

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

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

Transmit

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

Emission / Frequency Range (MHz):
NON / 5850.0 - 6250.0
NON / 6263.0 - 6309.0
NON / 6323.0 - 6425.0

Transmit 6.1 GHz

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

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Coordination Values	WOODBINE, MD	
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)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			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

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WOODBINE, MD

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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)		

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