

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for

**PETROCOM LICENSE CORP.
EAST CAMERON 167, GULF of MEXICO
(Oil Platform)**

Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, Virginia 20147
October 22, 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, based upon the restrictions noted in the Summary of Results (Section 2).

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 most cases.

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 and frequency separation are considered on the interfering paths, sufficient losses exist to negate harmful interference from occurring with the proposed transmit-receive earth station. Further, the transmit spectrum will be limited from 5925.0 to 5999.0 MHz, 6010.0 to 6251.0 MHz, and 6262.0 to 6425.0 MHz.

Company

None

No 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.

Coordination data for this earth station was sent to the below listed carriers with a letter dated September 17, 2009.

Company

AT&T COMM. OF THE SOUTH CENTRAL STATES
American National Insurance Company
Bell Atlantic Mobile Allentown-Verizon W
CENTERPOINT ENERGY, INC.
Calcasieu Parish Sheriff's Office
Centennial Southeast License Company LLC
ERF Wireless Bundled Services, Inc.
GTE Mobilnet of South Texas LTD Partners
GTE Mobilnet of Texas RSA #17 LTD Prtnsh
Harris County ITC
International Communications Group, Inc.
LOUISIANA STATE COMMUNICATION SECTION
MCI Communication Services, Inc.
PATHNET, INC. - DEBTOR IN POSSESSION
Southern & Central Wireless, LLC
Stratos Offshore Services Company
Texas Eastern Communications, Inc.
Verizon Wireless Texas, LLC

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: 10/22/2009
Job Number: 090917COMSJC01

Administrative Information

Status ENGINEER PROPOSAL
Call Sign
Licensee Code PETCOM
Licensee Name PETROCOM LICENSE CORP.

Site Information

EAST CAMERON 167, GULF of MEXICO

Venue Name Oil Platform
Latitude (NAD 83) 29° 23' 16.0" N
Longitude (NAD 83) 93° 28' 28.0" W
Climate Zone B
Rain Zone 1
Ground Elevation (AMSL) 0.0 m / 0.0 ft

Link Information

Satellite Type Geostationary
Mode TR - Transmit-Receive
Modulation Digital
Satellite Arc 60° W to 143° West Longitude
Azimuth Range 126.6° to 247.3°
Corresponding Elevation Angles 40.0° / 26.7°
Antenna Centerline (AGL) 30.48 m / 100.0 ft

Antenna Information

Receive

Manufacturer Prodelin
Model 1251
Gain / Diameter 38.0 dBi / 2.4 m
3-dB / 15-dB Beamwidth 2.16° / 4.00°

Transmit

Prodelin
1251
42.0 dBi / 2.4 m
1.36° / 2.54°

725KG7W to 2M90G7W

Max Available RF Power	(dBW/4 kHz)	-21.5	-21.5		
	(dBW/MHz)	1.1	2.5		
Maximum EIRP	(dBW/4 kHz)	20.5	20.5		
	(dBW/MHz)	43.1	44.5		
	(dBW)	43.1	49.1		
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
	Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%

Frequency Information

Receive 4.0 GHz

Emission / Frequency Range (MHz) 725KG7W - 2M90G7W / 3700.0 - 4200.0

Transmit 6.1 GHz

725KG7W - 2M90G7W / 5925.0 - 5999.0
725KG7W - 2M90G7W / 6010.0 - 6251.0
725KG7W - 2M90G7W / 6262.0 - 6425.0

Max Great Circle Coordination Distance 497.9 km / 309.4 mi 141.5 km / 87.9 mi
Precipitation Scatter Contour Radius 565.7 km / 351.5 mi 100.0 km / 62.1 mi

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Coordination Values

E. CAMERON 167, GM

Licensee Name PETROCOM LICENSE CORP.
Latitude (NAD 83) 29° 23' 16.0" N
Longitude (NAD 83) 93° 28' 28.0" W
Ground Elevation (AMSL) 0.0 m / 0.0 ft
Antenna Centerline (AGL) 30.48 m / 100.0 ft
Antenna Model Prodelin 1251
Antenna Mode Receive 4.0 GHz Transmit 6.1 GHz
Interference Objectives: Long Term -156.0 dBW/MHz 20% -154.0 dBW/4 kHz 20%
Short Term -146.0 dBW/MHz 0.01% -131.0 dBW/4 kHz 0.0025%
Max Available RF Power -21.5 (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	0.00	110.19	-10.00	412.20	-10.00	120.86
5	0.00	113.67	-10.00	412.20	-10.00	120.86
10	0.00	110.06	-10.00	412.20	-10.00	120.86
15	0.00	106.38	-10.00	412.20	-10.00	120.86
20	0.00	102.63	-10.00	412.20	-10.00	120.86
25	0.00	98.85	-10.00	412.20	-10.00	120.86
30	0.00	95.04	-10.00	412.20	-10.00	120.86
35	0.00	91.21	-10.00	412.20	-10.00	120.86
40	0.00	87.38	-10.00	412.20	-10.00	120.86
45	0.00	83.56	-10.00	412.20	-10.00	120.86
50	0.00	79.75	-10.00	412.20	-10.00	120.86
55	0.00	75.99	-10.00	412.20	-10.00	120.86
60	0.00	72.26	-10.00	412.20	-10.00	120.86
65	0.00	68.61	-10.00	412.20	-10.00	120.86
70	0.00	65.03	-10.00	412.20	-10.00	120.86
75	0.00	61.56	-10.00	412.20	-10.00	120.86
80	0.00	58.21	-10.00	412.20	-10.00	120.86
85	0.00	55.02	-10.00	412.20	-10.00	120.86
90	0.00	52.01	-10.00	412.20	-10.00	120.86
95	0.00	49.24	-10.00	412.20	-10.00	120.86
100	0.00	46.73	-9.74	415.44	-9.74	121.60
105	0.00	44.54	-9.22	422.00	-9.22	123.09
110	0.00	42.73	-8.77	427.78	-8.77	124.42
115	0.00	41.34	-8.41	432.45	-8.41	125.51
120	0.00	40.41	-8.16	435.66	-8.16	126.26
125	0.00	39.99	-8.05	437.16	-8.05	126.61
130	0.00	40.08	-8.07	436.82	-8.07	126.53
135	0.00	40.69	-8.24	434.67	-8.24	126.02
140	0.00	41.79	-8.53	430.89	-8.53	125.14
145	0.00	43.35	-8.92	425.77	-8.92	123.96
150	0.00	45.31	-9.40	419.66	-9.40	122.56
155	0.00	47.62	-9.94	412.90	-9.94	121.02
160	0.00	50.20	-10.00	412.20	-10.00	120.86
165	0.00	52.50	-10.00	412.20	-10.00	120.86
170	0.00	54.26	-10.00	412.20	-10.00	120.86
175	0.00	55.35	-10.00	412.20	-10.00	120.86
180	0.00	55.73	-10.00	412.20	-10.00	120.86
185	0.00	55.35	-10.00	412.20	-10.00	120.86

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Coordination Values

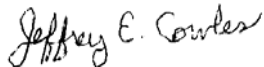
E. CAMERON 167, GM

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Latitude (NAD 83)	29° 23' 16.0" N			
Longitude (NAD 83)	93° 28' 28.0" W			
Ground Elevation (AMSL)	0.0 m / 0.0 ft			
Antenna Centerline (AGL)	30.48 m / 100.0 ft			
Antenna Model	Prodelin 1251			
Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz	
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power			-21.5 (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	0.00	54.25	-10.00	412.20	-10.00	120.86
195	0.00	52.50	-10.00	412.20	-10.00	120.86
200	0.00	50.20	-10.00	412.20	-10.00	120.86
205	0.00	47.44	-9.90	413.39	-9.90	121.13
210	0.00	44.32	-9.17	422.69	-9.17	123.25
215	0.00	40.92	-8.30	433.89	-8.30	125.84
220	0.00	37.42	-7.33	446.76	-7.33	128.87
225	0.00	34.22	-6.36	460.02	-6.36	132.05
230	0.00	31.43	-5.44	472.35	-5.44	135.19
235	0.00	29.18	-4.63	484.04	-4.63	138.06
240	0.00	27.58	-4.02	493.05	-4.02	140.29
245	0.00	26.77	-3.69	497.92	-3.69	141.50
250	0.00	26.80	-3.71	497.68	-3.71	141.44
255	0.00	27.69	-4.06	492.39	-4.06	140.13
260	0.00	29.35	-4.69	483.08	-4.69	137.82
265	0.00	31.66	-5.51	471.23	-5.51	134.92
270	0.00	34.49	-6.44	458.84	-6.44	131.76
275	0.00	37.72	-7.42	445.59	-7.42	128.59
280	0.00	41.26	-8.39	432.71	-8.39	125.57
285	0.00	45.03	-9.34	420.51	-9.34	122.75
290	0.00	48.97	-10.00	412.20	-10.00	120.86
295	0.00	53.05	-10.00	412.20	-10.00	120.86
300	0.00	57.23	-10.00	412.20	-10.00	120.86
305	0.00	61.50	-10.00	412.20	-10.00	120.86
310	0.00	65.83	-10.00	412.20	-10.00	120.86
315	0.00	70.20	-10.00	412.20	-10.00	120.86
320	0.00	74.61	-10.00	412.20	-10.00	120.86
325	0.00	79.05	-10.00	412.20	-10.00	120.86
330	0.00	83.50	-10.00	412.20	-10.00	120.86
335	0.00	87.97	-10.00	412.20	-10.00	120.86
340	0.00	92.43	-10.00	412.20	-10.00	120.86
345	0.00	96.90	-10.00	412.20	-10.00	120.86
350	0.00	101.35	-10.00	412.20	-10.00	120.86
355	0.00	105.78	-10.00	412.20	-10.00	120.86

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: October 22, 2009