

Prepared By

COMSEARCH

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

Prepared For

**Intelsat License LLC
Castle Rock, Colorado**

Temporary Transmit/Receive Earth Station
Operation Dates: 02/08/2013 - 04/10/2013

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 17, 2013.

Company

Boulder, County of
CBS Broadcasting Inc
City of Boulder
City of Colorado Springs
Clearwire Spectrum Holdings III, LLC
Comcast of Colorado/Pennsylvania/WV LLC
El Paso County Information Technologies
Federal Communications Commission
FiberTower Network Services Corp.
KLZ RADIO, INC.
LP Broadband, Inc.
MOBILE RELAY ASSOCIATES INC
MPX, Inc.
Memorial Health System
Memorial Hospital
NE Colorado Cellular, Inc.
NSAC, LLC
National Digital TV Ctr - Comcast Media
New Cingular Wireless PCS LLC -Colorado
PCI BROADBAND
QWEST CORPORATION
Sprint Spectrum LP DBA Sprint PCS
State of Colorado
Verizon Wireless (VAW) LLC -CO/ID/MT/WY
Vyvx , LLC - Colorado
WELD COUNTY COLORADO
Weld County District RE3J
Westminster City Colorado

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.

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Earth Station Data Sheet

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Date: 01/21/2013
Job Number: 130117COMSJC01

Administrative Information

Status TEMPORARY (Operation from 02/08/2013 to 04/10/2013)
Call Sign TEMP04
Licensee Code INTELS
Licensee Name Intelsat License LLC

Site Information

CASTLE ROCK, COLORADO

Venue Name
Latitude (NAD 83) 39° 16' 35.0" N
Longitude (NAD 83) 104° 48' 23.9" W
Climate Zone A
Rain Zone 2
Ground Elevation (AMSL) 2095.99 m / 6876.6 ft

Link Information

Satellite Type Geostationary
Mode TO - Transmit-Only
Modulation Digital
Satellite Arc 65° W to 150° West Longitude
Azimuth Range 127.2° to 237.8°
Corresponding Elevation Angles 28.9° / 25.2°
Antenna Centerline (AGL) 4.57 m / 15.0 ft

Antenna Information

Manufacturer Vertex
Model 8.1 Meter
Gain / Diameter 61.0 dBi / 8.1 m
3-dB / 15-dB Beamwidth 0.60° / 1.20°

Transmit

Max Available RF Power (dBW/4 kHz) -1.1
(dBW/MHz) 22.9

Maximum EIRP (dBW/4 kHz) 59.9
(dBW/MHz) 83.9
(dBW) 83.0

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

Frequency Information

Emission / Frequency Range (MHz) **Transmit 18.0 GHz**
816KFXD / 17301.0
816KFXD / 17302.5

Max Great Circle Coordination Distance 158.7 km / 98.6 mi
Precipitation Scatter Contour Radius 201.7 km / 125.3 mi

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Earth Station Data Sheet

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Coordination Values	CASTLE ROCK, CO	
Licensee Name	Intelsat License LLC	
Latitude (NAD 83)	39° 16' 35.0" N	
Longitude (NAD 83)	104° 48' 23.9" W	
Ground Elevation (AMSL)	2095.99 m / 6876.6 ft	
Antenna Centerline (AGL)	4.57 m / 15.0 ft	
Antenna Model	Vertex 8.1 Meter	
Antenna Mode	Transmit 18.0 GHz	
Interference Objectives:	Long Term	-151.0 dBW/4 kHz 20%
	Short Term	-128.0 dBW/4 kHz 0.0025%
Max Available RF Power	-1.1 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 18.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	4.04	119.77	-10.00	100.00
5	4.36	119.02	-10.00	100.00
10	4.58	114.64	-10.00	100.00
15	3.75	110.03	-10.00	100.00
20	2.70	105.41	-10.00	100.00
25	2.38	100.92	-10.00	100.00
30	2.29	96.46	-10.00	100.00
35	2.25	91.99	-10.00	100.00
40	2.21	87.52	-10.00	100.00
45	2.15	83.06	-10.00	100.00
50	1.71	78.65	-10.00	100.00
55	0.74	74.38	-10.00	108.66
60	0.65	70.06	-10.00	112.67
65	0.24	65.86	-10.00	138.50
70	0.00	61.70	-10.00	141.52
75	0.00	57.56	-10.00	141.52
80	0.00	53.51	-10.00	141.52
85	0.00	49.58	-10.00	141.52
90	0.00	45.79	-9.52	142.92
95	0.00	42.20	-8.63	145.54
100	0.00	38.86	-7.74	148.26
105	0.00	35.85	-6.86	150.98
110	0.00	33.24	-6.04	153.58
115	0.21	30.96	-5.27	155.15
120	0.28	29.42	-4.72	150.32
125	0.21	28.75	-4.47	158.68
130	0.48	28.52	-4.38	134.55
135	0.37	29.46	-4.73	142.41
140	0.44	30.96	-5.27	135.57
145	0.37	33.20	-6.03	139.09
150	0.53	35.66	-6.80	125.94
155	0.81	37.82	-7.44	112.59
160	0.86	39.81	-8.00	108.95
165	0.97	41.36	-8.42	103.30
170	1.14	42.41	-8.69	100.00
175	0.85	43.43	-8.94	106.71
180	0.83	43.71	-9.01	107.68
185	0.68	43.60	-8.99	113.85

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Earth Station Data Sheet

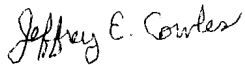
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Max Available RF Power	-1.1 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 18.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	1.31	42.25	-8.64	100.00
195	0.65	41.66	-8.49	116.29
200	1.15	39.56	-7.93	100.00
205	0.92	37.73	-7.42	108.15
210	0.91	35.36	-6.71	110.50
215	1.03	32.59	-5.83	108.24
220	1.13	29.64	-4.80	108.76
225	2.06	26.29	-3.49	100.00
230	2.29	24.14	-2.57	100.00
235	2.34	23.02	-2.05	100.00
240	2.27	23.02	-2.05	100.00
245	2.39	23.85	-2.44	100.00
250	2.49	25.60	-3.21	100.00
255	2.57	28.12	-4.23	100.00
260	2.58	31.25	-5.37	100.00
265	2.63	34.76	-6.53	100.00
270	2.63	38.58	-7.66	100.00
275	2.71	42.58	-8.73	100.00
280	3.27	46.56	-9.70	100.00
285	3.34	50.87	-10.00	100.00
290	3.51	55.25	-10.00	100.00
295	3.60	59.72	-10.00	100.00
300	3.41	64.30	-10.00	100.00
305	3.30	68.89	-10.00	100.00
310	3.61	73.45	-10.00	100.00
315	3.77	78.06	-10.00	100.00
320	4.51	82.67	-10.00	100.00
325	4.46	87.35	-10.00	100.00
330	3.97	92.02	-10.00	100.00
335	3.28	96.64	-10.00	100.00
340	3.12	101.26	-10.00	100.00
345	3.33	105.90	-10.00	100.00
350	3.44	110.51	-10.00	100.00
355	4.12	115.21	-10.00	100.00

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 21, 2013