

Prepared By

COMSEARCH

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

Prepared For

**SES Americom
Bristow, Virginia**

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.
Aerbender, LLC
Allentown SMSA Limited Partnership
Alltel Communications LLC - Western PA
Alltel Communications LLC-E OH WV
Alltel Communications LLC-North Carolina
Alltel Communications LLC-Southern VA
Alltel Communications of Petersburg Inc
Alltel Communications of Virginia #1 LLC
Appalachia Engineering Services
Appalachian Broadcasting
Atlantic Broadband (Delmar), LLC
Atlantic Broadband (Penn), LLC
Atlantic City Electric Company
Auburn Data Systems, LLC
B20 LLC
B2x Online Inc
BAY BROADBAND COMMUNICATIONS LLC
BLAIR COUNTY 911
Baltimore County of Maryland
Baltimore Gas and Electric Company
Bedford, County of
Believe Wireless, LLC
Bellsouth Telecommunications, Inc.

Company (Continued)

Berks, County of
Blue Ridge Carriers
Bucks, County of
CAMDEN COUNTY
CENTRE COUNTY
CHESTER, COUNTY OF
CLEARFIELD, COUNTY OF
CNG Transmission Corporation
CROWN COMMUNICATION, INC.
Cable Of The Carolinas
Cambria, County of
Campbell, 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
City of Durham, NC
Commonwealth of Pennsylvania
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 Franklin, VA
County of Frederick
Cumberland, County of
DAUPHIN COUNTY EMERGENCY MANAGEMENT
Delaware Division of Communications
Delmarva Power & Light Company
Direct Broadcast Services, Inc.
Duke Energy Business Services LLC
ECW Wireless, LLC
EG Broadcast Newco Corp
Eastern MLG LLC
Enoch Pratt Free Library
Exelon Generation Company, L.L.C
FELHC, Inc.
Federal Communications Commission
Fibertrack, LLC
Frederick County
Fundamental Broadcasting LLC

Company (Continued)

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
INDIANA, COUNTY OF
Jefferson Microwave, LLC
Juniata County Emergency Services
King and Queen County
Kryptic Technologies
Last Mile Inc.
Loudoun, County of
MONMOUTH, COUNTY OF
MVC Research. LLC
Maryland Public Broadcasting Commission
Maryland State Highway Administration
Maryland, State of - Dept.of Info & Tech
Mecklenburg Electric Cooperative
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
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

Company (Continued)

Penn Service Microwave Co., Inc.
Peoples Natural Gas Company LLC
Petersburg Cellular Partnership
Pitt Power
Pittsburgh SMSA Limited Partnership
Pittsylvania, County of
Prince George's County
Prince William, County of
RAPPAHANNOCK ELECTRIC COOPERATIVE
RCTC Wholesale Corporation
RICHMOND, CITY OF
ROANOKE COUNTY
Roanoke, City of
SCTF NET
SHENANDOAH VALLEY ELECTRIC COOPERATIVE
SOMERSET COUNTY
SW Networks
Southern Maryland Electric Cooperative I
Sprint Spectrum, LP
Sprintcom, Inc
St. Mary's County of (MD)
Stafford, County of
State of Maryland, MIEMSS
State of WV DHHR/BPH STECS
TRF SERVICES LLC
Texas Eastern Communications, Inc.
Thought Transmissions, LLC
Turtle Networks 6386
Turtle Networks 6466
Turtle Networks 6467
UNIVERSITY OF NORTH CAROLINA
US Cellular Operating Company, LLC (WI)
USCOC of Cumberland, Inc.
USCOC of North Carolina RSA #7, 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-NC,SC, TN
Verizon Wireless (VAW) LLC-Pennsylvania
Verizon Wireless LLC - West Virginia
Verizon Wireless VAW LLC-Southern VA
Verizon Wireless(VAW) LLC-AZ/CO/NM/NV/UT

Company (Continued)

Virginia RSA 5 Limited Partnership
Virginia Beach City of
Virginia Broadband, LLC
Virginia Cellular LLC
Virginia Department of State Police
Virginia Electric & Power Company
Virginia PCS Alliance, L.C.
Virginia Port Authority Police
Virginia RSA #7, Inc.
WITF Inc.
Washington D.C. SMSA L.P.
Washington Gas Light Company
Washington Suburban Sanitary Commission
Webline Holdings LLC
Wico, LLC
Wireless Internet Work II.
Wireless Internetwork LLC
World Class Wireless LLC
York County
York County Dept of Emergency Services
Zen Networks, Inc
ANNE ARUNDEL, COUNTY OF
APPALACHIAN POWER COMPANY
ATLANTIC, COUNTY OF
Albermarle, County of, Virginia
Allegheny County
Allegheny Power Service Corporation
American Electric Power Service Corp.
Amherst County of Dept of Public Safety
BOTETOURT COUNTY
CARROLL COUNTY
CBS Communications Services Inc.
CENTRAL VIRGINIA RADIO COMMUNICATIONS SY
CHESAPEAKE, CITY OF
COLUMBIA COUNTY
CTAB Holdings LLC
Calvert Cliffs Nuclear Power Plant
Calvert County Government
City of Bethlehem, Pennsylvania
City of Richmond
Columbia Gas Transmission Corporation
Conectiv Communications, Inc.
County of Burlington, Public Safety Cntr
County of Culpeper
County of Hunterdon
County of Louisa, VA
County of Nelson
County of Salem
Delaware County (PA) Emergency Services
Dinwiddie, County of

Company (Continued)

Eastern Pennsylvania EMS Council
Egan LLC
Equitable Gas Company
Franklin County Dept. of Emergency Servi
Franklin, County of
George Washington University
Harrison County Emergency Services
Henry, County of
Howard, County of
JEFFERSON COUNTY OF PENNSYLVANIA
LEBANON COUNTY OF
Lancaster County of
Lehigh, County of
M&T Bank
MARYLAND EMERG MANAGEMENT AGENCY COMM
MARYLAND STATE DEPT OF GENERAL SERVICES
Maryland, State Of - MDOT - MTA
Maryland, State of - DNR
Mifflin County
Montgomery County Of
Montgomery, County of
Morgan, County of
NORFOLK, CITY OF
Newport News , City of
North Carolina State Highway Patrol
Northumberland, County of
PENNSYLVANIA MICROWAVE NETWORK INC.
PIEDMONT ELECTRIC MEMBERSHIP COOPERATIVE
Pennsylvania Commonwealth State Police
Petersburg Police Department
Potomac Electric Power Company
Powhatan, County of
Prince George's, County of
RCYM Holdings LLC
Redi-Call Communications Company
SCHUYLKILL, COUNTY OF
SCS Networks
SECOM NET
SOUTHEASTERN PENNSYLVANIA TRANSIT AUTH
SPOTSYLVANIA COUNTY
SW Networks
Snyder, County of
Southampton County
Southside Electric Cooperative
Standard Backhaul Communications LLC
Suffolk, City of Radio Electronics Dept
Sussex County
Transcontinental Gas Pipeline Corp.
Triangle Communications, Inc.

Company (Continued)

WASHINGTON COUNTY E-911
WESTMORELAND COUNTY PUBLIC SAFETY
Warrenton Fauquier Joint Communications
Western Sub-RSA LTD Partnership
Zango 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: 05/31/2013
Job Number: 130516COMSJC01

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

BRISTOW, VIRGINIA

Venue Name:
Latitude (NAD 83): 38° 47' 3.3" N
Longitude (NAD 83): 77° 34' 21.7" W
Climate Zone: A
Rain Zone: 2
Ground Elevation (AMSL): 86.87 m / 285.0 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: No Modulation
Satellite Arc: 26° W to 26° West Longitude
Azimuth Range: 116.4° to 116.4°
Corresponding Elevation Angles: 20.9° / 20.9°
Antenna Centerline (AGL): 5.79 m / 19.0 ft

Antenna Information

Manufacturer: GD Satcom
Model: 9 Meter
Gain / Diameter: 53.5 dBi / 9.0 m
3-dB / 15-dB Beamwidth: 0.36° / 0.76°

Transmit

Max Available RF Power	(dBW/4 kHz)	27.5	
	(dBW/MHz)	51.5	
Maximum EIRP	(dBW/4 kHz)	81.0	
	(dBW/MHz)	105.0	
	(dBW)	81.0	
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 - 5929.0
NON / 5991.0 - 6136.0
NON / 6169.0 - 6181.0
NON / 6243.0 - 6388.0
NON / 6421.0 - 6425.0
NON / 6725.0 - 6769.0
NON / 6781.0 - 6874.0

Transmit 6.1 GHz

Max Great Circle Coordination Distance: 381.3 km / 236.9 mi
Precipitation Scatter Contour Radius: 506.5 km / 314.7 mi

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Coordination Values	BRISTOW, VA	
Licensee Name	SES Americom, Inc.	
Latitude (NAD 83)	38° 47' 3.3" N	
Longitude (NAD 83)	77° 34' 21.7" W	
Ground Elevation (AMSL)	86.87 m / 285.0 ft	
Antenna Centerline (AGL)	5.79 m / 19.0 ft	
Antenna Model	GD Satcom 9 Meter	
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	27.5 (dBW/4 kHz)	

			Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.88	114.73	-10.00	253.17
5	0.93	110.09	-10.00	250.25
10	0.83	105.41	-10.00	255.80
15	0.82	100.73	-10.00	256.88
20	0.67	96.03	-10.00	265.65
25	0.62	91.34	-10.00	269.01
30	0.51	86.65	-10.00	276.50
35	0.27	81.98	-10.00	304.61
40	0.42	77.30	-10.00	286.11
45	0.54	72.62	-10.00	274.12
50	0.28	68.01	-10.00	303.26
55	0.38	63.38	-10.00	290.44
60	0.00	58.88	-10.00	313.13
65	0.00	54.36	-10.00	313.13
70	0.00	49.90	-10.00	313.13
75	0.00	45.52	-9.45	316.89
80	0.00	41.25	-8.38	324.42
85	0.00	37.12	-7.24	332.67
90	0.00	33.19	-6.03	341.64
95	0.00	29.55	-4.77	351.22
100	0.00	26.32	-3.51	361.03
105	0.00	23.66	-2.35	370.27
110	0.00	21.78	-1.45	377.59
115	0.00	20.90	-1.00	381.29
120	0.39	20.76	-0.93	356.22
125	0.69	21.84	-1.48	324.28
130	0.73	24.11	-2.56	313.05
135	0.80	27.07	-3.81	298.87
140	0.88	30.52	-5.12	284.19
145	0.87	34.38	-6.41	276.49
150	0.98	38.41	-7.61	261.80
155	0.92	42.69	-8.76	257.95
160	0.71	47.14	-9.83	264.18
165	0.71	51.60	-10.00	263.24
170	0.39	56.20	-10.00	289.80
175	0.39	60.76	-10.00	290.08
180	0.39	65.36	-10.00	289.28
185	0.28	70.00	-10.00	303.22

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BRISTOW, VA

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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	27.5 (dBW/4 kHz)		

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	74.68	-10.00	313.13
195	0.00	79.33	-10.00	313.13
200	0.00	84.00	-10.00	313.13
205	0.00	88.67	-10.00	313.13
210	0.00	93.34	-10.00	313.13
215	0.00	98.01	-10.00	313.13
220	0.00	102.67	-10.00	313.13
225	0.00	107.32	-10.00	313.13
230	0.00	111.94	-10.00	313.13
235	0.24	116.59	-10.00	308.48
240	0.32	121.19	-10.00	298.24
245	0.36	125.73	-10.00	293.32
250	0.34	130.21	-10.00	295.28
255	0.35	134.61	-10.00	294.24
260	0.41	138.93	-10.00	287.09
265	0.46	143.11	-10.00	281.94
270	0.46	147.08	-10.00	281.05
275	0.44	150.74	-10.00	283.19
280	0.46	154.03	-10.00	281.76
285	0.47	156.75	-10.00	279.78
290	0.48	158.68	-10.00	278.75
295	0.52	159.61	-10.00	275.84
300	0.49	159.33	-10.00	278.46
305	0.50	157.98	-10.00	277.42
310	0.50	155.70	-10.00	276.78
315	0.46	152.69	-10.00	281.54
320	0.50	149.24	-10.00	276.91
325	0.53	145.44	-10.00	274.83
330	0.67	141.44	-10.00	266.09
335	0.52	137.15	-10.00	275.55
340	0.57	132.81	-10.00	272.59
345	0.65	128.39	-10.00	267.06
350	0.63	123.86	-10.00	268.61
355	0.68	119.30	-10.00	265.08

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