

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: 02/19/2014 - 06/06/2014

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 11, 2014.

Company

ADAMS COUNTY EMERGENCY MANAGEMENT AGENCY
ALLEGANY COUNTY GOVERNMENT
APC Realty and Equipment CO LLC
Airband Communications Inc
Arlington County Emergency Comm Ctr
B.F. SAUL COMPANY
BUSINESS INFORMATION GROUP, INC.
Believe Wireless, LLC
Blaze Broadband
Blue Ridge Carriers
Boeing Company
CAMP HILL SCHOOL DISTRICT
CBS Broadcasting Inc
CBS Communications Services Inc.
CECIL COUNTY PUBLIC SCHOOLS
CHESAPEAKE TELEVISION LICENSEE, LLC
CNG Transmission Corporation
CRISPUS ATTUCKS ASSOCIATION
Cable Of The Carolinas
Calvert, County of
Cambria, County of
Cape May County Municipal Utilities Auth
Cape May County, MIS Department
Carlisle Area School District
City of Altoona
Clearwire Spectrum Holdings III, LLC
Commissioners of Caroline County
Conterra Ultra Broadband, LLC
Cumberland County, New Jersey
Cumberland Valley School District

Company (Continued)

DELAWARE RIVER & BAY AUTHORITY
DOVER AREA SCHOOL DISTRICT
Delmarva Power & Light Company
ECW Wireless, LLC
East Pennsboro Area School
Eastern Lancaster County School District
Enoch Pratt Free Library
Federal Communications Commission
Franklin County Dept. of Emergency Servi
Fundamental Broadcasting LLC
GETWIRELESS.NET
George Washington University
Glenville State University
HALIFAX AREA SCHOOL DISTRICT
Harrison County Emergency Services
High Voltage Communications LLC
Homes Sales Co, Inc
Hope Gas, Inc.
LANCASTER GENERAL HOSPITAL
Last Mile Inc.
Loudoun Wireless LLC
Loudoun, County of
MLS Engineering
MVC Research. LLC
Maryland Port Administration
Maryland, State Of - MDOT - MTA
MetroPCS AWS, LLC
NBC Telemundo License LLC
NEXSTAR BROADCASTING, INC.
National Radio Astronomy Observatory
National Tower Company
Netrepid, 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
Old Dominion LLC
PEG Bandwidth
PENNSYLVANIA TURNPIKE COMMISSION
Plexicomm, LLC
Prince William, County of
Radio One Inc
RapidDSL & Wireless, Inc.
Red Rose Transit Authority
Red Zebra Broadcasting Licensee, LLC
Roadstar Internet, Inc.
SHIPPENSBURG AREA SCHOOL DISTRICT
SOMERSET COUNTY
SUSQUEHANNA TOWNSHIP SCHOOL DISTRICT

Company (Continued)

Shenandoah Personal Communications, LLC
Sprint Spectrum L.P
State of WV DHHR/BPH STECS
Steelton-Highspire School District
T-Mobile License LLC
THE HERSHEY COMPANY
Telecom Transport Management, Inc
Telegia Communications Inc.
WASHINGTON CABLE SYSTEMS INC
WKYSFM, INC
Washington Metro Area Transit Police Dep
West Virginia PCS Alliance, L.C.
Western PA Internet Access, Inc.
Windstream D&E Systems, Inc.
Wireless Internetwork LLC
World Class Wireless LLC
York County Dept of Emergency Services
York Water Co

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
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Date: 01/24/2014
Job Number: 140111COMSJC01

Administrative Information

Status TEMPORARY (Operation from 02/19/2014 to 06/06/2014)
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' 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

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

Transmit

Max Available RF Power	(dBW/4 kHz)	-0.4
	(dBW/MHz)	23.6
Maximum EIRP	(dBW/4 kHz)	64.7
	(dBW/MHz)	88.7
	(dBW)	88.0
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 18.0 GHz**
850KFXD / 17308.0
850KFXD / 18091.5

Max Great Circle Coordination Distance 444.4 km / 276.1 mi
Precipitation Scatter Contour Radius 186.6 km / 116.0 mi

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Earth Station Data Sheet

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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' 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	-0.4 (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	152.75
5	0.00	96.84	-10.00	152.75
10	0.00	91.86	-10.00	152.75
15	0.00	86.88	-10.00	152.75
20	0.00	81.90	-10.00	152.75
25	0.00	76.92	-10.00	152.75
30	0.00	71.95	-10.00	152.75
35	0.00	66.97	-10.00	152.75
40	0.00	62.00	-10.00	152.75
45	0.00	57.03	-10.00	152.75
50	0.00	52.06	-10.00	152.75
55	0.00	47.09	-9.82	153.31
60	0.00	42.14	-8.62	157.23
65	0.00	37.19	-7.26	162.24
70	0.00	32.26	-5.72	167.47
75	0.00	27.34	-3.92	173.65
80	0.00	22.47	-1.79	181.18
85	0.00	17.65	0.83	190.66
90	0.00	12.98	4.17	202.98
95	0.00	8.66	8.56	220.51
100	0.00	5.61	13.27	444.41
105	0.00	6.15	12.28	302.62
110	0.00	9.60	7.45	215.96
115	0.00	13.27	3.93	202.04
120	0.00	16.89	1.31	192.42
125	0.00	20.41	-0.75	184.91
130	0.00	23.83	-2.43	178.90
135	0.00	27.11	-3.83	173.98
140	0.00	30.23	-5.01	169.88
145	0.00	33.14	-6.01	166.47
150	0.00	35.82	-6.85	163.61
155	0.00	38.20	-7.55	161.26
160	0.00	40.26	-8.12	159.37
165	0.00	41.93	-8.56	157.41
170	0.00	43.16	-8.88	156.38
175	0.00	43.92	-9.07	155.76
180	0.00	44.18	-9.13	155.55

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Earth Station Data Sheet

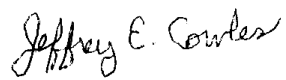
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Antenna Model	TIW 14.2 Meter	
Antenna Mode	Transmit 18.0 GHz	
Interference Objectives: Long Term	-154.0 dBW/4 kHz	20%
Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	-0.4 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 18.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
185	0.00	43.92	-9.07	155.76
190	0.00	43.16	-8.88	156.38
195	0.00	41.93	-8.56	157.41
200	0.00	40.26	-8.12	159.37
205	0.00	38.20	-7.55	161.26
210	0.00	35.81	-6.85	163.62
215	0.00	33.14	-6.01	166.47
220	0.00	30.22	-5.01	169.89
225	0.00	27.11	-3.83	173.98
230	0.00	23.83	-2.43	178.90
235	0.00	20.42	-0.75	184.91
240	0.00	16.89	1.31	192.44
245	0.00	13.28	3.92	202.03
250	0.00	9.59	7.46	216.01
255	0.00	6.33	11.96	312.84
260	0.00	6.11	12.35	426.25
265	0.00	9.18	7.93	217.91
270	0.00	13.46	3.77	201.46
275	0.00	18.11	0.55	189.65
280	0.00	22.90	-2.00	180.44
285	0.00	27.76	-4.09	173.08
290	0.00	32.66	-5.85	167.00
295	0.00	37.59	-7.38	161.85
300	0.00	42.53	-8.72	156.90
305	0.00	47.48	-9.91	153.03
310	0.00	52.44	-10.00	152.75
315	0.00	57.40	-10.00	152.75
320	0.00	62.37	-10.00	152.75
325	0.00	67.34	-10.00	152.75
330	0.00	72.31	-10.00	152.75
335	0.00	77.28	-10.00	152.75
340	0.00	82.26	-10.00	152.75
345	0.00	87.23	-10.00	152.75
350	0.00	92.21	-10.00	152.75
355	0.00	97.18	-10.00	152.75

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
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DATED: January 24, 2014