

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: 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  
AERIAL VIDEO SYSTEMS  
Alascom Inc  
Ascent Media Network Services, LLC  
Bellsouth Telecommunications, Inc.  
Borgeson, Tom R.  
Broadcast Sports Inc.  
CBS Television Stations  
CBTV, INC.  
Carolina Telephone and Telegraph Co  
Casper, John  
Catholic Television Apostolate  
CenturyTel of the Southwest, Inc.  
Chicago Comnet Corp  
Cincinnati Bell Wireless LLC  
Citywide News Network, Inc.  
Cohen, Elena  
Colorado Public TV - KBDI  
Cowboys Stadium LP  
DCI II, INC.  
Direct Broadcast Services, Inc.  
Entravision Holdings, LLC  
FULL GOSPEL OUTREACH, INC.  
Federal Communication Commission  
Global Telecom & Technology Americas, In  
Goodyear Tire & Rubber Company  
Gray Television Licensee LLC (Gray TV)  
Gray Television Licensee, LLC  
HF Enterprises, Inc  
Hallco Unlimited, Inc.  
Hawaiian Telcom, Inc.  
Heiden, William  
ION MEDIA DENVER LICENSE, INC.  
Illinois Bell Telephone Company  
Indiana Bell Telephone Company  
Information & Display Systems, Inc.

Information Super Station, LLC  
International Communications Group, Inc.  
KWGN, LLC  
Kentucky RSA #3 Cellular General Partner  
Kentucky RSA #4 Cellular General Partner  
LIN Television Corporation  
MERCURY COMMUNICATIONS  
Michigan Bell Telephone Company  
Moreen, Steven K  
Multimedia Holdings Corporation  
NEW ENGLAND DIGITAL DISTRIBUTION, INC.  
NEW ENGLAND SATELLITE SYSTEMS INC  
NSM Surveillance  
Navajo Communications Company  
NorthWest Suburbs Community Access Corp  
OHIO BELL TELEPHONE COMPANY  
Onboard Images  
Pacific Bell Tel Com dba AT&T California  
Penn Service Microwave Co., Inc.  
Pikes Peak Television, Inc.  
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.  
Rocky Mountain Public Broadcasting Netwo  
Sangre De Cristo Communications, LLC  
SBE Coordinator  
Scripps Media, Inc. - KMGH TV  
Southwestern Bell Telephone L.P.  
Speedshotz, Inc  
Syncom Media Group, Inc  
TTWN Networks, LLC  
Time Warner Cable Pacific West LLC  
Tribune Broadcasting Denver License, 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  
Westar Satellite Services LP  
Western Technical Services  
Wexler Video, Inc.  
Winged Vision Inc  
Wisconsin Bell Telephone Company  
Wolfe Air Aviation  
Word of God Fellowship, 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

19700 Janelia Farm Boulevard, Ashburn, VA 20147  
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Date: 12/21/2016  
Job Number: 161221COMSGE04

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### Administrative Information

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

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### Site Information

**CASTLE ROCK, CO**

Venue Name  
Latitude (NAD 83) 39° 16' 38.0" N  
Longitude (NAD 83) 104° 48' 26.9" W  
Climate Zone A  
Rain Zone 2  
Ground Elevation (AMSL) 2087.36 m / 6848.3 ft

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### 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) 7.74 m / 25.4 ft

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### Antenna Information

**Transmit - FCC32**

Manufacturer NEC  
Model 12.5 meter  
Gain / Diameter 64.0 dBi / 12.5 m  
3-dB / 15-dB Beamwidth 1.00° / 2.00°

Max Available RF Power (dBW/4 kHz) -2.7  
(dBW/MHz) 21.3

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%

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### Frequency Information

**Transmit 13.0 GHz**

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

Max Great Circle Coordination Distance 451.2 km / 280.4 mi  
Precipitation Scatter Contour Radius 132.3 km / 82.2 mi

<b>Coordination Values</b>	<b>CASTLE ROCK, CO</b>
Licensee Name	Intelsat License LLC
Latitude (NAD 83)	39° 16' 38.0" N
Longitude (NAD 83)	104° 48' 26.9" W
Ground Elevation (AMSL)	2087.36 m / 6848.3 ft
Antenna Centerline (AGL)	7.74 m / 25.4 ft
Antenna Model	NEC 12.5 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	-2.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 13.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	5.43	101.50	-10.00	100.00
5	5.55	96.76	-10.00	100.00
10	5.61	91.76	-10.00	100.00
15	6.07	86.76	-10.00	100.00
20	5.89	81.76	-10.00	100.00
25	5.78	76.76	-10.00	100.00
30	5.84	71.76	-10.00	100.00
35	5.61	66.76	-10.00	100.00
40	4.76	61.76	-10.00	100.00
45	4.09	56.76	-10.00	100.00
50	3.20	51.79	-10.00	100.00
55	2.70	46.81	-9.76	100.00
60	2.48	41.83	-8.54	100.00
65	1.40	36.93	-7.19	100.00
70	1.20	31.99	-5.63	108.90
75	0.35	27.18	-3.86	155.11
80	0.00	22.37	-1.74	181.45
85	0.00	17.56	0.89	191.26
90	0.00	12.89	4.24	201.73
95	0.21	8.46	8.81	218.28
100	0.24	5.38	13.74	437.38
105	0.00	6.23	12.13	290.82
110	0.22	9.56	7.49	212.53
115	0.25	13.23	3.96	197.63
120	0.29	16.84	1.34	183.69
125	0.25	20.41	-0.75	180.07
130	0.47	23.69	-2.36	148.95
135	0.41	27.03	-3.79	149.40
140	0.46	30.11	-4.97	140.90
145	0.42	33.07	-5.99	141.11
150	0.58	35.62	-6.79	128.77
155	0.83	37.80	-7.44	115.76
160	0.93	39.75	-7.98	110.28
165	0.98	41.35	-8.41	106.87
170	1.00	42.55	-8.72	105.53
175	0.88	43.40	-8.94	109.49
180	0.85	43.69	-9.01	110.89
185	0.93	43.36	-8.93	107.80

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Interference Objectives: Long Term	-151.0 dBW/4 kHz 20%
Short Term	-128.0 dBW/4 kHz 0.0025%
Max Available RF Power	-2.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 13.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	1.35	42.21	-8.63	100.00
195	1.09	41.25	-8.39	104.13
200	1.41	39.33	-7.87	100.00
205	1.52	37.21	-7.27	100.00
210	1.99	34.48	-6.44	100.00
215	1.80	31.99	-5.63	100.00
220	2.46	28.60	-4.41	100.00
225	2.38	25.58	-3.20	100.00
230	2.63	22.15	-1.63	100.00
235	2.58	18.79	0.15	100.00
240	2.67	15.21	2.45	102.40
245	2.80	11.52	5.46	110.40
250	2.91	7.76	9.75	123.90
255	2.95	4.02	16.91	253.53
260	3.09	2.45	22.28	451.25
265	3.14	6.77	11.24	125.28
270	4.17	11.53	5.46	100.00
275	4.14	16.52	1.55	100.00
280	4.12	21.52	-1.32	100.00
285	4.42	26.50	-3.58	100.00
290	4.73	31.50	-5.46	100.00
295	4.37	36.50	-7.06	100.00
300	4.24	41.50	-8.45	100.00
305	4.59	46.50	-9.69	100.00
310	5.61	51.50	-10.00	100.00
315	6.51	56.51	-10.00	100.00
320	7.34	61.52	-10.00	100.00
325	7.22	66.51	-10.00	100.00
330	6.96	71.51	-10.00	100.00
335	6.27	76.50	-10.00	100.00
340	5.49	81.50	-10.00	100.00
345	4.96	86.50	-10.00	100.00
350	4.97	91.50	-10.00	100.00
355	5.13	96.50	-10.00	100.00

