

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-Only Earth Station
Operation Dates: 06/01/2019 - 09/01/2019

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 May 5, 2019.

Company

AC BidCO LLC
AT&T Mobility Spectrum LLC - CO
AT&T Mobility Spectrum LLC - KS, MO
AirLife Denver
Arvada Police Dept.
BNSF Railway Company
Black Hawk Police Department
Black Hills Power and Light
Boulder, County of
CBS Communications Services Inc
CBS Television Stations
Cellular Inc. Network Corporation
City of Aurora
City of Colorado Springs
City of Lakewood, CO
Colorado Interstate Gas Company
Colorado RSA No. 3 Limited Partnership
Colorado Springs Utilities
County of Pueblo
Denver, City and County of
Douglas County Sheriff's Office (CO)
Elbert County Communications Authority
Entravision Holdings, LLC
Federal Communication Commission
Fones West Digital Systems Inc.
Gilpin County Sheriff's Office
Gray Television Licensee, LLC
Grazi Communications, LLC
Industrial Tower and Wireless, LLC
Intermountain Rural Electric Association
KSE Radio Ventures, LLC
Kellin Communications
LP Broadband, Inc.
Live Wire Networks, Inc.
MHO Networks
Midwest Energy, Inc.

Mountain Broadband LLC
Mountain View Electric Association, Inc.
NE Colorado Cellular, Inc.
New Cingular Wireless PCS LLC -Colorado
Nex-Tech Wireless, LLC
Nucla Naturita Telephone Company
Olympic Wireless, LLC
Qwest Corporation
Roggen Enterprises Broadband LLC
Sangre de Cristo Communications, LLC
Sprint Communications Company, LP
Sprint Spectrum L.P.
Sprint Spectrum LP DBA Sprint PCS
State of Colorado
T-Mobile License LLC
Tallgrass Operations, LLC
Tri-State Generation & Transmission Assn
Tribune Broadcasting Denver License, LLC
University Corp for Atmospheric Research
Verizon Wireless (VAW) LLC -CO/ID/MT/WY
Xcel Energy Services, Inc.
Y-W Electric Association, Inc

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

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Date: 05/02/2019
Job Number: 190502COMSGE02

Administrative Information

Status: TEMPORARY (Operation from 06/01/2019 to 09/01/2019)
Call Sign: TEMP09
Licensee Code: INTELS
Licensee Name: Intelsat License LLC

Site Information

CASTLE ROCK, CO

Venue Name
Latitude (NAD 83): 39° 16' 33.0" N
Longitude (NAD 83): 104° 48' 34.0" W
Climate Zone: A
Rain Zone: 2
Ground Elevation (AMSL): 2088.0 m / 6850.4 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: Digital
Satellite Arc: 33° W to 177° West Longitude
Azimuth Range: 101.8° to 258.5°
Corresponding Elevation Angles: 5.3° / 5.0°
Antenna Centerline (AGL): 5.49 m / 18.0 ft

Antenna Information

Transmit - FCC32

Manufacturer: Vertex
Model: 9.0 FMC
Gain / Diameter: 53.8 dBi / 9.0 m
3-dB / 15-dB Beamwidth: 0.20° / 0.40°

Max Available RF Power (dBW/4 kHz): 3.0
(dBW/MHz): 27.0

Maximum EIRP (dBW/4 kHz): 56.8
(dBW/MHz): 80.8

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

Frequency Information

Transmit 6.1 GHz

Emission / Frequency Range (MHz): 1M00F2D / 5926.5
1M00F2D / 6423.5

Max Great Circle Coordination Distance: 470.8 km / 292.5 mi
Precipitation Scatter Contour Radius: 270.9 km / 168.3 mi

Coordination Values	CASTLE ROCK, CO	
Licensee Name	Intelsat License LLC	
Latitude (NAD 83)	39° 16' 33.0" N	
Longitude (NAD 83)	104° 48' 34.0" W	
Ground Elevation (AMSL)	2088.0 m / 6850.4 ft	
Antenna Centerline (AGL)	5.49 m / 18.0 ft	
Antenna Model	Vertex 9 meter	
Antenna Mode	Transmit 6.1 GHz	
Interference Objectives: Long Term	-154.0 dBW/4 kHz	20%
Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	3.0 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	5.33	101.50	-10.00	100.00
5	4.79	96.75	-10.00	100.00
10	3.89	91.75	-10.00	100.00
15	4.01	86.75	-10.00	100.00
20	3.85	81.76	-10.00	100.00
25	3.58	76.76	-10.00	100.00
30	3.74	71.76	-10.00	100.00
35	3.35	66.77	-10.00	100.00
40	2.87	61.78	-10.00	100.00
45	2.58	56.80	-10.00	100.00
50	2.50	51.81	-10.00	100.30
55	1.71	46.86	-9.77	118.23
60	1.36	41.91	-8.56	131.09
65	0.54	37.02	-7.21	171.22
70	0.00	32.15	-5.68	207.57
75	0.00	27.24	-3.88	214.78
80	0.00	22.36	-1.74	223.86
85	0.00	17.56	0.89	235.75
90	0.00	12.89	4.25	251.54
95	0.23	8.45	8.82	273.41
100	0.00	5.60	13.29	458.50
105	0.00	6.23	12.13	334.37
110	0.00	9.71	7.32	268.11
115	0.28	13.21	3.97	242.14
120	0.36	16.79	1.37	221.68
125	0.30	20.38	-0.73	217.92
130	0.52	23.66	-2.35	193.71
135	0.43	27.02	-3.79	195.52
140	0.55	30.04	-4.94	180.55
145	1.02	32.60	-5.83	149.37
150	1.54	34.84	-6.55	133.57
155	1.39	37.33	-7.30	133.51
160	1.46	39.28	-7.85	130.93
165	1.44	40.92	-8.30	129.88
170	1.53	42.03	-8.59	126.65
175	1.93	42.37	-8.68	116.70
180	2.33	42.21	-8.64	108.59
185	2.57	41.73	-8.51	104.18

Coordination Values	CASTLE ROCK, CO	
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Antenna Model	Vertex 9 meter	
Antenna Mode	Transmit 6.1 GHz	
Interference Objectives: Long Term	-154.0 dBW/4 kHz	20%
Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	3.0 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	2.96	40.65	-8.23	100.00
195	3.16	39.31	-7.86	100.00
200	3.18	37.74	-7.42	100.00
205	2.89	36.04	-6.92	103.85
210	2.65	33.93	-6.26	110.83
215	2.70	31.28	-5.38	113.12
220	3.32	27.95	-4.16	106.36
225	3.28	24.91	-2.91	111.79
230	3.48	21.53	-1.32	114.41
235	3.42	18.19	0.50	122.28
240	3.40	14.71	2.81	131.21
245	3.51	11.04	5.93	140.34
250	3.53	7.37	10.31	160.63
255	3.67	3.54	18.28	287.11
260	3.61	2.06	24.13	470.77
265	3.77	6.62	11.48	161.17
270	3.98	11.54	5.44	131.24
275	4.00	16.53	1.54	115.96
280	4.02	21.52	-1.32	105.04
285	4.64	26.50	-3.58	100.00
290	5.69	31.50	-5.46	100.00
295	5.86	36.51	-7.06	100.00
300	5.20	41.50	-8.45	100.00
305	5.01	46.50	-9.69	100.00
310	5.30	51.50	-10.00	100.00
315	5.39	56.50	-10.00	100.00
320	4.95	61.50	-10.00	100.00
325	4.63	66.50	-10.00	100.00
330	4.54	71.50	-10.00	100.00
335	4.47	76.50	-10.00	100.00
340	5.31	81.50	-10.00	100.00
345	5.69	86.50	-10.00	100.00
350	5.73	91.50	-10.00	100.00
355	5.67	96.50	-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.

BY: 

Gary K. Edwards
Senior Manager
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147

DATED: October 22, 2018