

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: 02/14/2017 - 03/16/2017

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 December 21, 2016.

Company

3G Wireless, LLC
ACC License, LLC
AERIAL VIDEO SYSTEMS
Alascom Inc
American Broadcasting Companies, Inc.
Antietam Cable Television
Ascent Media Network Services, LLC
Bellsouth Telecommunications, Inc.
Borgeson, Tom R.
Broadcast Sports Inc.
C-SPAN
CBS TELEVISION LICENSES LLC
CNN America, Inc.
CTVN HARRISBURG, LLC
Carolina Telephone and Telegraph Co
Casper, John
CenturyTel of the Southwest, Inc.
Channel Communications, LLC (WHVL)
Chicago Comnet Corp
Cincinnati Bell Wireless LLC
Citywide News Network, Inc.
Cohen, Elena
Cowboys Stadium LP
DCI II, INC.
Direct Broadcast Services, Inc.
F Corporation
Federal Communication Commission
GEORGE MASON UNIVERSITY INSTR FNDTION
Global Telecom & Technology Americas, In
Goodyear Tire & Rubber Company
HF Enterprises, Inc
HOWARD UNIVERSITY TELEVISION - (WHUT-TV)
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
MERCURY COMMUNICATIONS
Maryland Public Broadcasting Commission
Media General Communications Holdings, L
Michigan Bell Telephone Company
Moreen, Steven K
Multimedia Holdings Corporation
NBC Telemundo License LLC
NEW ENGLAND DIGITAL DISTRIBUTION, INC.
NEW ENGLAND SATELLITE SYSTEMS INC
NSM Surveillance
National Cable Satellite Corporation
Navajo Communications Company
NorthWest Suburbs Community Access Corp
OHIO BELL TELEPHONE COMPANY
Onboard Images
Pacific Bell Tel Com dba AT&T California
Pacific and Southern Company, Inc.
Penn Service Microwave Co., Inc.
Pennsylvania Educational Comm Systems
Plateau Telecommunications, Inc.
Plum TV, LLC
Production & Satellite Services, Inc.
QUICK LINK CONNECTIONS INC
Qwest Corporation
RCC Minnesota Inc. - MN NE ND SD
REMOTE FACILITIES CONSULTING SERVICES
RF Central, LLC
RF Film, Inc
Radiofone, Inc.
Randy Hermes Production
Remote Broadcasts, Inc.
SBE Coordinator
Southwestern Bell Telephone L.P.
Speedshotz, Inc
TTWN Networks, LLC
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
Vyvx, LLC

WBAL HEARST-ARGYLE TV, INC. (CA CORP.)
WDCW, LLC
WGAL Hearst Television, Inc
WHP Licensee, LLC
WHYY, Inc.
WITF Inc.
WJAC Licensee, LLC
WPXI, LLC
WUSA-TV, Inc
West Virginia Educational Broadcasting
West Virginia Media Holdings, LLC
Westar Satellite Services LP
Western Technical Services
Wexler Video, Inc.
Winged Vision Inc
Wisconsin Bell Telephone Company
Wolfe Air Aviation

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: 12/21/2016
Job Number: 161221COMSGE05

Administrative Information

Status TEMPORARY (Operation from 02/14/2017 to 03/16/2017)
Call Sign TEMP03
Licensee Code INTELS
Licensee Name Intelsat License LLC

Site Information HAGERSTOWN, MD

Venue Name
Latitude (NAD 83) 39° 35' 53.8" N
Longitude (NAD 83) 77° 45' 20.8" W
Climate Zone A
Rain Zone 2
Ground Elevation (AMSL) 168.69 m / 553.4 ft

Link Information

Satellite Type Geostationary
Mode TO - Transmit-Only
Modulation Digital
Satellite Arc 33° W to 43.1° West Longitude
Azimuth Range 122.7° to 132.7°
Corresponding Elevation Angles 25.3° / 32.0°
Antenna Centerline (AGL) 5.49 m / 18.0 ft

Antenna Information Transmit - FCC32

Manufacturer ViaSat
Model 13.1 meter
Gain / Diameter 63.0 dBi / 13.1 m
3-dB / 15-dB Beamwidth 0.12° / 0.24°

Max Available RF Power (dBW/4 kHz) -1.7
(dBW/MHz) 22.3

Maximum EIRP (dBW/4 kHz) 61.3
(dBW/MHz) 85.3

Interference Objectives: Long Term -151.0 dBW/4 kHz 20%
Short Term -128.0 dBW/4 kHz 0.0025%

Frequency Information Transmit 13.0 GHz

Emission / Frequency Range (MHz) 950KGXD / 13249.5, 14498.0

Max Great Circle Coordination Distance 180.0 km / 111.8 mi
Precipitation Scatter Contour Radius 135.2 km / 84.0 mi

Coordination Values	HAGERSTOWN, MD
Licensee Name	Intelsat License LLC
Latitude (NAD 83)	39° 35' 53.8" N
Longitude (NAD 83)	77° 45' 20.8" W
Ground Elevation (AMSL)	168.69 m / 553.4 ft
Antenna Centerline (AGL)	5.49 m / 18.0 ft
Antenna Model	ViaSat 13.1 meter
Antenna Mode	Transmit 13.0 GHz
Interference Objectives: Long Term	-151.0 dBW/4 kHz 20%
Short Term	-128.0 dBW/4 kHz 0.0025%
Max Available RF Power	-1.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 13.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.27	119.34	-10.00	144.72
5	0.23	114.93	-10.00	148.75
10	0.21	110.49	-10.00	151.45
15	0.20	106.01	-10.00	151.73
20	0.22	101.52	-10.00	150.27
25	0.20	97.00	-10.00	151.55
30	0.00	92.47	-10.00	152.06
35	0.00	87.96	-10.00	152.06
40	0.23	83.43	-10.00	149.20
45	0.00	78.93	-10.00	152.06
50	0.00	74.44	-10.00	152.06
55	0.00	69.97	-10.00	152.06
60	0.00	65.54	-10.00	152.06
65	0.00	61.15	-10.00	152.06
70	0.00	56.82	-10.00	152.06
75	0.00	52.56	-10.00	152.06
80	0.00	48.40	-10.00	152.06
85	0.00	44.37	-9.18	155.02
90	0.00	40.50	-8.19	158.69
95	0.00	36.86	-7.16	162.60
100	0.00	33.52	-6.13	168.49
105	0.00	30.57	-5.13	172.34
110	0.00	28.15	-4.24	175.77
115	0.00	26.40	-3.54	178.43
120	0.00	25.45	-3.14	179.93
125	0.00	25.41	-3.13	180.00
130	0.00	26.27	-3.49	178.63
135	0.00	27.95	-4.16	176.07
140	0.00	30.32	-5.04	172.69
145	0.00	33.14	-6.01	168.97
150	0.00	35.82	-6.85	165.70
155	0.00	38.29	-7.58	161.00
160	0.00	41.08	-8.34	158.11
165	0.00	44.20	-9.13	155.18
170	0.00	47.57	-9.93	152.30
175	0.00	51.15	-10.00	152.06
180	0.00	54.89	-10.00	152.06
185	0.00	58.76	-10.00	152.06

Coordination Values	HAGERSTOWN, MD
Licensee Name	Intelsat License LLC
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Antenna Centerline (AGL)	5.49 m / 18.0 ft
Antenna Model	ViaSat 13.1 meter
Antenna Mode	Transmit 13.0 GHz
Interference Objectives: Long Term	-151.0 dBW/4 kHz 20%
Short Term	-128.0 dBW/4 kHz 0.0025%
Max Available RF Power	-1.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 13.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	62.74	-10.00	152.06
195	0.00	66.79	-10.00	152.06
200	0.00	70.91	-10.00	152.06
205	0.00	75.07	-10.00	152.06
210	0.00	79.27	-10.00	152.06
215	0.24	83.47	-10.00	147.89
220	0.29	87.72	-10.00	143.08
225	0.45	91.98	-10.00	130.43
230	0.36	96.23	-10.00	136.52
235	0.23	100.46	-10.00	148.65
240	0.20	104.66	-10.00	151.91
245	0.22	108.84	-10.00	150.37
250	0.35	113.01	-10.00	137.90
255	0.29	117.07	-10.00	143.14
260	0.33	121.08	-10.00	139.49
265	0.39	125.00	-10.00	134.24
270	0.35	128.76	-10.00	137.54
275	0.35	132.38	-10.00	137.28
280	0.36	135.79	-10.00	137.10
285	0.26	138.89	-10.00	145.56
290	0.00	141.52	-10.00	152.06
295	0.00	143.93	-10.00	152.06
300	0.00	145.86	-10.00	152.06
305	0.22	147.44	-10.00	149.70
310	0.31	148.25	-10.00	140.99
315	0.00	147.96	-10.00	152.06
320	0.00	147.30	-10.00	152.06
325	0.00	145.98	-10.00	152.06
330	0.00	143.47	-10.00	152.06
335	0.36	140.05	-10.00	137.06
340	0.28	136.15	-10.00	143.59
345	0.27	132.11	-10.00	144.60
350	0.21	127.92	-10.00	151.32
355	0.35	123.70	-10.00	137.99

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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DATED: January 13, 2017