

Prepared By

**COMSEARCH**

19700 Janelia Farm Boulevard, Ashburn, VA 20147  
(703)726-5500 <http://www.comsearch.com>

Prepared For

**Intelsat North America LLC  
CLARKSBURG, MARYLAND**

Temporary Transmit/Receive Earth Station  
Operation Dates: 08/01/2010 - 02/01/2011

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 June 28, 2010.

Company

ALLTEL Communications, LLC  
AMERICAN ELECTRIC POWER SERVICE CORP.  
APPALACHIAN POWER COMPANY  
AT&T COMM. OF THE SOUTH CENTRAL STATES  
AT&T COMMUNICATIONS OF MARYLAND INC  
AT&T COMMUNICATIONS OF VIRGINIA INC  
AT&T COMMUNICATIONS OF WEST VIRGINIA  
AT&T CORP  
Allegheny Power Service Corporation  
Alltel Communications of Virginia #1 LLC  
Atlantic Broadband (Delmar), LLC  
Atlantic Broadband (Penn), LLC  
BAY BROADBAND COMMUNICATIONS LLC  
Baltimore County of Maryland  
Baltimore Gas and Electric Company  
COLLEGE OF SOUTHERN MARYLAND  
Celco Partnership - Southern Virginia  
Celco Partnership- PA Region  
Celco Partnership-Newark-Dallas Verizon  
Celco Partnership-Washington/Baltimore  
Charles, County of  
Conterra Ultra Broadband, LLC  
County of Frederick  
County of Stafford  
County of York  
DELAWARE STATE - DTI  
Enoch Pratt Free Library  
Exelon Generation Company, L.L.C  
Federal Communications Commission  
Frederick County  
HANOVER COUNTY  
HENRICO COUNTY

Company (Continued)

Hardy Cellular Telephone Company  
International Communications Group, Inc.  
KENTUCKY POWER COMPANY  
LB Tower Company LLC  
Local Communications Network, Inc.  
Loudoun, County of  
MARYLAND PUBLIC BROADCASTING COMMISSION  
MCI Communications Services Inc.  
METROPOLITAN AREA NETWORKS, INC.  
Maryland State Highway Administration  
Maryland, State of - Budget & Management  
National Radio Astronomy Observatory  
New Cingular Wireless PCS - VA/DC/MD  
New Cingular Wireless PCS LLC - DC  
New Cingular Wireless PCS LLC - Ohio  
New Cingular Wireless PCS, LLC - PA  
New Cingular Wireless PCS, LLC - WV/VA  
Norfolk Southern Railway  
Northern Virginia Electric Cooperative  
PENNSYLVANIA TURNPIKE COMMISSION  
PRINCE WILLIAM COUNTY  
Prince George's County  
RAPPAHANNOCK ELECTRIC COOPERATIVE  
RCTC Wholesale Corporation - Verizon  
SCTF NET  
Southern Maryland Electric Cooperative I  
State of Maryland, MIEMSS  
State of WV DHHR/BPH STECS  
Texas Eastern Communications, Inc.  
USCOC of Cumberland, Inc.  
Verizon Maryland, Inc.  
Virginia Broadband, LLC  
Virginia Department of State Police  
Virginia Electric & Power Company  
Virginia PCS Alliance, L.C.  
WASHINGTON SUBURBAN SANITARY COMMISSION  
WEST VIRGINIA EDUCATIONAL BROADCASTING  
WEST VIRGINIA MEDIA HOLDINGS, LLC  
Washington D.C. SMSA L.P.  
Washington Gas Light Company  
Wireless Strategies, Inc.

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: 06/28/2010  
 Job Number: 100628COMSJC01

**Administrative Information**

Status: TEMPORARY (Operation from 08/01/2010 to 02/01/2011)  
 Call Sign: TEMP02  
 Licensee Code: INTNOA  
 Licensee Name: Intelsat North America LLC

**Site Information** **CLARKSBURG, MARYLAND**

Venue Name  
 Latitude (NAD 83): 39° 13' 5.4" N  
 Longitude (NAD 83): 77° 16' 10.9" W  
 Climate Zone: A  
 Rain Zone: 2  
 Ground Elevation (AMSL): 140.82 m / 462.0 ft

**Link Information**

Satellite Type: Geostationary  
 Mode: TR - Transmit-Receive  
 Modulation: Digital  
 Satellite Arc: 5° W to 149° West Longitude  
 Azimuth Range: 101.4° to 258.2°  
 Corresponding Elevation Angles: 5.0° / 5.4°  
 Antenna Centerline (AGL): 5.18 m / 17.0 ft

**Antenna Information**

		<b>Receive - V40901</b>		<b>Transmit - V60901</b>	
Manufacturer		VERTEX COMMUNICATIONS		VERTEX COMMUNICATIONS	
Model		9 KPC		9 KPC	
Gain / Diameter		50.1 dBi / 9.0 m		53.5 dBi / 9.0 m	
3-dB / 15-dB Beamwidth		0.55° / 1.20°		0.40° / 0.80°	
Max Available RF Power	(dBW/4 kHz) (dBW/MHz)			7.2 30.5	
Maximum EIRP	(dBW/4 kHz) (dBW/MHz) (dBW)			60.7 84.0 84.0	
Interference Objectives:	Long Term Short Term	-156.0 dBW/MHz -146.0 dBW/MHz	20% 0.01%	-154.0 dBW/4 kHz -131.0 dBW/4 kHz	20% 0.0025%

**Frequency Information**

	<b>Receive 4.0 GHz</b>	<b>Transmit 6.1 GHz</b>
Emission / Frequency Range (MHz)	150KFXD / 3956.2 150KFXD / 3957.7	850KFXD / 6182.0 850KFXD / 6183.5
Max Great Circle Coordination Distance	678.4 km / 421.5 mi	520.9 km / 323.6 mi
Precipitation Scatter Contour Radius	620.7 km / 385.7 mi	435.6 km / 270.6 mi

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## Earth Station Data Sheet

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### Coordination Values

### CLARKSBURG, MD

Licensee Name	Intelsat North America LLC		
Latitude (NAD 83)	39° 13' 5.4" N		
Longitude (NAD 83)	77° 16' 10.9" W		
Ground Elevation (AMSL)	140.82 m / 462.0 ft		
Antenna Centerline (AGL)	5.18 m / 17.0 ft		
Antenna Model	VERTEX COMMUNICATIONS 9 KPC		
Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz
Interference Objectives:	Long Term	-156.0 dBW/MHz    20%	-154.0 dBW/4 kHz    20%
	Short Term	-146.0 dBW/MHz    0.01%	-131.0 dBW/4 kHz    0.0025%
Max Available RF Power			7.2 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	1.47	101.41	-15.90	181.72	-15.50	119.03
5	1.34	96.42	-15.90	185.47	-15.50	122.22
10	1.28	91.43	-15.90	187.42	-15.50	123.89
15	1.63	86.44	-15.90	176.81	-15.50	114.93
20	1.80	81.44	-15.90	171.65	-15.50	110.70
25	1.72	76.45	-15.90	174.07	-15.50	112.68
30	1.89	71.46	-15.90	168.77	-15.50	108.38
35	2.24	66.46	-15.90	157.93	-15.50	100.90
40	2.12	61.47	-14.90	165.71	-15.50	103.31
45	2.20	56.48	-14.20	169.12	-15.50	101.77
50	2.08	51.49	-13.20	176.96	-15.50	104.07
55	2.04	46.50	-12.20	182.93	-15.50	104.92
60	2.55	41.49	-11.20	175.94	-13.69	101.13
65	2.55	36.50	-8.80	187.75	-11.10	110.45
70	2.59	31.51	-6.50	197.96	-9.80	114.44
75	2.59	26.53	-5.90	200.96	-7.42	123.48
80	2.59	21.56	-5.90	200.91	-5.12	132.13
85	2.10	16.67	-5.90	208.97	-4.51	142.84
90	2.11	11.78	-3.68	220.39	-4.55	142.65
95	2.10	7.04	0.06	242.79	-3.50	147.00
100	1.16	4.08	1.94	678.40	-0.66	520.89
105	1.00	5.34	0.76	423.63	-1.84	302.39
110	1.06	9.02	-1.92	265.93	-4.50	174.89
115	1.16	12.65	-4.55	245.18	-4.62	171.08
120	1.40	16.11	-5.90	229.20	-4.63	161.81
125	1.40	19.64	-5.90	229.14	-4.52	162.26
130	1.25	23.17	-5.90	234.08	-5.77	161.25
135	1.16	26.52	-5.90	237.09	-7.41	156.37
140	0.97	29.77	-5.90	244.45	-9.36	154.27
145	0.84	32.79	-7.02	245.80	-10.06	158.35
150	0.88	35.43	-8.16	236.69	-10.67	153.43
155	0.81	37.87	-9.62	232.81	-11.65	153.20
160	0.73	39.99	-10.89	230.61	-12.50	154.00
165	0.65	41.72	-11.24	233.52	-13.88	152.87
170	0.66	42.93	-11.49	231.29	-14.85	148.22
175	0.30	44.04	-11.71	262.13	-15.74	175.90
180	0.00	44.60	-11.82	273.97	-16.18	185.06
185	0.29	44.06	-11.71	264.16	-15.75	177.68

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### Coordination Values

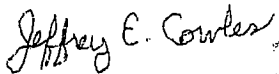
### CLARKSBURG, MD

Licensee Name	Intelsat North America LLC		
Latitude (NAD 83)	39° 13' 5.4" N		
Longitude (NAD 83)	77° 16' 10.9" W		
Ground Elevation (AMSL)	140.82 m / 462.0 ft		
Antenna Centerline (AGL)	5.18 m / 17.0 ft		
Antenna Model	VERTEX COMMUNICATIONS 9 KPC		
Antenna Mode	Receive 4.0 GHz	Transmit 6.1 GHz	
Interference Objectives: Long Term	-156.0 dBW/MHz 20%	-154.0 dBW/4 kHz 20%	
Short Term	-146.0 dBW/MHz 0.01%	-131.0 dBW/4 kHz 0.0025%	
Max Available RF Power		7.2 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.22	43.36	-11.57	273.10	-15.19	186.89
195	0.00	42.32	-11.36	276.75	-14.36	192.07
200	0.37	40.31	-10.96	258.91	-12.75	181.29
205	0.45	38.18	-9.81	256.65	-11.77	177.33
210	0.83	35.47	-8.18	239.63	-10.69	156.16
215	1.22	32.50	-6.90	229.72	-10.00	143.80
220	1.68	29.24	-5.90	220.44	-9.04	135.09
225	2.21	25.75	-5.90	206.74	-6.95	132.55
230	2.05	22.60	-5.90	210.23	-5.54	139.95
235	1.99	19.24	-5.90	211.70	-4.50	145.49
240	2.59	15.30	-5.90	200.91	-4.56	134.16
245	2.59	11.69	-3.59	209.79	-4.70	133.72
250	2.59	8.01	-0.91	224.35	-3.51	136.89
255	2.51	4.32	1.47	374.96	-1.13	260.12
260	2.51	3.40	2.10	644.31	0.90	492.57
265	2.67	7.32	-0.22	226.51	-3.50	135.37
270	2.91	12.05	-3.95	203.57	-4.61	128.03
275	2.98	16.96	-5.90	192.61	-4.60	126.89
280	3.31	21.89	-5.90	185.29	-5.25	118.39
285	3.55	26.85	-5.90	180.05	-7.61	104.99
290	3.61	31.84	-6.63	174.89	-9.87	100.00
295	3.61	36.83	-9.00	160.79	-11.23	100.00
300	3.61	41.82	-11.26	149.87	-13.96	100.00
305	3.61	46.82	-12.26	145.31	-15.50	100.00
310	3.56	51.82	-13.26	141.87	-15.50	100.00
315	3.42	56.82	-14.26	140.28	-15.50	100.00
320	3.10	61.82	-14.90	143.74	-15.50	100.00
325	2.71	66.82	-15.90	147.36	-15.50	100.00
330	2.47	71.82	-15.90	152.58	-15.50	100.00
335	1.91	76.82	-15.90	166.49	-15.50	107.96
340	1.55	81.81	-15.90	179.18	-15.50	116.90
345	1.49	86.80	-15.90	181.00	-15.50	118.42
350	1.48	91.79	-15.90	181.46	-15.50	118.81
355	1.42	96.78	-15.90	183.00	-15.50	120.12

## 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: July 14, 2010