

EXHIBIT C

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for

**PanAmSat Licensee Corp.
Ellenwood, Georgia
(Call Sign: E940333)**

Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, Virginia 20147
September 30, 2009

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1. CONCLUSIONS

An interference study considering all existing, proposed and prior coordinated microwave facilities within the coordination contours of the proposed earth station demonstrates that this site will operate satisfactorily with the common carrier microwave environment. Further, there will be no restrictions of its operation due to interference considerations.

2. SUMMARY OF RESULTS

A number of great circle interference cases were identified during the interference study of the proposed earth station. Each of the cases, which exceeded the interference objective on a line-of-sight basis, was profiled and the propagation losses estimated using NBS TN101 (Revised) techniques. The losses were found to be sufficient to reduce the signal levels to acceptable magnitudes in every case.

The following companies reported potential great circle interference conflicts that did not meet the objectives on a line-of-sight basis. When over-the-horizon losses are considered on the interfering paths, sufficient blockage exists to negate harmful interference from occurring with the transmit-receive earth station.

Company

ALLTEL Communications
Athens Cellular, Inc.
Cellco Partnership dba Verizon Wire (GA)
Cellco Partnership – Newark-Dallas Verizon
Norfolk Southern Railway
Southwestco Wireless LP (Georgia 5)
Verizon Wireless (VAW) LLC (Georgia)
Verizon Wireless of the East LP – (GA)

No other carriers reported potential interference cases.

3. SUPPLEMENTAL SHOWING

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.

Expedited coordination data for this earth station was emailed and sent to the below listed carriers with a letter dated September 10, 2009, and expedited revised coordination data was forwarded on September 18, 2009.

Company

ALABAMA ELECTRIC COOPERATIVE, INC.
ALLTEL Communications, LLC
Athens Cellular, Inc.
Bell Atlantic Mobile Allentown-Verizon W
Blue Ridge Electric Cooperative Inc
CALHOUN COUNTY COMMISSIONERS
CALHOUN, COUNTY OF
COBB COUNTY
Celco Partnership - Alabama
Celco Partnership dba Verizon Wire (GA
Celco Partnership-Newark-Dallas Verizon
Conterra Ultra Broadband, LLC
DeKalb County Police Department
FLINT ELECTRIC MEMBERSHIP CORPORATION
FULTON, COUNTY OF
GWINNETT, COUNTY OF
Gadsden Celltelco
Georgia Public Web
Georgia RSA #8 Partnership
Georgia System Operations Corporation
HOUSTON, COUNTY OF
Hall County 9-1-1
International Communications Group, Inc.
Jackson Electric Membership Corporation
METROPOLITAN AREA NETWORKS, INC.
New Cingular Wireless PCS LLC - AL, MS,
Norfolk Southern Railway
PATHNET, INC. - DEBTOR IN POSSESSION
Public Service Telephone Company
SOUTHERN COMPANY SERVICES INC
Southwestco Wireless LP (Georgia 5)
Talladega County Emergency Mangement Age
Troy University Radio & Television

Company (Continued)

UNIVERSITY OF NORTH CAROLINA
Verizon Wireless (VAW) LLC (Georgia)
Verizon Wireless of The East LP - (GA)
Verizon Wireless of the East LP- Alabama

4. EARTH STATION COORDINATION DATA

This 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
(703)726-5500 <http://www.comsearch.com>

Date: 09/30/2009
Job Number: 090918COMSJC03

Administrative Information

Status: ENGINEER PROPOSAL
Call Sign: E940333
Licensee Code: PANAS
Licensee Name: PanAmSat Licensee Corp

Site Information

ELLENWOOD, GEORGIA

Venue Name
Latitude (NAD 83): 33° 39' 49.4" N
Longitude (NAD 83): 84° 16' 18.7" W
Climate Zone: A
Rain Zone: 1
Ground Elevation (AMSL): 237.74 m / 780.0 ft

Link Information

Satellite Type: Geostationary
Mode: TR - Transmit-Receive
Modulation: Analog and Digital
Satellite Arc: 29° W to 145° West Longitude
Azimuth Range: 111.0° to 252.7°
Corresponding Elevation Angles: 20.1° / 15.6°
Antenna Centerline (AGL): 7.62 m / 25.0 ft

Antenna Information

Manufacturer: Vertex
Model: 13.0 KPC
Gain / Diameter: 53.5 dBi / 13.0 m
3-dB / 15-dB Beamwidth: 0.38° / 0.76°

Receive

Vertex
13.0 KPC
53.5 dBi / 13.0 m
0.38° / 0.76°

Transmit

Vertex
13.0 KPC
56.8 dBi / 13.0 m
0.26° / 0.52°

36M0F9W and 36M0G7W

Max Available RF Power	(dBW/4 kHz)		3.2	-9.3	
	(dBW/MHz)		27.2	14.7	
Maximum EIRP	(dBW/4 kHz)		60.0	47.5	
	(dBW/MHz)		84.0	71.5	
	(dBW)		87.0	87.0	
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
	Short Term	-144.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%

Frequency Information

Emission / Frequency Range (MHz)

Receive 4.0 GHz

36M0F9W / 3700.0 - 4200.0
36M0G7W / 3700.0 - 4200.0

Transmit 6.1 GHz

36M0F9W / 5925.0 - 6425.0
36M0G7W / 5925.0 - 6425.0

Max Great Circle Coordination Distance: 356.9 km / 221.7 mi 242.1 km / 150.4 mi
Precipitation Scatter Contour Radius: 592.6 km / 368.2 mi 270.3 km / 168.0 mi

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

ELLENWOOD, GA

Licensee Name	PanAmSat Licensee Corp		
Latitude (NAD 83)	33° 39' 49.4" N		
Longitude (NAD 83)	84° 16' 18.7" W		
Ground Elevation (AMSL)	237.74 m / 780.0 ft		
Antenna Centerline (AGL)	7.62 m / 25.0 ft		
Antenna Model	Vertex 13.0 KPC		
Antenna Mode	Receive 4.0 GHz	Transmit 6.1 GHz	
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%
	Short Term	-144.0 dBW/MHz	0.01%
Max Available RF Power			
			20%
		-131.0 dBW/4 kHz	0.0025%
			3.2 (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	1.87	106.75	-10.00	188.48	-10.00	114.03
5	1.18	105.13	-10.00	205.34	-10.00	131.35
10	0.30	100.36	-10.00	260.50	-10.00	182.96
15	0.36	95.66	-10.00	253.69	-10.00	176.89
20	0.38	90.96	-10.00	251.36	-10.00	174.76
25	0.26	86.26	-10.00	265.12	-10.00	186.95
30	0.27	81.56	-10.00	263.95	-10.00	185.95
35	0.21	76.87	-10.00	271.90	-10.00	192.64
40	0.30	72.19	-10.00	260.38	-10.00	182.86
45	0.40	67.51	-10.00	249.48	-10.00	173.13
50	0.44	62.86	-10.00	244.33	-10.00	168.25
55	0.51	58.24	-10.00	238.08	-10.00	160.59
60	0.47	53.68	-10.00	241.35	-10.00	163.74
65	0.26	49.23	-10.00	265.76	-10.00	187.50
70	0.33	44.78	-9.28	261.07	-9.28	182.66
75	0.26	40.48	-8.18	276.00	-8.18	193.97
80	0.38	36.25	-6.98	270.04	-6.98	187.82
85	0.70	32.07	-5.65	250.60	-5.65	169.56
90	0.76	28.29	-4.29	255.14	-4.29	172.40
95	0.77	24.94	-2.92	263.23	-2.92	178.21
100	0.68	22.26	-1.69	277.79	-1.69	189.01
105	0.82	20.20	-0.64	275.24	-0.64	185.91
110	0.98	19.19	-0.08	268.87	-0.08	180.17
115	1.19	19.35	-0.17	259.63	-0.17	172.47
120	1.15	20.94	-1.02	255.35	-1.02	169.63
125	1.14	23.44	-2.25	247.91	-2.25	162.60
130	1.09	26.64	-3.64	241.29	-3.64	157.75
135	1.43	29.99	-4.93	222.59	-4.93	142.01
140	1.68	33.31	-6.07	209.59	-6.07	132.65
145	1.99	36.37	-7.02	199.21	-7.02	121.66
150	1.60	39.68	-7.97	205.42	-7.97	127.84
155	1.30	42.65	-8.75	207.89	-8.75	132.76
160	1.18	45.12	-9.36	208.23	-9.36	133.49
165	1.01	47.22	-9.85	211.10	-9.85	135.20
170	1.28	48.40	-10.00	204.95	-10.00	128.79
175	1.04	49.52	-10.00	209.46	-10.00	133.84
180	0.74	50.12	-10.00	224.50	-10.00	147.69
185	0.55	50.01	-10.00	235.55	-10.00	158.17

COMSEARCH

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Coordination Values

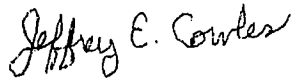
ELLENWOOD, GA

Licensee Name	PanAmSat Licensee Corp		
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Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz
Short Term	-144.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz
Max Available RF Power			3.2 (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	0.58	49.06	-10.00	233.37	-10.00	156.08
195	0.60	47.57	-9.93	232.65	-9.93	155.32
200	0.60	45.60	-9.47	235.43	-9.47	157.51
205	0.65	43.15	-8.87	235.64	-8.87	157.08
210	1.05	40.09	-8.07	218.36	-8.07	140.42
215	1.21	36.92	-7.18	217.83	-7.18	139.31
220	0.59	34.04	-6.30	254.13	-6.30	173.40
225	0.47	30.62	-5.15	271.17	-5.15	186.91
230	0.40	27.00	-3.78	288.14	-3.78	198.91
235	0.37	23.24	-2.16	302.34	-2.16	206.11
240	0.28	19.85	-0.45	327.21	-0.45	222.10
245	0.21	17.22	1.10	348.53	1.10	236.72
250	0.20	15.67	2.12	356.91	2.12	242.08
255	0.37	15.44	2.29	336.86	2.29	226.22
260	0.52	16.73	1.41	310.95	1.41	208.59
265	0.50	19.39	-0.19	300.62	-0.19	204.55
270	0.66	22.70	-1.90	277.13	-1.90	188.67
275	0.81	26.54	-3.60	256.62	-3.60	173.08
280	0.96	30.70	-5.18	237.88	-5.18	155.90
285	1.15	35.04	-6.62	222.68	-6.62	143.26
290	1.52	39.48	-7.91	205.39	-7.91	129.97
295	2.01	44.01	-9.09	189.24	-9.09	114.03
300	2.81	48.57	-10.00	163.85	-10.00	100.00
305	3.64	53.23	-10.00	145.98	-10.00	100.00
310	4.52	57.95	-10.00	133.22	-10.00	100.00
315	5.40	62.74	-10.00	123.02	-10.00	100.00
320	5.64	67.63	-10.00	120.64	-10.00	100.00
325	6.17	72.51	-10.00	115.36	-10.00	100.00
330	5.45	77.47	-10.00	122.50	-10.00	100.00
335	4.89	82.40	-10.00	128.33	-10.00	100.00
340	4.71	87.31	-10.00	130.65	-10.00	100.00
345	4.00	92.22	-10.00	139.15	-10.00	100.00
350	3.63	97.10	-10.00	146.04	-10.00	100.00
355	3.40	101.98	-10.00	150.70	-10.00	100.00

5. CERTIFICATION

I HEREBY CERTIFY THAT I AM THE TECHNICALLY QUALIFIED PERSON RESPONSIBLE FOR THE PREPARATION OF THE FREQUENCY COORDINATION DATA CONTAINED IN THIS APPLICATION, THAT I AM FAMILIAR WITH PARTS 101 AND 25 OF THE FCC RULES AND REGULATIONS, THAT I HAVE EITHER PREPARED OR REVIEWED THE FREQUENCY COORDINATION DATA SUBMITTED WITH THIS APPLICATION, AND THAT IT IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Jeffrey E. Cowles
Principal Frequency Planner
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, Va. 20147

DATED: September 30, 2009