

Prepared By

COMSEARCH

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

Prepared For

**Intelsat License LLC
Hagerstown, Maryland**

Temporary Transmit-Only Earth Station
Operation Dates: 03/13/2015 - 06/13/2015

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 January 25, 2015.

Company

256Q Networks
AWC Networks
Adams County Department of Emergency Svc
Affiniti PA, LLC
Albermarle, County of, Virginia
Allegheny County Dept of Emergency Svcs
Allegheny Power Service Corporation
Alltel Communications LLC-Southern VA
American Electric Power Service Co
Anne Arundel, County of
Appalachia Engineering Services
Appalachian Broadcasting
Atlantic City Electric Company
Atlantic, County of
Auburn Data Systems, LLC
BAY BROADBAND COMMUNICATIONS LLC
Baltimore County of Maryland
Baltimore Gas and Electric Company
Bedford, County of
BFI Licenses, LLC
Berks County Department of Emergency Ser
Blue Ridge Carriers
Blueline Communications
CBS Communication Services Inc
CLEARFIELD, COUNTY OF
CNG Transmission Corporation
CTAB Holdings LLC
Calvert Cliffs Nuclear Power Plant
Calvert, County of
Cameron County Office of Emergency Servi
Capital Communications of America

Company (Continued)

Carroll, County of
Cellco Partnership - Bridgeville, PA/WV
Cellco Partnership - Southern Virginia
Cellco Prtnrshp - Phil. Tri-State Rgn
Centre, County of
Chester, County of
Chester, County of
Chesterfield, County of
Clinton, County of
Columbia Gas Transmission Corporation
Columbia, County
Commonwealth of Pennsylvania
Commonwealth of Pennsylvania-Radio Proj.
Comprehensive Wireless
Comprehensive Wireless LLC
Conectiv Communications, Inc.
Converge Towers LLC
Coralinks
County of Burlington, Public Safety Cntr
County of Camden
County of Culpeper
County of Fayette
County of Louisa, VA
County of Lycoming
County of Salem
CP Communications, LLC
Cumberland, County of
DAUPHIN COUNTY EMERGENCY MANAGEMENT
Delaware County (PA) Emergency Services
Delaware Division of Communications
Delmarva Power and Light Company
ECW Wireless, LLC
EG Broadcast Newco Corp
Eastern MLG LLC
Eastern Pennsylvania EMS Council
Egan LLC
Enoch Pratt Free Library
Equitable Gas Company
Exelon Generation Company, LLC
FELHC, INC
Federal Communications Commission
Franklin County Dept. of Emergency Servi
Fundamental Broadcasting LLC
Geodesic Networks LLC
George Washington University
Gloucester, County of
HARRIS CORPORATION
Hanover, County of
Hardy Cellular Telephone Company
Harrison County Emergency Services
Harrisonburg-Rockingham ECC

Company (Continued)

High Voltage Communications LLC
Howard, County of
Indiana, County of
JEFFERSON COUNTY OF PENNSYLVANIA
Jefferson Microwave, LLC
Kryptick Technologies
Lancaster County-Wide Communications
Lebanon, County of
Loudoun, County of
M&T Bank
MARYLAND EMERG MANAGEMENT AGENCY COMM
MARYLAND STATE DEPT OF GENERAL SERVICES
MVC Research. LLC
Maryland Public Broadcasting Commission
Maryland State Highway Administration
Maryland, State Of - MDOT - MTA
Maryland, State of - DNR
Maryland, State of - Dept.of Info & Tech
Metrosat CommunicationsInc.
Mifflin County
Mifflin Mobilecom
Montgomery County Of
Montgomery, County of
Morgan, County of
National Tower Company LLC
Nelson, County of
New Cingular Wireless PCS LLC - Ohio
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, LLC - PA
New Jersey State Police
New Jersey Turnpike Authority-Pkwy Div
New Jersey, State of -NJ Transit
Norfolk Southern Railway
Northumberland, County of
OHIO POWER COMPANY
Old Dominion LLC
PEG Bandwidth, LLC
PSEG Services Corporation
Peco Energy Company
Pennsylvania Sports Entertainment Netwo.
Pennsylvania State Police
Pennsylvania Turnpike Commission
Peoples Natural Gas Company LLC
Peoples TWP LLC
Pitt Power
Pitt Power
Pittsburgh SMSA Limited Partnership
Potomac Electric Power Company
Prince George's County
Prince William, County of

Company (Continued)

RAPPAHANNOCK ELECTRIC COOPERATIVE
RCTC Wholesale Corporation
RCYM Holdings LLC
Redi-Call Communications Company
Rendezvous Communications LLC
SCHUYLKILL, COUNTY OF
SCS Networks
SCTF NET
SECOM NET
SW Networks
Snyder, County of
Southeastern Pennsylvania Transit Auth
Spotsylvania, County of
St. Mary's County of (MD)
Stafford, County of
Standard Backhaul Communications LLC
State of Maryland, MIEMSS
Texas Eastern Communications, LLC
Thought Transmissions, LLC
Torellco LLC
Transcontinental Gas Pipeline Corp.
Triangle Communications, Inc.
Turtle Networks 6559
Turtle Networks 6562
US Cellular Operating Company, LLC (WI)
USCOC of Cumberland, Inc.
USCOC of Virginia RSA #3, Inc.
USOC of Pennsylvania RSA No 10 B2 Inc.
Verizon Wireless VAW LLC-Southern VA
Virginia Cellular LLC
Virginia Department of State Police
Virginia Electric & Power Company
Virginia PCS Alliance, L.C.
WV DHHR BPH, Office of EMS, Com. Div.
Warrenton Fauquier Joint Communications
Washington Gas Light Company
Washington Suburban Sanitary Commission
Washington, County of
Weblin Holdings LLC
Westmoreland County Public Safety
Wireless Internetwork LLC
World Class Wireless, LLC
YAB Mobile
Zango LLC
iSignal
3G Wireless, LLC
ABC, Inc. - WPVI-TV
AERIAL VIDEO SYSTEMS
AT&T California
Alascom Inc
Anne Arundel, County of
Ascent Media Network Services, LLC

Company (Continued)

Bellsouth Telecommunications, Inc.
Borgeson, Tom R.
Broadcast Sports Inc.
C-SPAN
CBS Broadcasting Inc
CBS TELEVISION LICENSES LLC
CNG Communications, Inc.
Carolina Telephone and Telegraph Co
Casper, John
CenturyTel of the Southwest, Inc.
Chicago Comnet Corp
Cincinnati Bell Wireless LLC
Citywide News Network, Inc.
Cohen, Elena
County of Fairfax, Virginia
Cowboys Stadium LP
DCI II, INC.
Direct Broadcast Services, Inc.
Fox Television Stations, Inc.
GOODYEAR TIRE AND RUBBER COMPANY
GSN New, Inc
HF Enterprises, Inc
Hallco Unlimited, Inc.
Hawaiian Telcom, Inc.
Heiden, William
Illinois Bell Telephone Company
Indiana Bell Telephone Company
Information & Display Systems, Inc.
Information Super Station, LLC
International Communications Group, Inc.
Kentucky RSA #3 Cellular General Partner
Kentucky RSA #4 Cellular General Partner
Loop, Inc.
MERCURY COMMUNICATIONS
Metro Networks Communications, Inc.
Michigan Bell Telephone Company
Microwave Video Systems, LLC
Moreen, Steven K
NBC Telemundo License Co.
NBC Telemundo License LLC
NEW ENGLAND DIGITAL DISTRIBUTION, INC.
NEW ENGLAND SATELLITE SYSTEMS INC
NSM Surveillance
National Cable Satellite Corporation
National Football League
Navajo Communications Company
NorthWest Suburbs Community Access Corp
OHIO BELL TELEPHONE COMPANY
Onboard Images
Pacific Television Center
Penn Service Microwave Co., Inc.

Company (Continued)

Philadelphia, City of
Plateau Telecommunications, Inc.
Plum TV, LLC
Production & Satellite Services, Inc.
Proxy Aviation
Public Television Communications Center
QUICK LINK CONNECTIONS INC
Qwest Corporation
RCC Minnesota Inc. - MN NE ND SD
REMOTE FACILITIES CONSULTING SERVICES
RF Central, LLC
RF Film, Inc
RF Technology, LLC
Radiofone, Inc.
Randy Hermes Production
Regulus Media Services, Inc.
Remote Broadcasts, Inc.
Southwestern Bell Telephone L.P.
Speedshotz, Inc
Texas A&M University, Athletic Department
The City of Baltimore, Police Department
Total RF Marketing Inc
Unisat, Inc.
United Telephone - Southeast
VERIZON SOUTH INC.
Verizon California Inc.
Verizon Maryland, Inc.
Verizon New England Inc.
Verizon New Jersey, Inc.
Verizon New York, Inc.
Verizon North Inc.
Verizon Northwest Inc.
Verizon Pennsylvania, Inc.
Verizon Virginia, Inc.
Verizon Washington DC, Inc.
Village Video Productions Inc
Vitec Broadcast Services, Inc.
Vyvx, LLC
Westar Satellite Services LP
Western Technical Services
Wexler Video, Inc.
Winged Vision Inc
Wisconsin Bell, Inc.
Wolfe Air Aviation

Society of Broadcast Engineers

District of Columbia

Maryland: Entire State

Pennsylvania: So. Central Region
Western/Pittsburgh Region

Virginia: DC Area Region

West Virginia: Entire State

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: 02/13/2015
Job Number: 150125COMSJC01

Administrative Information

Status: TEMPORARY (Operation from 03/13/2015 to 06/13/2015)
Call Sign: TEMP06
Licensee Code: INTELS
Licensee Name: Intelsat License LLC

Site Information

HAGERSTOWN, MARYLAND

Venue Name
Latitude (NAD 83): 39° 35' 54.0" N
Longitude (NAD 83): 77° 45' 35.0" W
Climate Zone: A
Rain Zone: 2
Ground Elevation (AMSL): 173.74 m / 570.0 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: Digital
Satellite Arc: 6° W to 149° West Longitude
Azimuth Range: 101.9° to 257.8°
Corresponding Elevation Angles: 5.3° / 5.7°
Antenna Centerline (AGL): 5.79 m / 19.0 ft

Antenna Information

Manufacturer: TIW
Model: 9.0 Meter
Gain / Diameter: 53.5 dBi / 9.0 m
3-dB / 15-dB Beamwidth: 0.36° / 0.67°

Transmit

Max Available RF Power (dBW/4 kHz): 8.2
(dBW/MHz): 32.2

Maximum EIRP (dBW/4 kHz): 61.7
(dBW/MHz): 85.7
(dBW): 85.0

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): **Transmit 6.7 GHz**
850KFXD / 6535.0

Max Great Circle Coordination Distance: 518.8 km / 322.4 mi
Precipitation Scatter Contour Radius: 471.5 km / 292.9 mi

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Coordination Values	HAGERSTOWN, MD	
Licensee Name	Intelsat License LLC	
Latitude (NAD 83)	39° 35' 54.0" N	
Longitude (NAD 83)	77° 45' 35.0" W	
Ground Elevation (AMSL)	173.74 m / 570.0 ft	
Antenna Centerline (AGL)	5.79 m / 19.0 ft	
Antenna Model	TIW 9.0 Meter	
Antenna Mode	Transmit 6.7 GHz	
Interference Objectives:	Long Term	-154.0 dBW/4 kHz 20%
	Short Term	-131.0 dBW/4 kHz 0.0025%
Max Available RF Power	8.2 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.7 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	101.81	-10.00	211.05
5	0.00	96.84	-10.00	211.05
10	0.00	91.86	-10.00	211.05
15	0.00	86.88	-10.00	211.05
20	0.00	81.90	-10.00	211.05
25	0.00	76.92	-10.00	211.05
30	0.00	71.95	-10.00	211.05
35	0.00	66.97	-10.00	211.05
40	0.00	62.00	-10.00	211.05
45	0.00	57.03	-10.00	211.05
50	0.00	52.06	-10.00	211.05
55	0.00	47.09	-9.82	211.75
60	0.00	42.14	-8.62	216.70
65	0.00	37.19	-7.26	222.46
70	0.00	32.26	-5.72	229.29
75	0.00	27.34	-3.92	237.58
80	0.00	22.47	-1.79	247.95
85	0.00	17.65	0.83	260.94
90	0.00	12.98	4.17	280.02
95	0.00	8.66	8.56	308.09
100	0.00	5.61	13.27	518.84
105	0.00	6.15	12.28	380.23
110	0.00	9.60	7.45	300.58
115	0.00	13.27	3.93	278.57
120	0.00	16.89	1.31	263.56
125	0.00	20.41	-0.75	252.60
130	0.00	23.83	-2.43	244.79
135	0.00	27.11	-3.83	238.03
140	0.00	30.23	-5.01	232.51
145	0.00	33.14	-6.01	227.97
150	0.00	35.82	-6.85	224.24
155	0.00	38.20	-7.55	221.20
160	0.00	40.26	-8.12	218.77
165	0.00	41.93	-8.56	216.92
170	0.00	43.16	-8.88	215.61
175	0.00	43.92	-9.07	214.83
180	0.00	44.18	-9.13	214.57

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Antenna Centerline (AGL)	5.79 m / 19.0 ft	
Antenna Model	TIW 9.0 Meter	
Antenna Mode	Transmit 6.7 GHz	
Interference Objectives: Long Term	-154.0 dBW/4 kHz	20%
Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	8.2 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.7 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
185	0.00	43.92	-9.07	214.83
190	0.00	43.16	-8.88	215.61
195	0.00	41.93	-8.56	216.92
200	0.00	40.26	-8.12	218.78
205	0.00	38.20	-7.55	221.20
210	0.00	35.81	-6.85	224.24
215	0.00	33.14	-6.01	227.97
220	0.00	30.22	-5.01	232.51
225	0.00	27.11	-3.83	238.02
230	0.00	23.83	-2.43	244.78
235	0.00	20.42	-0.75	252.59
240	0.00	16.89	1.31	263.58
245	0.00	13.28	3.92	278.55
250	0.00	9.59	7.46	300.66
255	0.00	6.33	11.96	387.95
260	0.00	6.11	12.35	500.74
265	0.00	9.18	7.93	303.73
270	0.00	13.46	3.77	277.66
275	0.00	18.11	0.55	259.46
280	0.00	22.90	-2.00	246.92
285	0.00	27.76	-4.09	236.81
290	0.00	32.66	-5.85	228.68
295	0.00	37.59	-7.38	221.96
300	0.00	42.53	-8.72	216.28
305	0.00	47.48	-9.91	211.40
310	0.00	52.44	-10.00	211.05
315	0.00	57.40	-10.00	211.05
320	0.00	62.37	-10.00	211.05
325	0.00	67.34	-10.00	211.05
330	0.00	72.31	-10.00	211.05
335	0.00	77.28	-10.00	211.05
340	0.00	82.26	-10.00	211.05
345	0.00	87.23	-10.00	211.05
350	0.00	92.21	-10.00	211.05
355	0.00	97.18	-10.00	211.05

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, Virginia 20147

DATED: February 13, 2015