SES-STA-20111123-01399 IB2011004981
SES Americom, Inc.

Approved by OMB
3060–0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu:
STA for 2.4 m E/S for UN demonstration of emergency.lu

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:	Mr Daniel C.H. Mah		

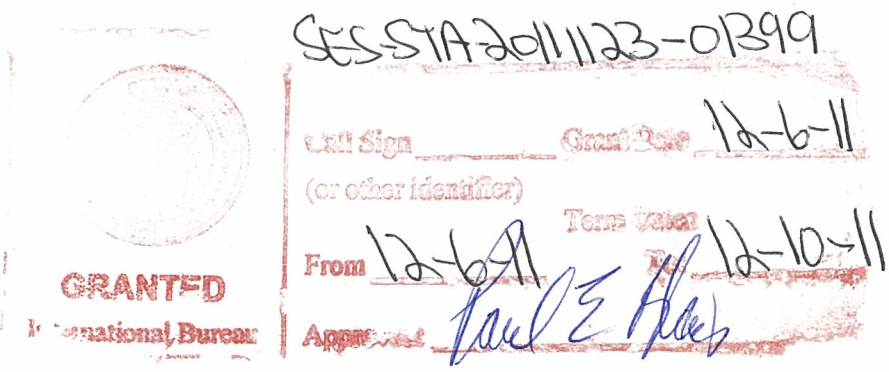
GRANTED
International Bureau

SES-STA-20111123-01399
Call Sign _____ Grant Date 12-6-11
(or other identifier)
From 12-6-11 To 12-10-11
Appr... Paul E Blaes

SES Americom, Inc.
SES-STA-20111123-01399
No Call Sign

1. 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.

2. This is granted with the condition that the licensee shall comply with Section 25.277(c) of the Commission's rules, 47 C.F.R. §25.277(c), regarding submission of Frequency Coordination Reports prior to commencing operations at any location. This is also granted subject to Section 25.277(d) and (e) of the Commission's rules, 47 C.F.R. §25.277(d) and (e). Failure to perform successful prior frequency coordination will result in the cancellation of your station license herein. Copies of all coordination notices shall be forwarded to the FCC Operations Center Office in Columbia, Maryland.



2. Contact

Name:	Karis A. Hastings	**Phone Number:**	202-599-0975
Company:	SatCom Law LLC	**Fax Number:**	
Street:	1317 F Street, N.W.	E-Mail:	karis@satcomlaw.com
	Suite 400		
City:	Washington	**State:**	DC
Country:	USA	**Zipcode:**	20004 -
Attention:		**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	
7. CityNew York	8. Latitude (dd mm ss.s h) 40 45 3.3 N

9. State NY	10. Longitude (dd mm ss.s h) 73 57 56.4 W

11. Please supply any need attachments.

Attachment 1: STA Request 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. requests special temporary authority for a period of four days beginning December 6 to permit use of a C-band 2.4 meter temporary-fixed earth station communicating with the NSS-806 satellite for demonstration of a disaster and humanitarian relief program at the United Nations headquarters.

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 ( ) No

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

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD–PERM, Paperwork Reduction Project (3060–0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060–0678.

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.

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

SES Americom, Inc. ("SES") hereby requests special temporary authority ("STA") for a period of four days beginning December 6, 2011 to permit use of a C-band 2.4 meter temporary-fixed earth station communicating with the NSS-806 satellite at 40.5° W.L. for demonstration of a disaster and humanitarian relief program at the United Nations headquarters.

SES is a partner in a Luxembourg government-sponsored UN disaster and humanitarian relief program called "emergency.lu." Under this program, SES, together with other partners, will provide fast response support for humanitarian disaster relief organizations. SES is supplying a satellite-based communications infrastructure including satellite capacity and services that will ensure the availability of quick and reliable data and voice communications in disaster relief theaters.[1] Official launch of the emergency.lu program is scheduled for December 7, 2011 at the UN Headquarters in New York City, and part of the launch event will include a demonstration of the system in operation.

The antenna that will be deployed at the UN is a 2.4 meter, inflatable "beach ball" antenna manufactured by GATR Technologies. The Commission has previously issued regular authority for operation of this antenna as a temporary-fixed earth station in the conventional C-band under a license issued to GATR, call sign E090054.[2] The technical information filed with the GATR Application includes antenna radiation patterns and a showing regarding compliance with Sections 25.209 and 25.220 of the Commission's rules[3] as well as a radiation hazard analysis.[4] SES incorporates those materials by reference herein. SES will be operating at lower power levels than those authorized under call sign E090054 and will therefore comply with the off-axis EIRP density requirements of the Commission's rules. As noted above, the demonstration will use capacity on NSS-806, a Netherlands-licensed satellite that is on the Commission's Permitted Space Station list for communications with U.S. earth stations at the 40.5° W.L. orbital location.[5]

Consistent with the requirements of Section 25.277 of the Commission's rules, SES is notifying all potentially affected co-primary terrestrial fixed licensees of the temporary operations proposed under this STA.[6] A copy of the notification document, which also contains

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[1] Additional information about the emergency.lu program can be found at the http://emergency.lu website.

[2] *See* File No. SES-LIC-20090330-00381 ("GATR Application").

[3] *See id.,* Exhibit A.

[4] *See id.,* Radiation Hazard Analysis.

[5] *See New Skies Satellites, N.V.*, Order, DA 01-513, 16 FCC Rcd. 7482 (Sat. Div., rel. Mar. 29, 2001).

[6] The proposed demonstration site is also located in close proximity to another 2.4 meter C-band antenna that has already been coordinated with terrestrial licensees for the relevant portion of the satellite arc. *See* HNS License Sub, LLC, File No. SES-MOD-20090518-00602 (Call Sign E040436), granted Oct. 14, 2009, at Exhibit C (coordination report for earth station located at UN Plaza in New York, NY for operations in the conventional C-band with satellites in the arc

full technical data regarding the planned demonstration operations, is attached hereto. The following SES personnel will be conducting the demonstration and can be contacted in the event any issues arise during the proposed operations:

Jean-Damien Leclercq:	+352 621 194 863
Alan Kuresevic:	+352 691 711 133

Grant of the requested STA will serve the public interest by allowing SES to evaluate and demonstrate the ability of the emergency.lu satellite communications platform to supply quick-response connectivity and support humanitarian disaster relief efforts.

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between 18° W.L. and 58° W.L.). The power levels of the operations proposed in the instant STA will be lower than the power levels coordinated for the HNS antenna.

19700 Janelia Farm Boulevard
Ashburn, VA 20147
(703) 726-5500
Fax (703) 726-5600
http://www.comsearch.com

COMSEARCH®

November 23, 2011

****
*** CLIENT COPY ***
*** PLEASE MAIL ***
*** TO CUSTOMER ***

Re: SES Americom, Inc.
New York City, New York
Temporary Transmit/Receive Earth Station
Operation Dates: 12/06/2011 - 12/09/2011
Job Number: 111123COMSJC01

Dear Frequency Coordinator:

On behalf of SES Americom, Inc., we are forwarding the attached coordination data for temporary operations from a transmit/receive earth station to be located at the site referenced above.

This earth station will transmit only on the satellite(s) and frequency or frequencies as described in the attached data. Our client will accept any potential cases at 4 GHz, and please do not report cases involving non-active paths or frequencies outside the specified range.

If there are any questions concerning this coordination notice, please contact Comsearch.

Sincerely,

COMSEARCH

Jeffrey E. Cowles
Engineer III, Telecommunications
jcowles@comsearch.com

Enclosure(s)

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5660 http://www.comsearch.com

Date:	11/23/2011
Job Number:	111123COMSJC01

Administrative Information	
Status	TEMPORARY (Operation from 12/06/2011 to 12/09/2011)
Call Sign	TEMP12
Licensee Code	P3210
Licensee Name	SES Americom, Inc.

Site Information	**NEW YORK CITY, NEW YORK**
Venue Name	
Latitude (NAD 83)	40° 45' 3.3" N
Longitude (NAD 83)	73° 57' 56.4" W
Climate Zone	A
Rain Zone	2
Ground Elevation (AMSL)	9.45 m / 31.0 ft

Link Information	
Satellite Type	Geostationary
Mode	TR - Transmit-Receive
Modulation	Digital
Satellite Arc	40° W to 41° West Longitude
Azimuth Range	134.1° to 135.2°
Corresponding Elevation Angles	31.5° / 32.1°
Antenna Centerline (AGL)	3.05 m / 10.0 ft

Antenna Information		**Receive**	**Transmit**
Manufacturer		GATR Technologies	GATR Technologies
Model		2.4 Meter	2.4 Meter
Gain / Diameter		37.4 dBi / 2.4 m	41.5 dBi / 2.4 m
3-dB / 15-dB Beamwidth		2.30° / 4.20°	1.45° / 2.70°
Max Available RF Power	(dBW/4 kHz)		-19.2
	(dBW/MHz)		4.8
Maximum EIRP	(dBW/4 kHz)		22.3
	(dBW/MHz)		46.3
Interference Objectives:	Long Term	-156.0 dBW/MHz 20%	-154.0 dBW/4 kHz 20%
	Short Term	-146.0 dBW/MHz 0.01%	-131.0 dBW/4 kHz 0.0025%

Frequency Information	**Receive 4.0 GHz**	**Transmit 6.1 GHz**
Emission / Frequency Range (MHz)	2M00G7D / 3989.9544	2M00G7D / 6216.9222
Max Great Circle Coordination Distance	316.4 km / 196.6 mi	131.1 km / 81.4 mi
Precipitation Scatter Contour Radius	488.1 km / 303.2 mi	100.0 km / 62.1 mi

COMSEARCH

Earth Station Data Sheet

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Coordination Values	**NEW YORK CITY, NY**			
Licensee Name	SES Americom, Inc.			
Latitude (NAD 83)	40° 45' 3.3" N			
Longitude (NAD 83)	73° 57' 56.4" W			
Ground Elevation (AMSL)	9.45 m / 31.0 ft			
Antenna Centerline (AGL)	3.05 m / 10.0 ft			
Antenna Model	GATR Technologies 2.4 Meter			
Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz	
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power			-19.2 (dBW/4 kHz)	

			Receive 4.0 GHz		Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.35	126.55	-10.00	266.35	-10.00	106.73
5	0.38	122.67	-10.00	262.86	-10.00	104.38
10	0.39	118.68	-10.00	262.08	-10.00	103.85
15	0.30	114.58	-10.00	272.87	-10.00	111.06
20	0.23	110.42	-10.00	281.84	-10.00	116.91
25	0.00	106.20	-10.00	285.28	-10.00	119.13
30	0.00	101.99	-10.00	285.28	-10.00	119.13
35	0.00	97.75	-10.00	285.28	-10.00	119.13
40	0.00	93.50	-10.00	285.28	-10.00	119.13
45	0.00	89.23	-10.00	285.28	-10.00	119.13
50	0.00	84.97	-10.00	285.28	-10.00	119.13
55	0.00	80.72	-10.00	285.28	-10.00	119.13
60	0.00	76.50	-10.00	285.28	-10.00	119.13
65	0.00	72.30	-10.00	285.28	-10.00	119.13
70	0.00	68.14	-10.00	285.28	-10.00	119.13
75	0.00	64.04	-10.00	285.28	-10.00	119.13
80	0.00	60.01	-10.00	285.28	-10.00	119.13
85	0.00	56.07	-10.00	285.28	-10.00	119.13
90	0.00	52.25	-10.00	285.28	-10.00	119.13
95	0.20	48.47	-10.00	285.20	-10.00	119.07
100	0.24	44.95	-9.32	284.70	-9.32	117.71
105	0.26	41.68	-8.50	287.42	-8.50	118.18
110	0.22	38.74	-7.70	297.52	-7.70	123.36
115	0.22	36.16	-6.95	302.99	-6.95	125.59
120	0.28	33.98	-6.28	299.93	-6.28	122.54
125	0.00	32.67	-5.86	313.64	-5.86	130.02
130	0.00	31.76	-5.55	315.82	-5.55	130.84
135	0.00	31.53	-5.47	316.37	-5.47	131.05
140	0.00	32.01	-5.63	315.21	-5.63	130.61
145	0.00	33.16	-6.02	311.88	-6.02	129.59
150	0.00	34.93	-6.58	307.97	-6.58	128.09
155	0.00	37.16	-7.25	303.36	-7.25	126.31
160	0.00	39.75	-7.98	298.44	-7.98	124.39
165	0.00	42.69	-8.76	293.29	-8.76	122.35
170	0.00	45.93	-9.55	288.14	-9.55	120.29
175	0.00	49.41	-10.00	285.28	-10.00	119.13
180	0.00	53.06	-10.00	285.28	-10.00	119.13
185	0.00	56.86	-10.00	285.28	-10.00	119.13

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Earth Station Data Sheet

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Coordination Values	**NEW YORK CITY, NY**			
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Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz	
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power			-19.2 (dBW/4 kHz)	

			Receive 4.0 GHz		Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	60.78	-10.00	285.28	-10.00	119.13
195	0.00	64.79	-10.00	285.28	-10.00	119.13
200	0.00	68.87	-10.00	285.28	-10.00	119.13
205	0.00	73.00	-10.00	285.28	-10.00	119.13
210	0.00	77.18	-10.00	285.28	-10.00	119.13
215	0.00	81.38	-10.00	285.28	-10.00	119.13
220	0.00	85.61	-10.00	285.28	-10.00	119.13
225	0.00	89.84	-10.00	285.28	-10.00	119.13
230	0.00	94.07	-10.00	285.28	-10.00	119.13
235	0.00	98.30	-10.00	285.28	-10.00	119.13
240	0.61	102.59	-10.00	242.91	-10.00	100.00
245	1.00	106.87	-10.00	220.35	-10.00	100.00
250	0.96	111.05	-10.00	222.50	-10.00	100.00
255	0.81	115.14	-10.00	230.76	-10.00	100.00
260	0.69	119.16	-10.00	237.92	-10.00	100.00
265	0.81	123.17	-10.00	230.77	-10.00	100.00
270	0.78	127.02	-10.00	232.32	-10.00	100.00
275	0.73	130.71	-10.00	235.50	-10.00	100.00
280	0.67	134.22	-10.00	238.75	-10.00	100.00
285	0.51	137.42	-10.00	248.92	-10.00	100.00
290	0.44	140.37	-10.00	256.67	-10.00	100.16
295	0.44	143.02	-10.00	256.09	-10.00	100.00
300	0.44	145.23	-10.00	256.30	-10.00	100.00
305	0.41	146.87	-10.00	260.01	-10.00	102.45
310	0.39	147.91	-10.00	261.90	-10.00	103.73
315	0.44	148.33	-10.00	256.77	-10.00	100.23
320	0.58	148.15	-10.00	244.74	-10.00	100.00
325	0.52	147.07	-10.00	248.74	-10.00	100.00
330	0.46	145.39	-10.00	253.92	-10.00	100.00
335	0.46	143.16	-10.00	254.09	-10.00	100.00
340	0.48	140.43	-10.00	251.67	-10.00	100.00
345	0.46	137.31	-10.00	254.08	-10.00	100.00
350	0.42	133.92	-10.00	258.29	-10.00	101.27
355	0.41	130.33	-10.00	260.36	-10.00	102.68

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

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[1] Additional information about the emergency.lu program can be found at the http://emergency.lu website.

[2] *See* File No. SES-LIC-20090330-00381 ("GATR Application").

[3] *See id.,* Exhibit A.

[4] *See id.,* Radiation Hazard Analysis.

[5] *See New Skies Satellites, N.V.*, Order, DA 01-513, 16 FCC Rcd. 7482 (Sat. Div., rel. Mar. 29, 2001).

[6] The proposed demonstration site is also located in close proximity to another 2.4 meter C-band antenna that has already been coordinated with terrestrial licensees for the relevant portion of the satellite arc. *See* HNS License Sub, LLC, File No. SES-MOD-20090518-00602 (Call Sign E040436), granted Oct. 14, 2009, at Exhibit C (coordination report for earth station located at UN Plaza in New York, NY for operations in the conventional C-band with satellites in the arc

full technical data regarding the planned demonstration operations, is attached hereto. The following SES personnel will be conducting the demonstration and can be contacted in the event any issues arise during the proposed operations:

Jean-Damien Leclercq:	+352 621 194 863
Alan Kuresevic:	+352 691 711 133

Grant of the requested STA will serve the public interest by allowing SES to evaluate and demonstrate the ability of the emergency.lu satellite communications platform to supply quick-response connectivity and support humanitarian disaster relief efforts.

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between 18° W.L. and 58° W.L.). The power levels of the operations proposed in the instant STA will be lower than the power levels coordinated for the HNS antenna.

Prepared By

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

Prepared For

SES Americom

New York City, New York

Temporary Transmit/Receive Earth Station
Operation Dates: 12/06/2011 - 12/09/2011

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 November 23, 2011.

Company

AB Services LLC
ALGONQUIN GAS TRANSMISSION CO
AT&T CORP
Aerbender, LLC
Auburn Data Systems, LLC
BFI Licenses, LLC
CONSOLIDATED EDISON COMPANY OF NEW YORK
Capital Communications of America
Cellco Partnership - (W-NY)
Cellco Partnership-Newark-Dallas Verizon
Commonwealth of Pennsylvania-Radio Proj.
Comprehensive Wireless LLC
Coral Reef Tecnologies Ltd
Coralinks
County of Warren
Direct Broadcast Services, Inc.
ECW Wireless, LLC
EG Broadcast Newco Corp
Eastern Mlg
Essex County Sherrif Office
FELHC, Inc.
Federal Communications Commission
Fibertrack, LLC
Fleet Systems, LLC
Fundamental Broadcasting LLC
Garden State Transmissions
Geneva Communications, LLC
Goosetown Network Services, LLC
Jefferson Microwave, LLC
Kryptic Technologies

Company (Continued)

M-Wave Networks LLC
MCI Communications Services Inc.
METROPOLITAN AREA NETWORKS, INC.
MVC Research. LLC
Meridian Microwave
NBC TELEMUNDO LICENSE CO.
NEW JERSEY TRANSIT RAIL OPERATIONS,INC
NEW YORK CITY POLICE DEPARTMENT
NORTHEAST UTILITIES SERVICE COMPANY
Nassau County Police Department
New Cingular Wireless PCS LLC -NJ
New Cingular Wireless PCS LLC -NE Reg
New Cingular Wireless PCS of PA LLC
New Cingular Wireless PCS, LLC - NY
New Jersey State Police
New Jersey Turnpike Authority-Pkwy Div
New Jersey, State of -NJ Transit
New York Communcations CO., Inc
New York, CIty of
Newgig Networks, LLC
OCEAN, COUNTY OF
Ocean, County of-Div of Wireless Tech.
Orange Poughkeepsie SMSA LTD Partnership
Orange and Rockland Utilities, Inc.
PENNSYLVANIA TURNPIKE COMMISSION
PSEG Services Corporation
Pike, County of PA
SBA Broadband Services
SW Networks
South Canaan Cellular Communications Co.
Stevens Institute of Technology
Suffolk, County of
Texas Eastern Communications, Inc.
Webline Holdings LLC
Wireless Backhaul Infrastructure, LLC
World Class Wireless LLC
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:	11/30/2011
Job Number:	111123COMSJC01

Administrative Information

Status	TEMPORARY (Operation from 12/06/2011 to 12/09/2011)
Call Sign	TEMP12
Licensee Code	P3210
Licensee Name	SES Americom, Inc.

Site Information — NEW YORK CITY, NEW YORK

Venue Name	
Latitude (NAD 83)	40° 45' 3.3" N
Longitude (NAD 83)	73° 57' 56.4" W
Climate Zone	A
Rain Zone	2
Ground Elevation (AMSL)	9.45 m / 31.0 ft

Link Information

Satellite Type	Geostationary
Mode	TR - Transmit-Receive
Modulation	Digital
Satellite Arc	40° W to 41° West Longitude
Azimuth Range	134.1° to 135.2°
Corresponding Elevation Angles	31.5° / 32.1°
Antenna Centerline (AGL)	3.05 m / 10.0 ft

Antenna Information		Receive		Transmit	
Manufacturer		GATR Technologies		GATR Technologies	
Model		2.4 Meter		2.4 Meter	
Gain / Diameter		37.4 dBi / 2.4 m		41.5 dBi / 2.4 m	
3-dB / 15-dB Beamwidth		2.30° / 4.20°		1.45° / 2.70°	
Max Available RF Power	(dBW/4 kHz)			-19.2	
	(dBW/MHz)			4.8	
Maximum EIRP	(dBW/4 kHz)			22.3	
	(dBW/MHz)			46.3	
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
	Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%

Frequency Information	Receive 4.0 GHz	Transmit 6.1 GHz
Emission / Frequency Range (MHz)	2M00G7D / 3989.9544	2M00G7D / 6216.9222
Max Great Circle Coordination Distance	316.4 km / 196.6 mi	131.1 km / 81.4 mi
Precipitation Scatter Contour Radius	488.1 km / 303.2 mi	100.0 km / 62.1 mi

COMSEARCH

Earth Station Data Sheet

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

Coordination Values	**NEW YORK CITY, NY**			
Licensee Name	SES Americom, Inc.			
Latitude (NAD 83)	40° 45' 3.3" N			
Longitude (NAD 83)	73° 57' 56.4" W			
Ground Elevation (AMSL)	9.45 m / 31.0 ft			
Antenna Centerline (AGL)	3.05 m / 10.0 ft			
Antenna Model	GATR Technologies 2.4 Meter			
Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz	
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power			-19.2 (dBW/4 kHz)	

			Receive 4.0 GHz		Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.35	126.55	-10.00	266.35	-10.00	106.73
5	0.38	122.67	-10.00	262.86	-10.00	104.38
10	0.39	118.68	-10.00	262.08	-10.00	103.85
15	0.30	114.58	-10.00	272.87	-10.00	111.06
20	0.23	110.42	-10.00	281.84	-10.00	116.91
25	0.00	106.20	-10.00	285.28	-10.00	119.13
30	0.00	101.99	-10.00	285.28	-10.00	119.13
35	0.00	97.75	-10.00	285.28	-10.00	119.13
40	0.00	93.50	-10.00	285.28	-10.00	119.13
45	0.00	89.23	-10.00	285.28	-10.00	119.13
50	0.00	84.97	-10.00	285.28	-10.00	119.13
55	0.00	80.72	-10.00	285.28	-10.00	119.13
60	0.00	76.50	-10.00	285.28	-10.00	119.13
65	0.00	72.30	-10.00	285.28	-10.00	119.13
70	0.00	68.14	-10.00	285.28	-10.00	119.13
75	0.00	64.04	-10.00	285.28	-10.00	119.13
80	0.00	60.01	-10.00	285.28	-10.00	119.13
85	0.00	56.07	-10.00	285.28	-10.00	119.13
90	0.00	52.25	-10.00	285.28	-10.00	119.13
95	0.20	48.47	-10.00	285.20	-10.00	119.07
100	0.24	44.95	-9.32	284.70	-9.32	117.71
105	0.26	41.68	-8.50	287.42	-8.50	118.18
110	0.22	38.74	-7.70	297.52	-7.70	123.36
115	0.22	36.16	-6.95	302.99	-6.95	125.59
120	0.28	33.98	-6.28	299.93	-6.28	122.54
125	0.00	32.67	-5.86	313.64	-5.86	130.02
130	0.00	31.76	-5.55	315.82	-5.55	130.84
135	0.00	31.53	-5.47	316.37	-5.47	131.05
140	0.00	32.01	-5.63	315.21	-5.63	130.61
145	0.00	33.16	-6.02	311.88	-6.02	129.59
150	0.00	34.93	-6.58	307.97	-6.58	128.09
155	0.00	37.16	-7.25	303.36	-7.25	126.31
160	0.00	39.75	-7.98	298.44	-7.98	124.39
165	0.00	42.69	-8.76	293.29	-8.76	122.35
170	0.00	45.93	-9.55	288.14	-9.55	120.29
175	0.00	49.41	-10.00	285.28	-10.00	119.13
180	0.00	53.06	-10.00	285.28	-10.00	119.13
185	0.00	56.86	-10.00	285.28	-10.00	119.13

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Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz	
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power			-19.2 (dBW/4 kHz)	

			Receive 4.0 GHz		Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	60.78	-10.00	285.28	-10.00	119.13
195	0.00	64.79	-10.00	285.28	-10.00	119.13
200	0.00	68.87	-10.00	285.28	-10.00	119.13
205	0.00	73.00	-10.00	285.28	-10.00	119.13
210	0.00	77.18	-10.00	285.28	-10.00	119.13
215	0.00	81.38	-10.00	285.28	-10.00	119.13
220	0.00	85.61	-10.00	285.28	-10.00	119.13
225	0.00	89.84	-10.00	285.28	-10.00	119.13
230	0.00	94.07	-10.00	285.28	-10.00	119.13
235	0.00	98.30	-10.00	285.28	-10.00	119.13
240	0.61	102.59	-10.00	242.91	-10.00	100.00
245	1.00	106.87	-10.00	220.35	-10.00	100.00
250	0.96	111.05	-10.00	222.50	-10.00	100.00
255	0.81	115.14	-10.00	230.76	-10.00	100.00
260	0.69	119.16	-10.00	237.92	-10.00	100.00
265	0.81	123.17	-10.00	230.77	-10.00	100.00
270	0.78	127.02	-10.00	232.32	-10.00	100.00
275	0.73	130.71	-10.00	235.50	-10.00	100.00
280	0.67	134.22	-10.00	238.75	-10.00	100.00
285	0.51	137.42	-10.00	248.92	-10.00	100.00
290	0.44	140.37	-10.00	256.67	-10.00	100.16
295	0.44	143.02	-10.00	256.09	-10.00	100.00
300	0.44	145.23	-10.00	256.30	-10.00	100.00
305	0.41	146.87	-10.00	260.01	-10.00	102.45
310	0.39	147.91	-10.00	261.90	-10.00	103.73
315	0.44	148.33	-10.00	256.77	-10.00	100.23
320	0.58	148.15	-10.00	244.74	-10.00	100.00
325	0.52	147.07	-10.00	248.74	-10.00	100.00
330	0.46	145.39	-10.00	253.92	-10.00	100.00
335	0.46	143.16	-10.00	254.09	-10.00	100.00
340	0.48	140.43	-10.00	251.67	-10.00	100.00
345	0.46	137.31	-10.00	254.08	-10.00	100.00
350	0.42	133.92	-10.00	258.29	-10.00	101.27
355	0.41	130.33	-10.00	260.36	-10.00	102.68

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

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

DATED: November 30, 2011