

Prepared By

COMSEARCH

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

Prepared For

PanAmSat Licensee Corp.

Temporary Transmit/Receive Earth Station
Operation Dates: 08/27/2010 - 02/27/2011

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 July 8, 2009.

Company

AIRCELL, LLC
ALLTEL Communications of New Mexico, Inc
Abraham Divestiture Company LLC
Accelerated Internet LLC dba ResortInter
Adcom 911
Arvada, City of
Boulder, County of
CHEETAH ACCESS TECHNOLOGIES, INC
Castle Rock, Town of - Utilities
Cellular, Inc. Financial Corporation
CenturyTel of Eagle, Inc.
City of Aurora
City of Aurora, Water Department
Clearwire Spectrum Holdings III, LLC
Colorado 7-Saguache Limited Partnership
Colorado RSA No. 3 Limited Partnership
Commnet Four Corners, LLC
DENVER, CITY AND COUNTY OF
Denver Educational Broadcasting Inc.
ENTRAVISION HOLDINGS, LLC
Eastern Colorado Independent Networks
El Paso County InformationTechnologies
Elbert County School District C-1
Federal Communications Commission
FiberTower Network Services Corp.
GARFIELD COUNTY EMERGENCY COMMUNICATIONS
Grainland Cooperative
Great Western Communications, LLC
Holy Cross Electric Association, Inc.
Intermountain Rural Electric Association
International Communications Group, Inc.

Company (Continued)

Jab Wireless, Inc.
KLZ RADIO, INC.
LAKEWOOD, CITY OF
LP Broadband, Inc.
MESA NETWORKS, INC
METROPOLITAN AREA NETWORKS, INC.
MHO Networks
Millhouse Electronics Inc
Motorola, Inc.
N.E. Colorado Wireless Technologies, Inc
National Digital TV Ctr - Comcast Media
New Cingular Wireless PCS LLC -Colorado
Open Range Communications
PACIFICORP
Platte River Power Authority
Pueblo, City of
QWEST CORPORATION
RED ROCKS DATA CENTER
ROUTT COUNTY COMMUNICATIONS
SUMMIT, COUNTY OF
San Isabel Cellular Of Colorado L.P.
Sangre DeCristo Cellular Inc.
Smoky Hill Cellular of Colorado LP
Sprint Communications Co., LP
State of Colorado
Stelera Wireless, LLC
Thompson School District
Union Pacific Railroad Company
Union Telephone Company, Inc.
Verizon Wireless - Mountain Region
Vyvx , LLC - Colorado
WESTMINSTER CITY COLORADO
WISPER TELECOMMUNICATIONS
WWC Holding Co., Inc
West Metro Fire Protection District
Wyoming State Transportation Dept.
XTO Energy, Inc.
Zirkel Wireless, LLC

There are no unresolved interference objections with the stations contained in this application.

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.

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Earth Station Data Sheet

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Date: 07/08/2010
Job Number: 100708COMSJC10

Administrative Information

Status: TEMPORARY (Operation from 08/27/2010 to 02/27/2011)
Call Sign: TEMP02
Licensee Code: PANAS
Licensee Name: PanAmSat Licensee Corp.

Site Information

CASTLE ROCK, COLORADO

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): 2091.1 m / 6860.6 ft

Link Information

Satellite Type: Low Earth Orbit
Mode: TR - Transmit-Receive
Modulation: Digital
Minimum Elevation Angle: 5.0°
Azimuth Range: 0.0° to 360°
Antenna Centerline (AGL): 7.74 m / 25.4 ft

Antenna Information

Manufacturer:
Model:
Gain / Diameter:
3-dB / 15-dB Beamwidth:

Receive

Manufacturer: NEC
Model: 12.5 Meter
Gain / Diameter: 62.0 dBi / 12.5 m
3-dB / 15-dB Beamwidth: 0.20° / 0.40°

Transmit

Manufacturer: NEC
Model: 12.5 Meter
Gain / Diameter: 64.0 dBi / 12.5 m
3-dB / 15-dB Beamwidth: 0.21° / 0.40°

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

4.7
28.0

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

68.7
92.0
92.0

Interference Objectives: Long Term: -156.0 dBW/MHz 20%
Short Term: -146.0 dBW/MHz 0.01%

-151.0 dBW/4 kHz 20%
-128.0 dBW/4 kHz 0.0025%

Frequency Information

Emission / Frequency Range (MHz)

Receive 11.0 GHz

180KF2D / 11201.4
180KF2D / 11698.6

Transmit 14.0 GHz

850KF2D / 14250.0
850KF2D / 14499.8

Max Great Circle Coordination Distance:
Precipitation Scatter Contour Radius:

319.2 km / 198.3 mi
462.5 km / 287.3 mi

214.8 km / 133.5 mi
249.3 km / 154.9 mi

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Earth Station Data Sheet

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Coordination Values

CASTLE ROCK, CO

Licensee Name	PanAmSat Licensee Corp.				
Latitude (NAD 83)	39° 16' 38.0" N				
Longitude (NAD 83)	104° 48' 26.9" W				
Ground Elevation (AMSL)	2091.1 m / 6860.6 ft				
Antenna Centerline (AGL)	7.74 m / 25.4 ft				
Antenna Model	NEC 12.5 Meter				
Antenna Mode	Receive 11.0 GHz		Transmit 14.0 GHz		
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%	-151.0 dBW/4 kHz	20%
	Short Term	-146.0 dBW/MHz	0.01%	-128.0 dBW/4 kHz	0.0025%
Max Available RF Power				4.7 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 11.0 GHz		Transmit 14.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	1.16	81.12	4.50	319.20	4.50	214.80
5	1.12	76.46	4.50	319.20	4.50	214.80
10	1.02	71.80	4.50	319.20	4.50	214.80
15	0.87	67.14	4.50	319.20	4.50	214.80
20	0.96	62.55	4.50	319.20	4.50	214.80
25	1.11	58.01	4.50	319.20	4.50	214.80
30	1.29	53.54	4.50	319.20	4.50	214.80
35	1.02	49.01	4.50	319.20	4.50	214.80
40	0.93	44.60	4.50	319.20	4.50	214.80
45	1.08	40.39	4.50	319.20	4.50	214.80
50	1.20	36.35	4.50	319.20	4.50	214.80
55	0.87	32.27	4.50	319.20	4.50	214.80
60	0.70	28.54	4.50	319.20	4.50	214.80
65	0.73	25.37	4.50	319.20	4.50	214.80
70	0.93	22.96	4.50	319.20	4.50	214.80
75	0.76	21.06	4.50	319.20	4.50	214.80
80	0.76	20.37	4.50	319.20	4.50	214.80
85	0.76	20.83	4.50	319.20	4.50	214.80
90	0.69	22.32	4.50	319.20	4.50	214.80
95	0.61	24.70	4.50	319.20	4.50	214.80
100	0.71	27.87	4.50	319.20	4.50	214.80
105	0.76	31.45	4.50	319.20	4.50	214.80
110	0.71	35.29	4.50	319.20	4.50	214.80
115	0.67	39.37	4.50	319.20	4.50	214.80
120	0.73	43.65	4.50	319.20	4.50	214.80
125	0.70	48.01	4.50	319.20	4.50	214.80
130	0.60	52.45	4.50	319.20	4.50	214.80
135	0.48	56.95	4.50	319.20	4.50	214.80
140	0.48	61.53	4.50	319.20	4.50	214.80
145	0.29	66.12	4.50	319.20	4.50	214.80
150	0.28	70.77	4.50	319.20	4.50	214.80
155	0.23	75.44	4.50	319.20	4.50	214.80
160	0.29	80.13	4.50	319.20	4.50	214.80
165	0.26	84.83	4.50	319.20	4.50	214.80
170	0.00	89.53	4.50	319.20	4.50	214.80
175	0.00	94.24	4.50	319.20	4.50	214.80
180	0.00	98.94	4.50	319.20	4.50	214.80
185	0.00	103.64	4.50	319.20	4.50	214.80

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Coordination Values

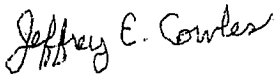
CASTLE ROCK, CO

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Interference Objectives:	Long Term	-156.0 dBW/MHz 20%	-151.0 dBW/4 kHz 20%
	Short Term	-146.0 dBW/MHz 0.01%	-128.0 dBW/4 kHz 0.0025%
Max Available RF Power			4.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 11.0 GHz		Transmit 14.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	108.33	4.50	319.20	4.50	214.80
195	0.00	112.99	4.50	319.20	4.50	214.80
200	0.42	117.56	4.50	319.20	4.50	214.80
205	0.92	122.03	4.50	319.20	4.50	214.80
210	1.05	126.53	4.50	319.20	4.50	214.80
215	0.75	131.08	4.50	319.20	4.50	214.80
220	0.92	135.41	4.50	319.20	4.50	214.80
225	1.05	139.62	4.50	319.20	4.50	214.80
230	0.90	143.81	4.50	319.20	4.50	214.80
235	1.11	147.59	4.50	319.20	4.50	214.80
240	1.48	150.92	4.50	319.20	4.50	214.80
245	1.48	154.04	4.50	319.20	4.50	214.80
250	1.76	156.30	4.50	319.20	4.50	214.80
255	1.76	157.97	4.50	319.20	4.50	214.80
260	1.97	158.42	4.50	319.20	4.50	214.80
265	1.98	157.98	4.50	319.20	4.50	214.80
270	2.29	156.23	4.50	319.20	4.50	214.80
275	2.78	153.54	4.50	319.20	4.50	214.80
280	2.68	150.72	4.50	319.20	4.50	214.80
285	2.68	147.35	4.50	319.20	4.50	214.80
290	3.05	143.44	4.50	319.20	4.50	214.80
295	3.13	139.48	4.50	319.20	4.50	214.80
300	3.49	135.22	4.50	319.20	4.50	214.80
305	3.19	131.12	4.50	319.20	4.50	214.80
310	3.64	126.64	4.50	319.20	4.50	214.80
315	3.56	122.27	4.50	319.20	4.50	214.80
320	3.19	117.90	4.50	319.20	4.50	214.80
325	3.05	113.41	4.50	319.20	4.50	214.80
330	2.65	108.91	4.50	319.20	4.50	214.80
335	2.18	104.37	4.50	319.20	4.50	214.80
340	1.94	99.76	4.50	319.20	4.50	214.80
345	1.45	95.13	4.50	319.20	4.50	214.80
350	1.45	90.47	4.50	319.20	4.50	214.80
355	1.13	85.79	4.50	319.20	4.50	214.80

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
Principal Frequency Planner
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DATED: July 14, 2010