

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: 09/05/2018 - 11/29/2018

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 July 05, 2018.

Company

AB Services LLC
AQ2AT LLC
AT&T Corp.
AT&T Wireless Services 3 LLC - PA
Access MLP Operating LLC
Adams County Department of Emergency Svc
Affiniti PA, LLC
Agile Network Builders LLC
Albemarle, County of, Virginia
Allentown SMSA Limited Partnership
Alltel Communications LLC - Western PA
Alltel Communications LLC-E OH WV
Alltel Communications LLC-TriState Rgn
American Electric Power Service Corp
Appalachia Engineering Services
Appalachian Power Company
Argos Engineering, LLC
Atlantic Broadband (Penn), LLC
Atlantic City Electric Company
Atlantic Coast Pipeline, LLC
Atlantic, County of
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
Blair County 911
Blue Ridge Carriers
Blueline Communications
Bucks County Dept. of Emergency Comm
CBS Radio of Maryland, LLC
Calvert, County of
Cambria, County of
Capital Communications of America
Carbon, County of 911 Center

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
Charles, County of
Charter Communications, LLC
Chester, County of
Chesterfield, County of
City of Fredericksburg
Citynet, LLC
Clearfield, County of
Clinton, County of
Columbia Gas Transmission, LLC
Commonwealth of Pennsylvania
Commonwealth of Pennsylvania-Radio Proj.
Comprehensive Wireless LLC
Conterra Ultra Broadband, LLC
County of Augusta
County of Burlington, Public Safety Cntr
County of Camden
County of Centre
County of Culpeper
County of Fayette
County of Frederick
County of King William, Virginia
County of Lycoming
County of Tioga
County of York
DSRC Networks
Dauphin County Emergency Management
Delaware County (PA) Emergency Services
Delaware Division of Communications
Delmarva Broadcasting Company
Delmarva Power and Light Company
Direct Broadcast Services, Inc.
Dominion Energy Transmission, Inc.
ECW Wireless, LLC
East Ohio Gas Company
Eastern MLG LLC
Electric Railroad, LLC
Enoch Pratt Free Library
Essex, County of
Exelon Generation Company, LLC
FELHC, Inc.
Federal Communication Commission
Fulton County of (PA)
Fundamental Broadcasting LLC
GSB Broadcasting LLC
GTT America LLC
Garden State Transmissions
Getwireless.Net
Gloucester, County of
Goochland County

Goochland, County of
Greene, County of (PA)
Hanover, County of
Hardy Cellular Telephone Company
Hardy County OEM/E911
Harrisonburg-Rockingham ECC
Henrico County
High Voltage Communications LLC (CFN)
Huntingdon, County of
Indiana, County of
Jefferson County of Pennsylvania
Jefferson Microwave, LLC
Juniata County Emergency Services
Kentucky Power Company
King and Queen County
Kryptick Technologies
Lancaster County-Wide Communications
Limitless Mobile, LLC
Loudoun, County of
Luzerne County of PA
MGW Networks, LLC
Maryland Public Broadcasting Commission
Maryland State Highway Administration
Maryland, State of - Dept.of Info & Tech
McKean, County of
Middlesex County Sherriff's Office
Mifflin County
Monroe County Control Center (PA)
Montgomery County Of
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 - KY
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 Turnpike Authority-Pkwy Div
New Jersey, State of -NJ Transit
New Kent County
New Line Networks, LLC
Norfolk Southern Railway
Northumberland County DPS/911
Ocean County of - Div of Wireless Tech.
Ohio Power Company
Ohio Valley Electric Company
PSEG Services Corporation
Peco Energy Company
Pennsylvania Turnpike Commission
Perry, County of
Pittsburgh SMSA Limited Partnership
Potter County of (PA)
Preston County Office of Emergency Manag

Prince George's County
Prince William, County of
RCTC Wholesale Corporation
Radio License Holding CBC, LLC
Radio One Inc
Rappahannock Electric Cooperative
Richmond, City of
Rockbridge Reg. Pub Safety Comm Ctr
Rural Broadband Network Services LLC
Rural Broadband, LLC
SW Networks
Shenandoah Personal Communications, LLC
Shenandoah Valley Electric Cooperative
Snyder, County of
Somerset County Dept. of Emergency Servi
South Central Task Force (SCTFNET)
Southern Maryland Electric Cooperative I
Southside Electric Cooperative
Spotsylvania, County of
Sprintcom, Inc
St. Mary's County of (MD)
Stafford, County of
Standard Backhaul Communications LLC
State of Maryland, MIEMSS
T-Mobile License LLC
Texas Eastern Communications, LLC
Thought Transmissions, LLC
Torellco LLC
Transcontinental Gas Pipeline Corp.
US Cellular Operating Company, LLC (WI)
USCOC of Cumberland, Inc.
USCOC of Virginia RSA #3, Inc.
USOC of Pennsylvania RSA No 10 B2 Inc.
Uniti Fiber PEG, LLC
Ursa Navigation Solutions, Inc.
Verizon Maryland, Inc.
Verizon Virginia, Inc.
Verizon Wireless (VAW) LLC - Delaware/NJ
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 RSA 5 Limited Partnership
Virginia Broadband, LLC
Virginia Department of State Police
Virginia Electric & Power Company
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
West Virginia Educational Broadcasting
Westmoreland, County of
Wheeling Power Company

Wicomico County
Williamson Enterprise LLC
Wireless Internetwork LLC
Worcester County Emergency Services
World Class Wireless, LLC
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: 07/05/2018
Job Number: 180705COMSGE07

Administrative Information

Status: TEMPORARY (Operation from 09/05/2018 to 11/29/2018)
Call Sign: TEMP11
Licensee Code: INTELS
Licensee Name: Intelsat License LLC

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

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): 12.5 m / 41.0 ft

Antenna Information

Transmit - FCC32

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

Max Available RF Power (dBW/4 kHz): 12.3
(dBW/MHz): 36.3

Maximum EIRP (dBW/4 kHz): 71.4
(dBW/MHz): 95.4

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

Frequency Information

Transmit 6.1 GHz

Emission / Frequency Range (MHz): 850KFXD - 1M20FXD / 5850.0 - 5853.5
850KFXD - 1M20FXD / 6421.5 - 6425.0

Max Great Circle Coordination Distance: 636.4 km / 395.4 mi
Precipitation Scatter Contour Radius: 614.7 km / 381.9 mi

Coordination Values	HAGERSTOWN, MD	
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 Satcom 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	12.3 (dBW/4 kHz)	

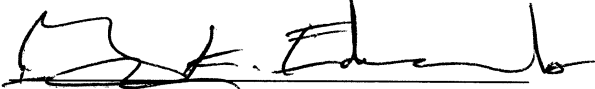
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	101.81	-10.00	228.46
5	0.00	96.84	-10.00	228.46
10	0.00	91.86	-10.00	228.46
15	0.00	86.88	-10.00	228.46
20	0.00	81.90	-10.00	228.46
25	0.00	76.92	-10.00	228.46
30	0.00	71.95	-10.00	228.46
35	0.00	66.97	-10.00	228.46
40	0.00	62.00	-10.00	228.46
45	0.00	57.03	-10.00	228.46
50	0.00	52.06	-10.00	228.46
55	0.00	47.09	-9.82	229.25
60	0.00	42.14	-8.62	234.79
65	0.00	37.19	-7.26	241.22
70	0.00	32.26	-5.72	248.19
75	0.00	27.34	-3.92	257.45
80	0.00	22.47	-1.79	269.18
85	0.00	17.65	0.83	284.62
90	0.00	12.98	4.17	306.03
95	0.00	8.66	8.56	337.06
100	0.00	5.61	13.27	636.41
105	0.00	6.15	12.28	450.49
110	0.00	9.60	7.45	328.94
115	0.00	13.27	3.93	304.41
120	0.00	16.89	1.31	287.58
125	0.00	20.41	-0.75	275.18
130	0.00	23.83	-2.43	265.58
135	0.00	27.11	-3.83	257.95
140	0.00	30.23	-5.01	251.77
145	0.00	33.14	-6.01	247.35
150	0.00	35.82	-6.85	243.20
155	0.00	38.20	-7.55	239.82
160	0.00	40.26	-8.12	237.11
165	0.00	41.93	-8.56	235.05
170	0.00	43.16	-8.88	233.58
175	0.00	43.92	-9.07	232.71
180	0.00	44.18	-9.13	232.42
185	0.00	43.92	-9.07	232.71

Coordination Values		HAGERSTOWN, MD	
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 Satcom 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	12.3 (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	233.58
195	0.00	41.93	-8.56	235.05
200	0.00	40.26	-8.12	237.12
205	0.00	38.20	-7.55	239.82
210	0.00	35.81	-6.85	243.20
215	0.00	33.14	-6.01	247.35
220	0.00	30.22	-5.01	251.77
225	0.00	27.11	-3.83	257.95
230	0.00	23.83	-2.43	265.57
235	0.00	20.42	-0.75	275.17
240	0.00	16.89	1.31	287.60
245	0.00	13.28	3.92	304.38
250	0.00	9.59	7.46	329.03
255	0.00	6.33	11.96	461.32
260	0.00	6.11	12.35	612.62
265	0.00	9.18	7.93	332.41
270	0.00	13.46	3.77	303.39
275	0.00	18.11	0.55	282.94
280	0.00	22.90	-2.00	268.00
285	0.00	27.76	-4.09	256.58
290	0.00	32.66	-5.85	248.13
295	0.00	37.59	-7.38	240.66
300	0.00	42.53	-8.72	234.32
305	0.00	47.48	-9.91	228.85
310	0.00	52.44	-10.00	228.46
315	0.00	57.40	-10.00	228.46
320	0.00	62.37	-10.00	228.46
325	0.00	67.34	-10.00	228.46
330	0.00	72.31	-10.00	228.46
335	0.00	77.28	-10.00	228.46
340	0.00	82.26	-10.00	228.46
345	0.00	87.23	-10.00	228.46
350	0.00	92.21	-10.00	228.46
355	0.00	97.18	-10.00	228.46

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
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147

DATED: July 24, 2018