

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
Vizada Satellite, Inc. Rockville MD
New Orleans, LA
Satellite Earth Station on Vessel (ESV)

Prepared By:
Skjei Telecom, Inc.
7777 Leesburg Pike, Suite 315N
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November 24, 2008

TABLE OF CONTENTS

1. CONCLUSIONS	3
2. SUMMARY OF RESULTS	4
3. SUPPLEMENTAL SHOWING	6
4. EARTH STATION COORDINATION DATA.....	7
5. CERTIFICATION.....	16

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. There will be spectrum restrictions 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. The Critical Contour Point method of determining worst case interference from the route and port sites was the interference method used. 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, except as noted below. Also note, that there are no unresolved coordination requests which would result in an exceedance of the maximum 180 megahertz of coordinated spectrum for all ESV operations in the coordination area in the 5925-6425 MHz band.

The following company 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 proposed transmit-only earth station, except as noted below.

Company

ALLTEL Communications, LLC
Jefferson Parish Sheriff's Office
Jefferson Parish Sheriff's Office
Louisiana, State Of
New Cingular Wireless PCS, LLC - LA
NEW ORLEANS EDUCATIONAL TELECOMM
PATHNET, INC. - DEBTOR IN POSSESSION
Stratos Offshore Services Company
Verizon Wireless Personal Comm., LP

Spectrum between 5960 - 5970 MHz can clear for entire route. Spectrum between 5948-5960 MHz will be impacted by one large case, Nunez from Bank One and several smaller cases. To resolve these cases the ESV will not operate within the 5948-5960 MHz band in the blacked out area shown in Figure 1 below.

Path Name : NUNEZ COMM C LA from BANK ONE CTR LA
Call Sign: WPOV261
Licensee: NEW ORLEANS EDUCATIONAL TELECOMM

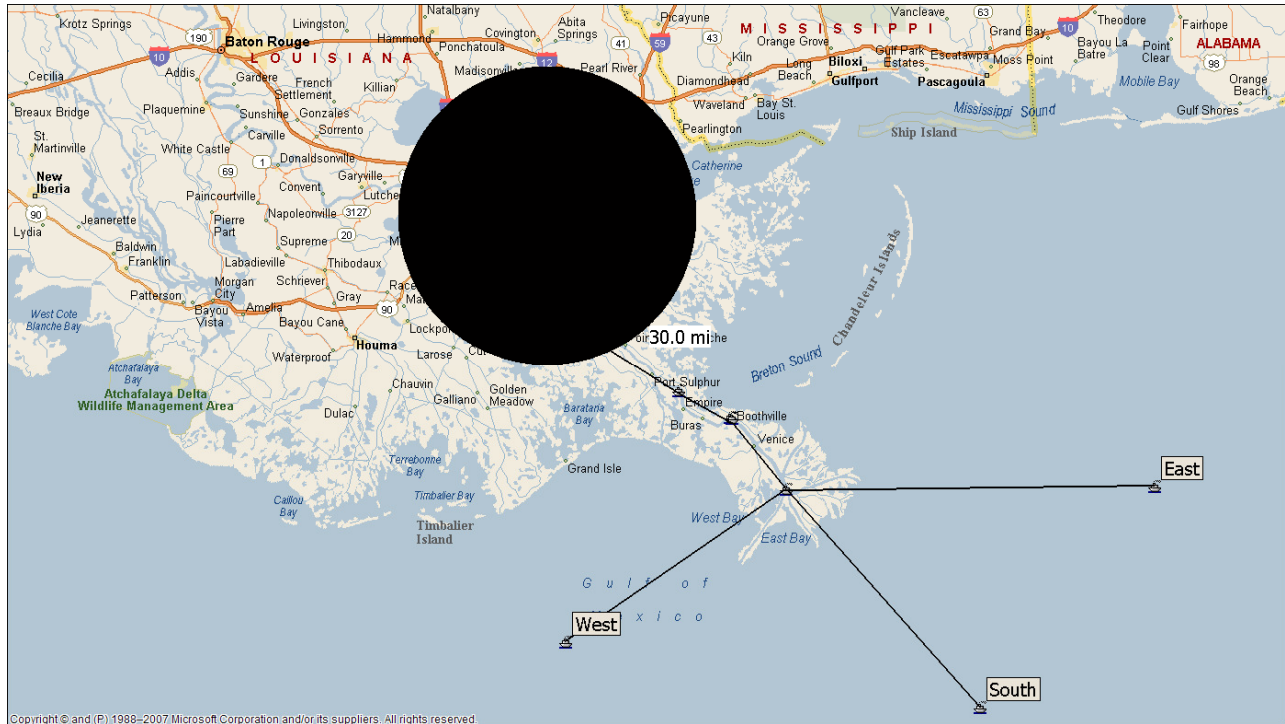


Figure 1 – Exclusion Zone around case in New Orleans. Within blacked out zone (i.e., north of Pt 17 as specified in the Breakpoints List in Section 4) ESV will not operate within the 5948-5960 MHz band.

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 Skjei Telecom, Inc. 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 12/20/2006 with a revision dated 6/18/08 with a revision on 7/23/08.

Company

Acadiana Cellular General Partnership
ALLTEL Communications, LLC
ALLTEL Mobile of Louisiana, LLC
Bell Atlantic Mobile Allentown-Verizon W
Cellular South Licenses, Inc.
Celutel of Biloxi, Inc.
CenturyTel of Alabama, LLC.
Cleco Power LLC
DIXIE ELECTRIC MEMBERSHIP CORP
ENTERGY SERVICES INC
Exxon Communications Company
Greater Lafourche Port Commission
GTE Mobilnet of South Texas LTD Partners
Jefferson Parish Sheriff's Office
Lafayette MSA Limited Partnership
Louisiana Dept. of Transportation and De
Louisiana RSA #7 Cell Gen Partnership
LOUISIANA STATE COMMUNICATION SECTION
Louisiana, State Of
MCI Communication Services, Inc.
METROPOLITAN AREA NETWORKS, INC.
Mississippi Authority for ED TV
MISSISSIPPI STATE DEPT OF TRANSPORTATION
MISSISSIPPI, STATE OF
New Cingular Wireless PCS, LLC - LA
NEW ORLEANS EDUCATIONAL TELECOMM
PATHNET, INC. - DEBTOR IN POSSESSION
Plaquemines Parish Government
Sprint Spectrum LP DBA Sprint PCS
Sprint Spectrum LP Louisiana
STAR TELEPHONE COMPANY
Stratos Offshore Services Company
Texas Eastern Communications, Inc.
Verizon Wireless Personal Comm., LP

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. The coordination data was circulated with a letter dated June 18, 2008, with a revision on July 23, 2008.

Skjei Telecom, Inc.
Earth Station Data Sheet

June 18, 2008

*** CLIENT COPY ***
*** PLEASE MAIL ***
*** TO CUSTOMER ***

Re: Vizada Satellite Inc -ESV In-Motion
NEWORLEANS, LA
C-Band Transmit Only Earth Station on Vessel
Job Number: 080618SKJTEL06

Dear Frequency Coordinator:

This notice is being provided in accordance with Sections 25.203(c) and 25.221 of the FCC Rules and Regulations. We are forwarding the attached coordination data on behalf of Vizada Satellite Inc -ESV In-Motion, 1101 Wootton Parkway, 10th Floor Rockville, MD 20852 for a C-Band Transmit Only Earth Station on Vessel to be located in NEWORLEANS, LA.

The coordination notice is being circulated to the owners (or their protection agents) of all existing or proposed terrestrial facilities operating in a shared frequency band within the coordination contours of the proposed station(s).

We respectfully request that you examine this data for its interference potential with your system(s). In the event that your analysis identifies potential interference cases that have not been resolved, please contact us by July 23, 2008.

If there are any questions concerning this coordination notice, please contact Skjei Telecom.

Sincerely,

Ken Ryan
Skjei Telecom, Inc.
7777 Leesburg Pike, Suite 315N, Falls Church, VA 22043
Ph:(703)917-4020, Fax:(703)917-0098

Enclosure(s)

Skjei Telecom, Inc.
Earth Station Data Sheet

July 23, 2008

*** CLIENT COPY ***
*** PLEASE MAIL ***
*** TO CUSTOMER ***

Re: Vizada Satellite Inc -ESV In-Motion
NEW ORLEANS, LA
C-Band Transmit Only Earth Station on Vessel
Job Number: 080618SKJTEL06 Rev 080723SKJTEL01

Dear Frequency Coordinator:

This notice is being provided in accordance with Sections 25.203(c) and 25.221 of the FCC Rules and Regulations. We are forwarding the attached REVISED coordination data on behalf of Vizada Satellite Inc, Rockville MD, 1101 Wootton Parkway, 10th Floor Rockville, MD 20852 for a C-Band Transmit Only Earth Station on Vessel to be located in NEW ORLEANS, LA.

The coordination notice is being circulated to the owners (or their protection agents) of all existing or proposed terrestrial facilities operating in a shared frequency band within the coordination contours of the proposed station(s).

The revision involves a change to the ESV route breakpoints. The revised ESV route is described in the attached PCN data. All other technical parameters remain the same as before.

We respectfully request that you examine this data for its interference potential with your system(s). In the event that your analysis identifies potential interference cases that have not been resolved, please contact us by Aug 28, 2008.

If there are any questions concerning this coordination notice, please contact Skjei Telecom.

Sincerely,

Skjei Telecom, Inc.

Ken Ryan
ken@skjeitelecom.com
7777 Leesburg Pike, 315N
Falls Church, VA 22043
(703) 917-4020
Fax: (703) 917-0098

Enclosure(s)

Skjei Telecom, Inc.
Earth Station Data Sheet

Date: 07/23/2008
Job Number: 080618SKJTEL06 Rev 080723SKJTEL01

Administrative Information

Status ENGINEER PROPOSAL
Call Sign
Licensee Code TELESV
Licensee Name Vizada Satellite Inc -ESV In-Motion

Site Information **NEWORLEANS, LA**

Venue Name
Latitude (NAD 83) 29° 54' 52.8" N
Longitude (NAD 83) 90° 7' 49.8" W
Climate Zone B
Rain Zone 1
Ground Elevation (AMSL) 0.0 m / 0.0 ft

Link Information

Satellite Type Geostationary
Mode TO - Transmit-Only
Modulation Digital
Satellite Arc 22° W to 22° West Longitude
Azimuth Range 101.3° to 101.3°
Corresponding Elevation Angles 10.3° / 10.3°
Antenna Centerline (AGL) 15.54 m / 51.0 ft

Antenna Information

Transmit - FCC32

Manufacturer FCC REFERENCE
Model 32-25LOG(THETA)
Gain / Diameter 41.7 dBi / 2.4 m
3-dB / 15-dB Beamwidth 0.66° / 1.18°

Max Available RF Power (dBW/4 kHz) -10.5
(dBW/MHz) 13.5

Maximum EIRP (dBW/4 kHz) 31.2
(dBW/MHz) 55.2
(dBW)

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) 102KG7D - 204KG7D / 5850.0 - 5864.0
102KG7D - 204KG7D / 5948.0 - 5970.0

Max Great Circle Coordination Distance 256.1 km / 159.1 mi
Precipitation Scatter Contour Radius 100.0 km / 62.1 mi

Skjei Telecom, Inc. Earth Station Data Sheet

Coordination Values

NEWORLEANS, LA	
Licensee Name	Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83)	29° 54' 52.8" N
Longitude (NAD 83)	90° 7' 49.8" W
Ground Elevation (AMSL)	0.0 m / 0.0 ft
Antenna Centerline (AGL)	15.54 m / 51.0 ft
Antenna Model	FCC Reference 32-25LOG(THETA)
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	-10.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	101.14	-10.00	160.62
5	0.00	96.22	-10.00	160.62
10	0.00	91.30	-10.00	160.62
15	0.00	86.38	-10.00	160.62
20	0.00	81.46	-10.00	160.62
25	0.00	76.55	-10.00	160.62
30	0.00	71.63	-10.00	160.62
35	0.00	66.72	-10.00	160.62
40	0.00	61.82	-10.00	160.62
45	0.00	56.93	-10.00	160.62
50	0.00	52.05	-10.00	160.62
55	0.00	47.19	-9.85	161.31
60	0.00	42.36	-8.67	166.70
65	0.00	37.55	-7.37	172.97
70	0.00	32.80	-5.90	180.33
75	0.00	28.12	-4.23	189.13
80	0.00	23.57	-2.31	200.16
85	0.00	19.21	-0.09	213.09
90	0.00	15.25	2.42	228.51
95	0.00	12.05	4.98	245.03
100	0.00	10.36	6.61	256.07
105	0.00	10.91	6.05	252.26
110	0.00	13.42	3.80	237.35
115	0.00	17.05	1.21	220.95
120	0.00	21.23	-1.17	206.69
125	0.00	25.69	-3.25	194.51
130	0.00	30.32	-5.04	184.78
135	0.00	35.03	-6.61	176.71
140	0.00	39.81	-8.00	169.89
145	0.00	44.63	-9.24	164.06
150	0.00	49.48	-10.00	160.62
155	0.00	54.35	-10.00	160.62
160	0.00	59.24	-10.00	160.62
165	0.00	64.13	-10.00	160.62
170	0.00	69.04	-10.00	160.62
175	0.00	73.95	-10.00	160.62
180	0.00	78.86	-10.00	160.62
185	0.00	83.78	-10.00	160.62

Skjei Telecom, Inc. Earth Station Data Sheet

Coordination Values	NEWORLEANS, LA
Licensee Name	Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83)	29° 54' 52.8" N
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Ground Elevation (AMSL)	0.0 m / 0.0 ft
Antenna Centerline (AGL)	15.54 m / 51.0 ft
Antenna Model	FCC Reference 32-25LOG(THETA)
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	-10.5 (dBW/4 kHz)

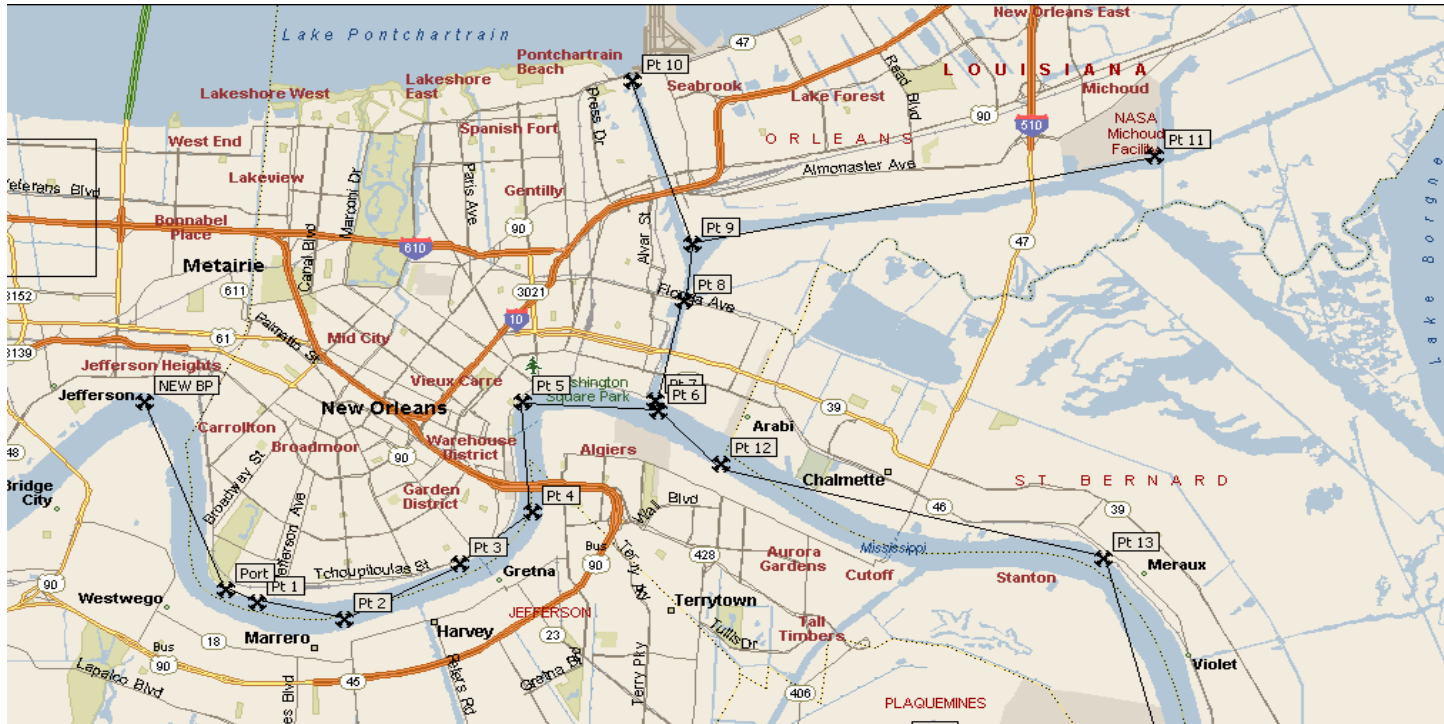
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Transmit 6.1 GHz Coordination Distance (km)
190	0.00	88.70	-10.00	160.62
195	0.00	93.62	-10.00	160.62
200	0.00	98.54	-10.00	160.62
205	0.00	103.45	-10.00	160.62
210	0.00	108.37	-10.00	160.62
215	0.00	113.28	-10.00	160.62
220	0.00	118.18	-10.00	160.62
225	0.00	123.07	-10.00	160.62
230	0.00	127.95	-10.00	160.62
235	0.00	132.81	-10.00	160.62
240	0.00	137.64	-10.00	160.62
245	0.00	142.45	-10.00	160.62
250	0.00	147.20	-10.00	160.62
255	0.00	151.88	-10.00	160.62
260	0.00	156.43	-10.00	160.62
265	0.00	160.79	-10.00	160.62
270	0.00	164.75	-10.00	160.62
275	0.00	167.95	-10.00	160.62
280	0.00	169.64	-10.00	160.62
285	0.00	169.09	-10.00	160.62
290	0.00	166.58	-10.00	160.62
295	0.00	162.95	-10.00	160.62
300	0.00	158.77	-10.00	160.62
305	0.00	154.31	-10.00	160.62
310	0.00	149.68	-10.00	160.62
315	0.00	144.97	-10.00	160.62
320	0.00	140.19	-10.00	160.62
325	0.00	135.37	-10.00	160.62
330	0.00	130.52	-10.00	160.62
335	0.00	125.65	-10.00	160.62
340	0.00	120.76	-10.00	160.62
345	0.00	115.87	-10.00	160.62
350	0.00	110.96	-10.00	160.62
355	0.00	106.05	-10.00	160.62

Skjei Telecom, Inc. Earth Station Data Sheet

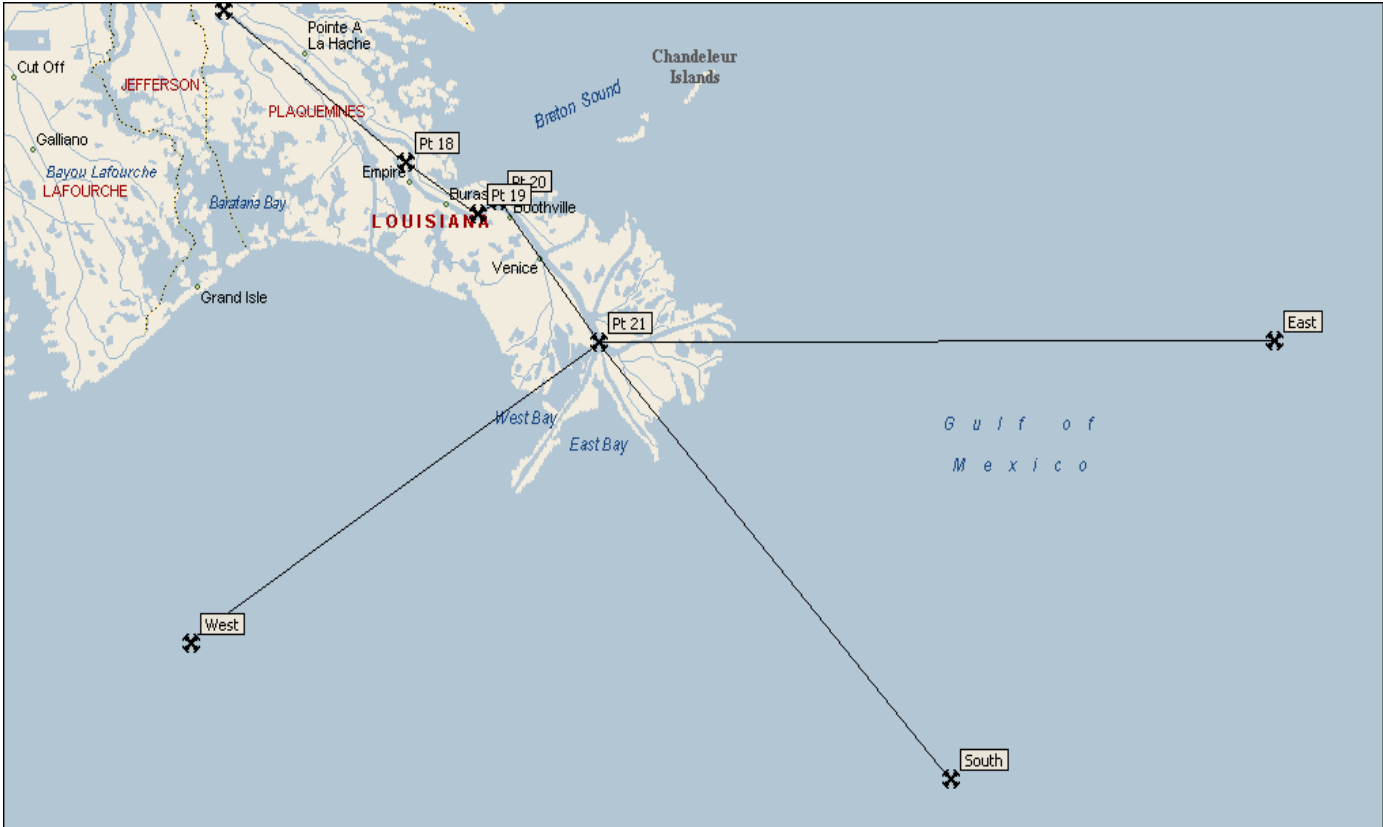
New Orleans Breakpoints List

Name	Latitude	Longitude
New BP	29.95714	-90.15
Port	29.91467	-90.1305
Pt 1	29.91164	-90.1232
Pt 2	29.90797	-90.1025
Pt 3	29.92044	-90.0751
Pt 4	29.93225	-90.0577
Pt 5	29.95714	-90.06
Pt 6	29.95508	-90.0279
Pt 7	29.95742	-90.0287
Pt 8	29.98	-90.022
Pt 9	29.993	-90.02
Pt 10	30.03	-90.034
Pt 11	30.013	-89.91
Pt 12	29.943	-90.0132
Pt 13	29.92167	-89.9222
Pt 14	29.86972	-89.906
Pt 15	29.87897	-89.97
Pt 16	29.76183	-90.0249
Pt 17	29.644	-89.948
Pt 18	29.418	-89.607
Pt 19	29.342	-89.475
Pt 20	29.36217	-89.4356
Pt 21	29.15147	-89.25
East	29.15	-88
West	28.7	-90
South	28.5	-88.6

Skjei Telecom, Inc. Earth Station Data Sheet

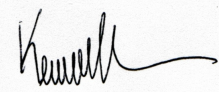


Skjei Telecom, Inc. Earth Station Data Sheet



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.

BY: 

Ken Ryan, P.E.
Principal Engineer
Skjei Telecom, Inc.
7777 Leesburg Pike, Suite 315N
Falls Church, VA 22043

DATED: November 23, 2008