

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: 12/17/2016 - 12/27/2016

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 November 2, 2016.

Company

ALLEGANY COUNTY GOVERNMENT
ALTIUS Communications
APC Realty and Equipment CO LLC
Adams County Department of Emergency Svc
Affiniti PA, LLC
Arlington County Emergency Comm Ctr
B.F. SAUL COMPANY
BUSINESS INFORMATION GROUP, INC.
Believe Wireless, LLC
Blaze Broadband
Boeing Company
CAMP HILL SCHOOL DISTRICT
CBS Broadcasting Inc
CBS Radio Stations Inc.
CECIL COUNTY PUBLIC SCHOOLS
CONXX, Inc.
Calvert County Government
Calvert, County of
Cambria, County of
Cape May County Municipal Utilities Auth
Cape May County, MIS Department
Carlisle Area School District
Chesapeake Television Licensee, LLC
City of Altoona
City of Lebanon Authority
Clearwire Spectrum Holdings III, LLC
Commissioners of Caroline County
County of York
Cumberland County, New Jersey
Cumberland Valley School District
DELAWARE RIVER & BAY AUTHORITY
DOVER AREA SCHOOL DISTRICT
Delmarva Power and Light Company
ECW Wireless, LLC
East Pennsboro Area School
Eastern Lancaster County School District

Enoch Pratt Free Library
Federal Communication Commission
Franklin County Dept. of Emergency Servi
GETWIRELESS.NET
George Washington University
Glenville State University
Global Telecom & Technology Americas
HALIFAX AREA SCHOOL DISTRICT
Harrison County Emergency Services
Home Sales Company, Inc
LANCASTER GENERAL HOSPITAL
Limitless Mobile, LLC
Loudoun, County of
MLS Engineering
Maryland Port Administration
Maryland, State of - MDOT-MTA
NBC Telemundo License LLC
NEXSTAR BROADCASTING, INC.
New Cingular Wireless PCS LLC - AZ
New Cingular Wireless PCS - Maryland
New Cingular Wireless PCS LLC - WV,NC,SC
New Cingular Wireless PCS, LLC - PA
Northern York County School District
PDP GROUP, INC.
Pennsylvania Turnpike Commission
PhillieCo, L.P.
Prince William, County of
R. Fritz Enterprises Inc
Radio One Inc
RapidDSL & Wireless, Inc.
Red Rose Transit Authority
Red Zebra Broadcasting Licensee, LLC
Rural Broadband Network Services LLC
SHIPPENSBURG AREA SCHOOL DISTRICT
SUSQUEHANNA TOWNSHIP SCHOOL DISTRICT
Shenandoah Personal Communications, LLC
Somerset, County of
South Western School District
Sprint Spectrum L.P.
Sprintcom, Inc
Steelton-Highspire School District
T-Mobile License LLC
Telecom Transport Management, Inc
Telegia Communications Inc.
Virginia Everywhere, LLC
WASHINGTON CABLE SYSTEMS INC
WKYSFM, INC
WV DHHR BPH, Office of EMS, Com. Div.
West Virginia PCS Alliance, L.C.
Windstream D&E Systems, Inc.
World Class Wireless, LLC
XO Communications, LLC
York Water Co

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: 11/02/2016
Job Number: <PCNJobCode>

Administrative Information

Status TEMPORARY (Operation from 12/17/2016 to 12/27/2016)
Call Sign <PCNCallSign>
Licensee Code INTELS
Licensee Name Intelsat License LLC

Site Information

HAGERSTOWN, MD

Venue Name
Latitude (NAD 83) 39° 35' 54.6" N
Longitude (NAD 83) 77° 45' 33.0" W
Climate Zone A
Rain Zone 2
Ground Elevation (AMSL) 174.65 m / 573.0 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) 9.45 m / 31.0 ft

Antenna Information

Transmit - FCC32

Manufacturer TIW
Model 14.2 Meter
Gain / Diameter 65.1 dBi / 14.2 m
3-dB / 15-dB Beamwidth 0.10° / 0.20°

Max Available RF Power (dBW/4 kHz) -1.4
(dBW/MHz) 22.6

Maximum EIRP (dBW/4 kHz) 63.7
(dBW/MHz) 87.7

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

Frequency Information

Transmit 18.0 GHz

Emission / Frequency Range (MHz) 1M00FXD / 17300.0 - 17310.0
1M00FXD / 17305.0 - 17791.0

Max Great Circle Coordination Distance 434.2 km / 269.8 mi
Precipitation Scatter Contour Radius 166.9 km / 103.7 mi

Coordination Values	HAGERSTOWN, MD
Licensee Name	Intelsat License LLC
Latitude (NAD 83)	39° 35' 54.6" N
Longitude (NAD 83)	77° 45' 33.0" W
Ground Elevation (AMSL)	174.65 m / 573.0 ft
Antenna Centerline (AGL)	9.45 m / 31.0 ft
Antenna Model	TIW 14.2 Meter
Antenna Mode	Transmit 18.0 GHz
Interference Objectives: Long Term	-154.0 dBW/4 kHz 20%
Short Term	-131.0 dBW/4 kHz 0.0025%
Max Available RF Power	-1.4 (dBW/4 kHz)

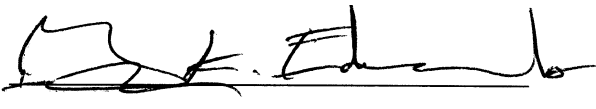
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 18.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	101.81	-10.00	149.61
5	0.00	96.84	-10.00	149.61
10	0.00	91.86	-10.00	149.61
15	0.00	86.88	-10.00	149.61
20	0.00	81.90	-10.00	149.61
25	0.00	76.92	-10.00	149.61
30	0.00	71.95	-10.00	149.61
35	0.00	66.97	-10.00	149.61
40	0.00	62.00	-10.00	149.61
45	0.00	57.03	-10.00	149.61
50	0.00	52.06	-10.00	149.61
55	0.00	47.09	-9.82	150.16
60	0.00	42.14	-8.62	153.98
65	0.00	37.19	-7.26	158.91
70	0.00	32.26	-5.72	164.07
75	0.00	27.34	-3.92	170.19
80	0.00	22.47	-1.79	177.63
85	0.00	17.65	0.83	187.00
90	0.00	12.98	4.17	199.15
95	0.00	8.66	8.56	216.41
100	0.00	5.61	13.27	434.23
105	0.00	6.15	12.28	296.23
110	0.00	9.60	7.45	211.93
115	0.00	13.27	3.93	198.23
120	0.00	16.89	1.31	188.75
125	0.00	20.41	-0.75	181.32
130	0.00	23.83	-2.43	175.38
135	0.00	27.11	-3.83	170.51
140	0.00	30.23	-5.01	166.46
145	0.00	33.14	-6.01	163.08
150	0.00	35.82	-6.85	160.27
155	0.00	38.20	-7.55	157.45
160	0.00	40.26	-8.12	155.58
165	0.00	41.93	-8.56	154.16
170	0.00	43.16	-8.88	153.15
175	0.00	43.92	-9.07	152.54
180	0.00	44.18	-9.13	152.34
185	0.00	43.92	-9.07	152.54

Coordination Values		HAGERSTOWN, MD	
Licensee Name		Intelsat License LLC	
Latitude (NAD 83)		39° 35' 54.6" N	
Longitude (NAD 83)		77° 45' 33.0" W	
Ground Elevation (AMSL)		174.65 m / 573.0 ft	
Antenna Centerline (AGL)		9.45 m / 31.0 ft	
Antenna Model		TIW 14.2 Meter	
Antenna Mode		Transmit 18.0 GHz	
Interference Objectives:	Long Term	-154.0 dBW/4 kHz	20%
	Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power		-1.4 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 18.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	43.16	-8.88	153.15
195	0.00	41.93	-8.56	154.16
200	0.00	40.26	-8.12	155.58
205	0.00	38.20	-7.55	157.44
210	0.00	35.81	-6.85	160.27
215	0.00	33.14	-6.01	163.09
220	0.00	30.22	-5.01	166.47
225	0.00	27.11	-3.83	170.51
230	0.00	23.83	-2.43	175.37
235	0.00	20.42	-0.75	181.32
240	0.00	16.89	1.31	188.76
245	0.00	13.28	3.92	198.21
250	0.00	9.59	7.46	211.98
255	0.00	6.33	11.96	306.17
260	0.00	6.11	12.35	416.69
265	0.00	9.18	7.93	213.85
270	0.00	13.46	3.77	197.65
275	0.00	18.11	0.55	186.01
280	0.00	22.90	-2.00	176.90
285	0.00	27.76	-4.09	169.62
290	0.00	32.66	-5.85	163.62
295	0.00	37.59	-7.38	158.53
300	0.00	42.53	-8.72	153.66
305	0.00	47.48	-9.91	149.88
310	0.00	52.44	-10.00	149.61
315	0.00	57.40	-10.00	149.61
320	0.00	62.37	-10.00	149.61
325	0.00	67.34	-10.00	149.61
330	0.00	72.31	-10.00	149.61
335	0.00	77.28	-10.00	149.61
340	0.00	82.26	-10.00	149.61
345	0.00	87.23	-10.00	149.61
350	0.00	92.21	-10.00	149.61
355	0.00	97.18	-10.00	149.61

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: December 2, 2016