

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for

**Vizada Satellite, Inc.
Santa Paula, California
(Call Sign: KA31)**

Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, Virginia 20147
November 2, 2008

TABLE OF CONTENTS

1. CONCLUSIONS	3
2. SUMMARY OF RESULTS	4
3. SUPPLEMENTAL SHOWING	5
4. EARTH STATION COORDINATION DATA.....	9
5. CERTIFICATION.....	13

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 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 transmit/receive earth station. Further, the receive spectrum will be limited to frequencies 3600.0 to 3629.0 MHz, and the transmit spectrum will be limited to 6425.0 to 6454.0 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.

Expedited coordination data for this earth station was emailed and sent to the below listed carriers with a letter dated October 12, 2008.

Company

AERA ENERGY LLC
ARCHDIOCESE OF LOS ANGELES WELFARE CORP
Antelope Valley - East Kern Water Agency
BNSF Railway Company
Boeing Company
CARITAS TELECOMMUNICATIONS
CITY OF POMONA COMMUNICATIONS
California, State of
Chevron USA Inc.
Exxon Communications Company
Fresno MSA Limited Partnership
GLENDALE CITY CALIFORNIA
GULF-CALIFORNIA BROADCASTING
INCOMM DIVISION CHURCH OF SCIENTOLOGY
KERN COUNTY CALIFORNIA
LOS ANGELES CITY WATER & POWER
LOS ANGELES UNIFIED SCHOOL DISTRICT
Los Angeles City Info Technology Agency
Los Angeles County Dept of Public Works
Los Angeles County FCC Licensing Section
Los Angeles County Metro Transit Auth
Los Angeles SMSA Ltd. Partnership
METROPOLITAN WATER DIST OF SO CALIFORNIA
MOBILE RELAY ASSOCIATES INC
Mile High Inc
New Cingular Wireless PCS - Los Angeles
New Cingular Wireless PCS LLC - N CAL
ORANGE, COUNTY OF, CA
PACIFIC PIPELINE SYSTEM LLC
Pacific Gas and Electric Company
Plains Exploration & Production Company
RIVERSIDE COUNTY OF
NBC TELEMUNDO LICENSE CO.
ORANGE, COUNTY OF, CA
PAPPAS SOUTHERN CALIFORNIA LICENSE, LLC

Company (Continued)

SANTA BARBARA COUNTY
San Bernardino County of California
Southern California Edison Company
Southern California Gas Company
Union Pacific Railroad Company
VENOCO, INC.
Ventura, County of
West End Communications Authority
BAY CITY TELEVISION, INC
CBS Broadcasting Inc
GULF-CALIFORNIA BROADCAST COMPANY
KRCA License Corporation
KTLA INC
LOS ANGELES TELEVISION STATION KCAL LLC
Time Warner NY Cable, Inc
American Tower, LLC
CNG Communications, Inc.
AT&T California
ALASCOM, Inc.
Bellsouth Telecommunications, Inc.
Indiana Bell Telephone Company, Inc
Ohio Bell Telephone Company
Illinois Bell Telephone Company
Michigan Bell Telephone Company
Wisconsin Bell Inc.
Southwestern Bell Telephone Company
Cincinnati Bell Telephone Company LLC
Carolina Telephone and Telegraph Company, LLC
Hawaiian Telecom
Qwest Corporation
Verizon California, Inc.
Verizon New York, Inc.
Verizon New Jersey, Inc.
Verizon Pennsylvania, Inc.
Verizon Maryland, Inc.
Verizon Delaware, Inc.
Verizon Washington DC, Inc.
Verizon Virginia, Inc.
Verizon New England, Inc.
Verizon North, Inc.
Verizon South, Inc.
Verizon Northwest, Inc.
United Telephone Southeast, LLC
Chicago Comnet Corp.
Ascent Media Network Services, LLC
Mercury Communications
Quick Link Connections, Inc.
Onboard Images

Company (Continued)

Direct Broadcasting Service, Inc.
Village Video Production, Inc.
New England Satellite Systems, Inc.
Society of Broadcast Engineers (SBE) Representatives
Steven K. Moreen
NSM Surveillance
Information Super Station, LLC
Broadcast Communications Microwave, Inc.
Global Microwave Systems, Inc
Penn Service Microwave Company, Inc.
HF Enterprises, Inc. dba HSE Communications, Inc.
Broadcast Sports Corporation
Broadcast Sports Enterprises, Inc.
HBJ Parkes, Inc.
Westar Satellite Services, LP
RF Central, LLC
Tom R. Borgeson
MidCom, Inc.
Metro Networks Communications, Inc.
Broadcast Photography Services, Inc.
Universal Satellite Communications Incorporated
Norlight Telecommunications, Inc.
International Communications Group, Inc. dba Corban Networks
John Casper
AMCI Acquisition, LP
Radiofone, Inc. dba Alltel
Regulus Media Services, Inc.
Kentucky RSA 3 Cellular General Partnership
Kentucky RSA 4 Cellular General Partnership
Plateau Telecommunications, Inc.
Remote Facilities Consulting Services
Winged Vision, Inc.
RCC Minnesota, Inc.
Goodyear Tire & Rubber Company
New England Digital Distribution, Inc.
Navajo Communications Company, Inc.
VYVX, LLC
Centurytel of the Southwest, Inc.
Production & Satellite Services, Inc.
Total RF Marketing, Inc.
DCI II, Inc
Western Technical Services (a Division of Focus Communications, Inc.)
Wexler Video Inc.
3G Wireless, LLC
Information & Display Systems, Inc.
Elena Cohen
Speedshotz, Inc
On Scene Video Production
Remote Broadcasts, Inc.
Plum TV, LLC
Public Television Communications Center, Troy Public Broadcasting

Company (Continued)

NorthWest Suburbs Community Access Corporation dba NorthWest Community Television
Aerial Video Systems
RF Film, Inc.
Citywide News Network, Inc.
Mr. William Heiden
Wolfe Air Aviation
RF Technology, 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: 11/02/2008
Job Number: 081012COMSJC02

Administrative Information

Status: ENGINEER PROPOSAL
Call Sign: KA31
Licensee Code: VIZSAT
Licensee Name: Vizada Satellite, Inc.

Site Information SANTA PAULA, CALIFORNIA

Venue Name
Latitude (NAD 83): 34° 24' 5.0" N
Longitude (NAD 83): 119° 4' 29.4" W
Climate Zone: A
Rain Zone: 4
Ground Elevation (AMSL): 228.6 m / 750.0 ft

Link Information

Satellite Type: Geostationary
Mode: TR - Transmit-Receive
Modulation: Digital
Satellite Arc: 48° W to 190° West Longitude
Azimuth Range: 101.0° to 258.9°
Corresponding Elevation Angles: 6.9° / 7.0°
Antenna Centerline (AGL): 9.14 m / 30.0 ft

Antenna Information

	Receive	Transmit
Manufacturer	Philco Ford	Philco Ford
Model	12.8 Meter	12.8 Meter
Gain / Diameter	52.8 dBi / 12.8 m	56.0 dBi / 12.8 m
3-dB / 15-dB Beamwidth	0.40° / 1.00°	0.20° / 0.60°

2K50G1D to 100KG1X

Max Available RF Power	(dBW/4 kHz)	9.7	-9.2
	(dBW/MHz)	9.7	4.8
Maximum EIRP	(dBW/4 kHz)	65.7	46.8
	(dBW/MHz)	65.7	60.8

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	Transmit 6.1 GHz
Emission / Frequency Range (MHz)	2K50G1D - 100KG1X / 3600.0 - 3629.0	2K50G1D - 100KG1X / 6425.0 - 6454.0

Max Great Circle Coordination Distance	603.3 km / 374.8 mi	472.1 km / 293.3 mi
Precipitation Scatter Contour Radius	412.7 km / 256.4 mi	355.2 km / 220.7 mi

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

SANTA PAULA, CA

Licensee Name Vizada Satellite, Inc.
Latitude (NAD 83) 34° 24' 5.0" N
Longitude (NAD 83) 119° 4' 29.4" W
Ground Elevation (AMSL) 228.6 m / 750.0 ft
Antenna Centerline (AGL) 9.14 m / 30.0 ft
Antenna Model Philco Ford 12.8 Meter
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 9.7 (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	7.64	100.96	-10.00	107.50	-10.00	100.00
5	8.43	95.96	-10.00	100.00	-10.00	100.00
10	9.54	90.96	-10.00	100.00	-10.00	100.00
15	10.01	85.97	-10.00	100.00	-10.00	100.00
20	10.99	80.99	-10.00	100.00	-10.00	100.00
25	11.37	76.01	-10.00	100.00	-10.00	100.00
30	12.08	71.05	-10.00	100.00	-10.00	100.00
35	12.62	66.09	-10.00	100.00	-10.00	100.00
40	13.07	61.15	-10.00	100.00	-10.00	100.00
45	12.38	56.14	-10.00	100.00	-10.00	100.00
50	11.66	51.13	-10.00	100.00	-10.00	100.00
55	9.60	46.03	-9.58	100.00	-9.58	100.00
60	8.50	40.99	-8.32	106.08	-8.32	100.00
65	8.43	35.99	-6.91	112.43	-6.91	100.00
70	7.65	30.97	-5.27	126.62	-5.27	100.00
75	7.85	25.98	-3.37	132.58	-3.37	100.00
80	7.81	20.99	-1.05	142.12	-1.05	100.00
85	7.50	15.98	1.91	162.30	1.91	104.48
90	6.89	10.97	6.00	197.01	6.00	127.19
95	6.48	5.98	12.58	242.10	12.58	162.50
100	6.19	1.19	30.12	603.28	30.12	472.06
105	5.30	4.19	16.46	299.00	16.46	207.63
110	5.94	7.79	9.71	230.18	9.71	153.86
115	4.80	12.41	4.65	212.28	4.65	142.99
120	3.17	17.30	1.05	222.22	1.05	155.77
125	2.13	21.76	-1.44	232.55	-1.44	169.26
130	2.23	25.41	-3.12	220.44	-3.12	157.00
135	1.92	29.20	-4.63	220.25	-4.63	157.83
140	1.22	33.10	-6.00	234.71	-6.00	174.60
145	0.26	37.02	-7.21	296.37	-7.21	223.60
150	0.00	40.23	-8.11	297.56	-8.11	225.28
155	0.00	42.98	-8.83	292.82	-8.83	222.15
160	0.00	45.37	-9.42	289.00	-9.42	219.63
165	0.00	47.33	-9.88	286.05	-9.88	217.69
170	0.00	48.80	-10.00	285.28	-10.00	217.18
175	0.22	49.50	-10.00	282.34	-10.00	214.87
180	1.15	48.88	-10.00	215.78	-10.00	156.52

COMSEARCH

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Coordination Values

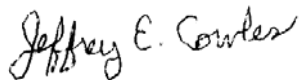
SANTA PAULA, CA

Licensee Name	Vizada Satellite, Inc		
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Longitude (NAD 83)	119° 4' 29.4" W		
Ground Elevation (AMSL)	228.6 m / 750.0 ft		
Antenna Centerline (AGL)	9.14 m / 30.0 ft		
Antenna Model	Philco Ford 12.8 Meter		
Antenna Mode	Receive 4.0 GHz		
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	Transmit 6.1 GHz -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	9.7 (dBW/4 kHz)		

Azimuth (°)	Receive 4.0 GHz		Transmit 6.1 GHz			
	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
185	2.15	47.59	-9.94	191.30	-9.94	131.71
190	3.24	45.74	-9.51	166.66	-9.51	113.01
195	4.50	43.28	-8.91	145.19	-8.91	100.00
200	3.29	42.60	-8.74	171.14	-8.74	115.03
205	4.12	39.70	-7.97	155.56	-7.97	103.85
210	2.48	38.39	-7.60	195.07	-7.60	134.21
215	5.33	33.35	-6.08	147.04	-6.08	100.00
220	6.77	29.20	-4.63	137.45	-4.63	100.00
225	5.52	26.77	-3.69	156.84	-3.69	102.97
230	4.95	23.63	-2.34	173.37	-2.34	113.97
235	5.81	19.41	-0.20	174.67	-0.20	113.91
240	5.39	15.91	1.96	192.04	1.96	126.65
245	6.55	11.33	5.64	199.28	5.64	129.48
250	5.63	7.97	9.46	232.53	9.46	156.18
255	5.79	3.91	17.19	292.90	17.19	201.97
260	6.16	1.36	28.70	592.18	28.70	462.32
265	7.47	6.07	12.41	226.27	12.41	148.51
270	6.81	11.06	5.91	197.48	5.91	127.69
275	5.46	16.13	1.81	190.44	1.81	125.44
280	4.92	21.16	-1.14	180.52	-1.14	119.05
285	5.26	26.11	-3.42	161.38	-3.42	106.51
290	5.46	31.09	-5.32	149.25	-5.32	100.00
295	6.13	36.07	-6.93	134.77	-6.93	100.00
300	6.11	41.06	-8.34	130.64	-8.34	100.00
305	5.57	46.07	-9.59	130.97	-9.59	100.00
310	6.15	51.06	-10.00	123.57	-10.00	100.00
315	5.92	56.06	-10.00	125.97	-10.00	100.00
320	5.90	61.06	-10.00	126.18	-10.00	100.00
325	5.26	66.07	-10.00	132.33	-10.00	100.00
330	5.31	71.07	-10.00	131.84	-10.00	100.00
335	6.24	76.06	-10.00	122.62	-10.00	100.00
340	7.68	81.06	-10.00	107.13	-10.00	100.00
345	8.00	86.06	-10.00	103.82	-10.00	100.00
350	8.07	91.06	-10.00	103.18	-10.00	100.00
355	8.28	96.06	-10.00	101.30	-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: November 2, 2008