

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: 06/08/2016 - 06/18/2016

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 3, 2016.

Company

256Q Networks  
AB Services LLC  
AT&T Communications of Virginia, LLC  
AT&T Corp.  
AWC Networks  
Adams County Department of Emergency Svc  
Affiniti PA, LLC  
Alltel Communications LLC-E OH WV  
Alltel Communications LLC-Southern VA  
American Electric Power Service Co  
Appalachia Engineering Services  
Argos Engineering, LLC  
Atlantic Broadband (Penn), LLC  
Atlantic City Electric Company  
Atlantic, County of  
BLAIR COUNTY 911  
Baltimore County of Maryland  
Baltimore Gas and Electric Company  
Beaver Springs Faith Baptist Church, Inc  
Bedford, County of  
Believe Wireless, LLC  
Berks County Department of Emergency Ser  
Blue Ridge Carriers  
Blueline Communications  
CLEARFIELD, COUNTY OF  
CNG Transmission Corporation  
CROWN COMMUNICATION, INC.  
Cambria, County of  
Capital Communications of America  
Caroline County, VA  
Carroll, County of  
Cellco Partnership - Bridgeville, PA/WV  
Cellco Partnership - Southern Virginia  
Cellco Partnership- PA Region  
Cellco Partnership-WDC/Baltimore  
Cellco Prtnrshp - Phil. Tri-State Rgn

Centre, County of  
Charles, County of  
Chester, County of  
City of Fredericksburg  
Citynet  
Clinton, County of  
Columbia Gas Transmission Corporation  
Commonwealth of Pennsylvania  
Commonwealth of Pennsylvania-Radio Proj.  
Comprehensive Wireless LLC  
Conterra Ultra Broadband, LLC  
Coral Reef Technologies Ltd  
Coralinks  
County of Fayette  
County of Frederick  
County of Lycoming  
County of York  
DAUPHIN COUNTY EMERGENCY MANAGEMENT  
Delaware County (PA) Emergency Services  
Delaware Division of Communications  
Delmarva Broadcasting Company  
Delmarva Power and Light Company  
ECW Wireless, LLC  
EG Broadcast Newco Corp  
Eastern MLG LLC  
Enoch Pratt Free Library  
Exelon Generation Company, LLC  
FELHC, INC  
Federal Communication Commission  
Frederick County  
Fundamental Broadcasting LLC  
GETWIRELESS.NET  
GREAT SCOTT BROADCASTING  
GW Networks  
Garden State Transmissions  
Geodesic Networks LLC  
Gloucester, County of  
Greene, County of (PA)  
Hanover, County of  
Hardy Cellular Telephone Company  
Harrisonburg-Rockingham ECC  
High Voltage Communications LLC (CFN)  
Huntingdon County of  
Indiana, County of  
Jefferson Microwave, LLC  
Juniata County Emergency Services  
Kryptick Technologies  
Lancaster County-Wide Communications  
Limitless Mobile, LLC  
Loudoun, County of  
MGW Networks, LLC  
MVC Research. LLC  
Maryland Public Broadcasting Commission  
Maryland State Highway Administration  
Maryland, State of - Dept.of Info & Tech  
Montgomery County Of

National Tower Company LLC  
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, LLC - PA  
New Jersey, State of -NJ Transit  
New Line Networks, LLC  
Norfolk Southern Railway  
Northumberland County DPS/911  
Old Dominion LLC  
PA Communications  
PEG Bandwidth, LLC  
PRESTON COUNTY OFFICE OF EMERGENCY MANAG  
PSEG Services Corporation  
Peco Energy Company  
Pennsylvania Turnpike Commission  
Peoples Natural Gas Company LLC  
Pepco Holdings Inc.  
Perseus Technology Holdings USA Inc.  
Pitt Power  
Pittsburgh SMSA Limited Partnership  
Prince George's County  
Prince William, County of  
RAPPAHANNOCK ELECTRIC COOPERATIVE  
Radio One Inc  
Rural Broadband Network Services LLC  
SCS Networks  
SHENANDOAH VALLEY ELECTRIC COOPERATIVE  
SW Networks  
Somerset, County of  
South Central Task Force (SCTFNET)  
Southern Maryland Electric Cooperative I  
Spotsylvania, County of  
Sprint Spectrum L.P.  
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.  
Turtle Networks 6559  
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 Maryland, Inc.  
Verizon Wireless (VAW) LLC - Maryland  
Verizon Wireless (VAW) LLC - W/B/V Mkts  
Verizon Wireless (VAW) LLC-Pennsylvania  
Verizon Wireless VAW LLC - West Virginia  
Verizon Wireless VAW LLC-Southern VA

Virginia Broadband, LLC  
Virginia Cellular LLC  
Virginia Department of State Police  
Virginia Electric & Power Company  
Virginia PCS Alliance, L.C.  
WITF Inc.  
WV DHHR BPH, Office of EMS, Com. Div.  
Washington D.C. SMSA L.P.  
Washington Gas Light Company  
Washington Suburban Sanitary Commission  
Washington, County of  
Weblin Holdings LLC  
Wireless Internetwork LLC  
World Class Wireless, LLC  
YAB Mobile  
iSignal  
xWave Engineering LLC

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

The following section presents the data pertinent to frequency coordination of the 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: 05/03/2016  
Job Number: 160503COMSGE04

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### Administrative Information

Status TEMPORARY (Operation from 06/08/2016 to 06/18/2016)  
Call Sign TEMP06  
Licensee Code INTELS  
Licensee Name Intelsat License LLC

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### Site Information HAGERSTOWN, MD

Venue Name  
Latitude (NAD 83) 39° 35' 54.7" N  
Longitude (NAD 83) 77° 45' 35.3" W  
Climate Zone A  
Rain Zone 2  
Ground Elevation (AMSL) 171.3 m / 562.0 ft

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### Link Information

Satellite Type Geostationary  
Mode TO - Transmit-Only  
Modulation Analog and 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) 12.5 m / 41.0 ft

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### Antenna Information Transmit - FCC32

Manufacturer GD Satcom  
Model 19M CFP A  
Gain / Diameter 59.1 dBi / 19.0 m  
3-dB / 15-dB Beamwidth 0.20° / 0.40°

Max Available RF Power (dBW/4 kHz) 2.0  
(dBW/MHz) 26.0

Maximum EIRP (dBW/4 kHz) 61.1  
(dBW/MHz) 85.1

Interference Objectives: Long Term -154.0 dBW/4 kHz 20%  
Short Term -131.0 dBW/4 kHz 0.0025%

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### Frequency Information Transmit 6.1 GHz

Emission / Frequency Range (MHz) 850KG7W / 6416.5 - 6418.5

Max Great Circle Coordination Distance 510.1 km / 316.9 mi  
Precipitation Scatter Contour Radius 235.5 km / 146.3 mi

<b>Coordination Values</b>	<b>HAGERSTOWN, MD</b>
Licensee Name	Intelsat License LLC
Latitude (NAD 83)	39° 35' 54.7" N
Longitude (NAD 83)	77° 45' 35.3" W
Ground Elevation (AMSL)	171.3 m / 562.0 ft
Antenna Centerline (AGL)	12.5 m / 41.0 ft
Antenna Model	GD 19 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	2.0 (dBW/4 kHz)

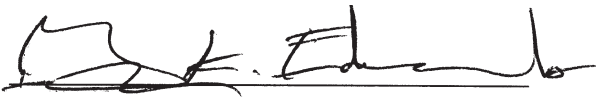
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	101.81	-10.00	188.84
5	0.00	96.84	-10.00	188.84
10	0.00	91.86	-10.00	188.84
15	0.00	86.88	-10.00	188.84
20	0.00	81.90	-10.00	188.84
25	0.00	76.92	-10.00	188.84
30	0.00	71.95	-10.00	188.84
35	0.00	66.97	-10.00	188.84
40	0.00	62.00	-10.00	188.84
45	0.00	57.03	-10.00	188.84
50	0.00	52.06	-10.00	188.84
55	0.00	47.09	-9.82	189.52
60	0.00	42.14	-8.62	194.15
65	0.00	37.19	-7.26	199.34
70	0.00	32.26	-5.72	205.22
75	0.00	27.34	-3.92	210.56
80	0.00	22.47	-1.79	219.34
85	0.00	17.65	0.83	230.85
90	0.00	12.98	4.17	246.75
95	0.00	8.66	8.56	269.45
100	0.00	5.61	13.27	510.12
105	0.00	6.15	12.28	352.29
110	0.00	9.60	7.45	263.23
115	0.00	13.27	3.93	245.55
120	0.00	16.89	1.31	233.05
125	0.00	20.41	-0.75	223.82
130	0.00	23.83	-2.43	216.65
135	0.00	27.11	-3.83	210.93
140	0.00	30.23	-5.01	206.29
145	0.00	33.14	-6.01	204.11
150	0.00	35.82	-6.85	200.90
155	0.00	38.20	-7.55	198.22
160	0.00	40.26	-8.12	196.05
165	0.00	41.93	-8.56	194.36
170	0.00	43.16	-8.88	193.15
175	0.00	43.92	-9.07	192.43
180	0.00	44.18	-9.13	192.18
185	0.00	43.92	-9.07	192.42

<b>Coordination Values</b>		<b>HAGERSTOWN, MD</b>	
Licensee Name		Intelsat License LLC	
Latitude (NAD 83)		39° 35' 54.7" N	
Longitude (NAD 83)		77° 45' 35.3" W	
Ground Elevation (AMSL)		171.3 m / 562.0 ft	
Antenna Centerline (AGL)		12.5 m / 41.0 ft	
Antenna Model		GD 19 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		2.0 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	43.16	-8.88	193.15
195	0.00	41.93	-8.56	194.36
200	0.00	40.26	-8.12	196.05
205	0.00	38.20	-7.55	198.22
210	0.00	35.81	-6.85	200.90
215	0.00	33.14	-6.01	204.11
220	0.00	30.22	-5.01	206.30
225	0.00	27.11	-3.83	210.93
230	0.00	23.83	-2.43	216.64
235	0.00	20.42	-0.75	223.81
240	0.00	16.89	1.31	233.07
245	0.00	13.28	3.92	245.53
250	0.00	9.59	7.46	263.29
255	0.00	6.33	11.96	362.01
260	0.00	6.11	12.35	490.02
265	0.00	9.18	7.93	265.88
270	0.00	13.46	3.77	244.79
275	0.00	18.11	0.55	229.60
280	0.00	22.90	-2.00	218.46
285	0.00	27.76	-4.09	209.91
290	0.00	32.66	-5.85	204.71
295	0.00	37.59	-7.38	198.89
300	0.00	42.53	-8.72	193.77
305	0.00	47.48	-9.91	189.18
310	0.00	52.44	-10.00	188.84
315	0.00	57.40	-10.00	188.84
320	0.00	62.37	-10.00	188.84
325	0.00	67.34	-10.00	188.84
330	0.00	72.31	-10.00	188.84
335	0.00	77.28	-10.00	188.84
340	0.00	82.26	-10.00	188.84
345	0.00	87.23	-10.00	188.84
350	0.00	92.21	-10.00	188.84
355	0.00	97.18	-10.00	188.84

## 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.

BY: 

Gary K. Edwards  
Senior Manager  
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Ashburn, VA 20147

DATED: May 25, 2016