SPECIAL TEMPORARY AUTHORITY**

Call Signs E050287, E120055

SES Americom, Inc. (“SES”) respectfully requests a 30-day Special Temporary Authority (“STA”), beginning on or about July 14, 2013, to use the following earth stations to perform in-orbit testing (“IOT”) for the Netherlands-licensed SES-6 satellite at the 26° W.L. orbital location, prior to its relocation to its regularly authorized location at 40.5° W.L.

<b>Earth Station</b>	<b>Antenna</b>	<b>Frequencies</b>	<b>Max Tx EIRP</b>	<b>Max Tx EIRP Density</b>
E050287	WBKUB1	14.0-14.5 GHz up 11.7-12.2 GHz down	87.28 dBW	49.5 dBW/4 kHz
E120055	1	5.850-6.425 GHz up 3.625-4.2 GHz down	84.09 dBW	57.1 dBW/4 kHz

A full description of the SES-6 satellite can be found in the pending application for U.S. market access for SES-6 at 40.5° W.L. *See* File No. SAT-PPL-20120717-00117; Call Sign S2870 (accepted for filing Aug. 31, 2012).

Coordination of the IOT of SES-6 at 26° W.L. with adjacent satellite operators is complete. The IOT transmissions from the above earth stations will not exceed the maximum EIRP listed on their respective licenses. The maximum EIRP density on the licenses will also not be exceeded, except in the case of certain tests involving high-powered continuous wave (“CW”) carriers. Temporary use of these high-powered carriers in the C-band during IOT has been coordinated with co-primary terrestrial services. *See* Coordination Report (attached to STA application for E120055). The use of a CW carrier during C-band IOT may also result in satellite emissions in the 3.65-4.2 GHz frequency band that exceed the Commission’s PFD limits on the Earth’s surface in 47 C.F.R. § 25.208(a) within certain narrow bandwidths. To the extent necessary, SES requests a waiver of that provision for purposes of short-term satellite IOT on a non-interference basis.

In any event, all IOT operations will be conducted on a non-harmful interference basis. SES will cease transmissions in the event of any report of harmful interference. The SES point of contact during the proposed IOT operations will be Dewey Courtright, 410-970-7571, dewey.courtright@ses.com.

Grant of the requested STA will serve the public interest by enabling SES and its affiliate, New Skies Satellites B.V., to verify the capabilities of SES-6 before the satellite commences commercial operations at 40.5° W.L., while minimizing the risk of interference.

Prepared By

## COMSEARCH

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

Prepared For

### SES Americom Woodbine, Maryland

Temporary Transmit-Only Earth Station  
Operation Dates: 06/15/2013 - 07/20/2013

Pursuant to Part 25.203(c) of the FCC Rules and Regulations, the satellite earth station proposed in this application was coordinated by Comsearch using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations. Verbal and written coordination was conducted with the below listed carriers on May 16, 2013.

#### Company

256Q Networks  
AB Services LLC  
ADAMS COUNTY EMERGENCY MANAGEMENT AGENCY  
AT&T COMMUNICATIONS OF MARYLAND INC  
AT&T Communications of Virginia, LLC  
AT&T Corp.  
AWC Networks  
Aerbender, LLC  
Allentown SMSA Limited Partnership  
Alltel Communications LLC-Southern VA  
Alltel Communications of Petersburg Inc  
Appalachia Engineering Services  
Appalachian Broadcasting  
Atlantic Broadband (Delmar), LLC  
Atlantic Broadband (Penn), LLC  
Atlantic City Electric Company  
Auburn Data Systems, LLC  
B20 LLC  
BAY BROADBAND COMMUNICATIONS LLC  
BLAIR COUNTY 911  
Baltimore County of Maryland  
Baltimore Gas and Electric Company  
Bedford, County of  
Believe Wireless, LLC  
Berks, County of  
Blue Ridge Carriers  
Bucks, County of  
CAMDEN COUNTY  
CENTRE COUNTY  
CHESTER, COUNTY OF  
CNG Transmission Corporation  
CROWN COMMUNICATION, INC.

Company (Continued)

Cable Of The Carolinas  
Cambria, County of  
Capital Communications of America  
Carbon, County of 911 Center  
Cellco Partnership - Bridgeville, PA/WV  
Cellco Partnership - Southern Virginia  
Cellco Partnership- PA Region  
Cellco Partnership-Newark-Dallas Verizon  
Cellco Partnership-WDC/Baltimore  
Cellco Prtnrshp - Phil. Tri-State Rgn  
Charles City County Sheriffs Office  
Charles, County of  
Chesterfield, County of  
China Cat Productions LLC  
Commonwealth of Pennsylvania-Radio Proj.  
Comprehensive Wireless LLC  
Conterra Ultra Broadband, LLC  
Converge Towers LLC  
Coral Reef Technologies Ltd  
Coralinks  
County of Fayette  
County of Frederick  
County of Warren, NJ  
Cumberland, County of  
DAUPHIN COUNTY EMERGENCY MANAGEMENT  
Delaware Division of Communications  
Delmarva Power & Light Company  
Direct Broadcast Services, Inc.  
ECW Wireless, LLC  
EG Broadcast Newco Corp  
Eastern MLG LLC  
Eastern Pennsylvania EMS Council  
Electric Railroad, LLC  
Enoch Pratt Free Library  
Exelon Generation Company, L.L.C  
FELHC, Inc.  
Federal Communications Commission  
Fibertrack, LLC  
Frederick County  
Fundamental Broadcasting LLC  
Garden State Transmissions  
Gloucester County  
Gloucester, County of  
Goochland County  
Greene, County of (PA)  
HENRICO COUNTY  
Hampton Roads Planning District Commissi  
Hanover, County of  
Hardy Cellular Telephone Company  
Harrisonburg-Rockingham ECC  
High Voltage Communications LLC  
Huntingdon, County of



Company (Continued)

INDIANA, COUNTY OF  
Jefferson Microwave, LLC  
Juniata County Emergency Services  
King and Queen County  
Kryptic Technologies  
Last Mile Inc.  
Loudoun, County of  
Luzerne County Department of Public Sfty  
MONMOUTH, COUNTY OF  
MVC Research. LLC  
Mahwah Communications  
Maryland Public Broadcasting Commission  
Maryland State Highway Administration  
Maryland, State of - Dept.of Info & Tech  
National Radio Astronomy Observatory  
National Tower Company  
New Cingular Wireless PCS LLC -NJ  
New Cingular Wireless PCS - Maryland  
New Cingular Wireless PCS LLC - DC  
New Cingular Wireless PCS LLC - VA  
New Cingular Wireless PCS LLC- WV/NC/SC  
New Cingular Wireless PCS LLC-DE/NH/RI  
New Cingular Wireless PCS of PA LLC  
New Cingular Wireless PCS, LLC - PA  
New Jersey State Police  
New Jersey Turnpike Authority-Pkwy Div  
New Jersey, State of -NJ Transit  
New Kent County  
Newgig Networks, LLC  
Norfolk Southern Railway  
Northeast Pennsylvania SMSA LTD Prtnrsh  
OCEAN, COUNTY OF  
Ocean, County of-Div of Wireless Tech.  
Old Dominion LLC  
PA Communications  
PEG Bandwidth  
PENNSYLVANIA TURNPIKE COMMISSION  
PSEG Services Corporation  
Peco Energy Company  
Penn Service Microwave Co., Inc.  
Petersburg Cellular Partnership  
Pitt Power  
Pitt Power  
Pittsburgh SMSA Limited Partnership  
Prince George's County  
Prince William, County of  
RAPPAHANNOCK ELECTRIC COOPERATIVE  
RCTC Wholesale Corporation  
RICHMOND, CITY OF

Company (Continued)

SCS Networks  
SCTF NET  
SHENANDOAH VALLEY ELECTRIC COOPERATIVE  
SOMERSET COUNTY  
SW Networks  
San Juan Wireless  
Southern Maryland Electric Cooperative I  
Sprint Spectrum, LP  
St. Mary's County of (MD)  
Stafford, County of  
State of Maryland, MIEMSS  
State of WV DHHR/BPH STECS  
Sullivan, County of  
TRF SERVICES LLC  
Texas Eastern Communications, Inc.  
Thought Transmissions, LLC  
Turtle Networks 6386  
Turtle Networks 6466  
Turtle Networks 6467  
US Cellular Operating Company, LLC (WI)  
USCOC of Cumberland, Inc.  
USCOC of Virginia RSA #2, Inc.  
USCOC of Virginia RSA #3, Inc.  
Velox Networks LLC  
Verizon Maryland, Inc.  
Verizon Virginia, Inc.  
Verizon Wireless (VAW) LLC - Delaware  
Verizon Wireless (VAW) LLC - Maryland  
Verizon Wireless (VAW) LLC - NJ  
Verizon Wireless (VAW) LLC-Pennsylvania  
Verizon Wireless VAW LLC-Southern VA  
Virginia RSA 5 Limited Partnership  
Virginia Broadband, LLC  
Virginia Cellular LLC  
Virginia Department of State Police  
Virginia Electric & Power Company  
Virginia PCS Alliance, L.C.  
Virginia Port Authority Police  
WITF Inc.  
Washington D.C. SMSA L.P.  
Washington Gas Light Company  
Washington Suburban Sanitary Commission  
Weblin Holdings LLC  
Wico, LLC  
Wireless Internet Work II.  
Wireless Internetwork LLC  
World Class Wireless LLC

Company (Continued)

York County  
York County Dept of Emergency Services  
Zen Networks, Inc  
iSignal

There are no unresolved interference objections with the stations contained in these applications.

The following section presents the data pertinent to frequency coordination of the proposed earth station that was circulated to all carriers within its coordination contours.

**COMSEARCH**  
**Earth Station Data Sheet**  
 19700 Janelia Farm Boulevard, Ashburn, VA 20147  
 (703)726-5500 <http://www.comsearch.com>

Date: 05/31/2013  
 Job Number: 130516COMSJC05

**Administrative Information**

Status: TEMPORARY (Operation from 06/15/2013 to 07/20/2013)  
 Call Sign: TEMP07  
 Licensee Code: P3210  
 Licensee Name: SES Americom, Inc.

**Site Information**

**WOODBINE, MARYLAND**

Venue Name  
 Latitude (NAD 83): 39° 22' 37.0" N  
 Longitude (NAD 83): 77° 4' 46.0" W  
 Climate Zone: A  
 Rain Zone: 2  
 Ground Elevation (AMSL): 192.02 m / 630.0 ft

**Link Information**

Satellite Type: Geostationary  
 Mode: TO - Transmit-Only  
 Modulation: No Modulation  
 Satellite Arc: 26° W to 26° West Longitude  
 Azimuth Range: 117.1° to 117.1°  
 Corresponding Elevation Angles: 20.9° / 20.9°  
 Antenna Centerline (AGL): 8.53 m / 28.0 ft

**Antenna Information**

**Transmit**

Manufacturer: Vertex  
 Model: 13 KPC  
 Gain / Diameter: 57.1 dBi / 13.0 m  
 3-dB / 15-dB Beamwidth: 0.24° / 0.44°

Max Available RF Power (dBW/4 kHz): 25.9  
 (dBW/MHz): 49.9

Maximum EIRP (dBW/4 kHz): 83.0  
 (dBW/MHz): 107.0  
 (dBW): 83.0

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): NON / 5850.0 - 6250.0  
 NON / 6263.0 - 6309.0  
 NON / 6323.0 - 6425.0

Max Great Circle Coordination Distance: 327.2 km / 203.3 mi  
 Precipitation Scatter Contour Radius: 506.1 km / 314.4 mi

## COMSEARCH Earth Station Data Sheet

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

<b>Coordination Values</b>	<b>WOODBINE, MD</b>		
Licensee Name	SES Americom, Inc.		
Latitude (NAD 83)	39° 22' 37.0" N		
Longitude (NAD 83)	77° 4' 46.0" W		
Ground Elevation (AMSL)	192.02 m / 630.0 ft		
Antenna Centerline (AGL)	8.53 m / 28.0 ft		
Antenna Model	Vertex 13 KPC		
Antenna Mode	Transmit 6.1 GHz		
Interference Objectives: Long Term		-154.0 dBW/4 kHz	20%
	Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	25.9 (dBW/4 kHz)		

			Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)
0	1.36	115.44	-10.00	226.44
5	1.32	110.78	-10.00	227.62
10	1.15	106.09	-10.00	232.99
15	1.14	101.40	-10.00	233.48
20	0.93	96.70	-10.00	242.10
25	0.88	92.00	-10.00	244.38
30	1.06	87.30	-10.00	235.98
35	1.32	82.59	-10.00	227.79
40	1.41	77.88	-10.00	225.03
45	1.05	73.23	-10.00	236.43
50	1.15	68.55	-10.00	232.96
55	0.86	63.95	-10.00	245.83
60	1.04	59.31	-10.00	236.76
65	0.99	54.75	-10.00	238.25
70	1.04	50.23	-10.00	236.66
75	0.89	45.84	-9.53	246.93
80	0.95	41.47	-8.44	248.67
85	0.89	37.29	-7.29	259.40
90	0.92	33.25	-6.05	264.93
95	0.91	29.50	-4.74	273.87
100	0.88	26.14	-3.43	284.76
105	0.78	23.39	-2.23	300.21
110	0.67	21.43	-1.28	315.11
115	1.06	19.99	-0.52	296.15
120	1.19	19.94	-0.49	291.12
125	1.03	21.34	-1.23	291.81
130	0.91	23.66	-2.35	290.86
135	0.76	26.70	-3.66	291.40
140	0.50	30.30	-5.04	299.80
145	0.00	34.35	-6.40	327.19
150	0.00	38.33	-7.59	318.75
155	0.00	42.50	-8.71	311.01
160	0.46	46.64	-9.72	273.27
165	0.45	51.07	-10.00	272.21
170	0.45	55.57	-10.00	272.84
175	0.65	60.08	-10.00	257.78
180	0.79	64.65	-10.00	249.03
185	0.87	69.28	-10.00	244.98

# COMSEARCH

## Earth Station Data Sheet

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

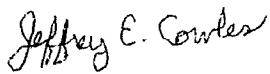
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<b>Coordination Values</b>	<b>WOODBINE, MD</b>
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Antenna Model	Vertex 13 KPC
Antenna Mode	Transmit 6.1 GHz
Interference Objectives: Long Term	-154.0 dBW/4 kHz 20%
Short Term	-131.0 dBW/4 kHz 0.0025%
Max Available RF Power	25.9 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.60	73.97	-10.00	260.82
195	0.69	78.63	-10.00	254.81
200	0.58	83.32	-10.00	261.70
205	0.46	88.01	-10.00	270.95
210	0.61	92.69	-10.00	259.82
215	0.64	97.38	-10.00	258.36
220	0.52	102.05	-10.00	265.81
225	0.53	106.72	-10.00	264.90
230	0.61	111.38	-10.00	260.03
235	0.68	116.01	-10.00	255.94
240	0.75	120.63	-10.00	251.51
245	0.53	125.13	-10.00	264.80
250	0.48	129.60	-10.00	269.39
255	0.41	133.99	-10.00	277.02
260	0.55	138.36	-10.00	263.62
265	0.46	142.50	-10.00	271.09
270	0.45	146.48	-10.00	272.93
275	0.60	150.30	-10.00	260.54
280	0.63	153.67	-10.00	259.00
285	0.65	156.50	-10.00	257.50
290	0.69	158.59	-10.00	254.88
295	0.95	159.91	-10.00	240.59
300	1.39	160.26	-10.00	225.55
305	1.74	159.31	-10.00	215.32
310	1.89	157.14	-10.00	211.15
315	2.55	154.58	-10.00	197.58
320	2.90	151.18	-10.00	189.70
325	2.86	147.18	-10.00	190.60
330	2.63	142.88	-10.00	195.70
335	2.38	138.45	-10.00	201.25
340	2.20	133.95	-10.00	205.25
345	1.98	129.38	-10.00	208.58
350	1.68	124.74	-10.00	217.07
355	1.47	120.09	-10.00	223.16

## Certification

I hereby certify that I am the technically qualified person responsible for the preparation of the frequency coordination data contained in this report. I am familiar with Parts 101 and 25 of the FCC Rules and Regulations and I have either prepared or reviewed the frequency coordination data submitted with this report, and that it is complete and correct to the best of my knowledge and belief.



Jeffrey E. Cowles  
Engineer III, Telecommunications  
COMSEARCH  
19700 Janelia Farm Blvd.  
Ashburn, Va. 20147

DATED: May 31, 2013