

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 contours include all the area within this route as well as all of the area seaward of this route within 200 km of the baseline of the United States or 200 km from any fixed service offshore installations.

Date: 05/26/2010
Job Number: 100526SKJTEL03

Administrative Information

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

Site Information ANCHORAGE, AK

Venue Name
Latitude (NAD 83) 61° 14' 27.6" N
Longitude (NAD 83) 149° 53' 16.8" W
Climate Zone B
Rain Zone 2
Ground Elevation (AMSL) 0.0 m / 0.0 ft

Link Information

Satellite Type Geostationary
Mode TO - Transmit-Only
Modulation Digital
Satellite Arc 177° W to 177° West Longitude
Azimuth Range 210.3° to 210.3°
Corresponding Elevation Angles 17.0° / 17.0°
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 - 205KG7D / 6277.0 - 6283.0
102KG7D - 205KG7D / 6295.5 - 6298.0
102KG7D - 205KG7D / 6344.0 - 6350.0
102KG7D - 205KG7D / 6355.0 - 6371.5
102KG7D - 205KG7D / 6418.0 - 6423.0

Max Great Circle Coordination Distance 221.0 km / 137.3 mi
Precipitation Scatter Contour Radius 100.0 km / 62.1 mi

Coordination Values	ANCHORAGE, AK
Licensee Name	Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83)	61° 14' 27.6" N
Longitude (NAD 83)	149° 53' 16.8" 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	145.65	-10.00	160.62
5	0.00	149.83	-10.00	160.62
10	0.00	153.74	-10.00	160.62
15	0.00	157.26	-10.00	160.62
20	1.14	161.13	-10.00	100.00
25	1.65	163.75	-10.00	100.00
30	2.14	165.10	-10.00	100.00
35	2.28	164.52	-10.00	100.00
40	2.25	162.36	-10.00	100.00
45	2.30	159.28	-10.00	100.00
50	2.35	155.59	-10.00	100.00
55	2.76	151.68	-10.00	100.00
60	3.00	147.41	-10.00	100.00
65	3.05	142.90	-10.00	100.00
70	2.76	138.20	-10.00	100.00
75	2.89	133.55	-10.00	100.00
80	3.05	128.86	-10.00	100.00
85	3.01	124.08	-10.00	100.00
90	3.06	119.30	-10.00	100.00
95	3.05	114.48	-10.00	100.00
100	2.90	109.64	-10.00	100.00
105	2.82	104.80	-10.00	100.00
110	2.68	99.96	-10.00	100.00
115	2.53	95.11	-10.00	100.00
120	2.04	90.27	-10.00	100.00
125	1.41	85.46	-10.00	100.00
130	1.16	80.66	-10.00	100.00
135	1.16	75.86	-10.00	100.00
140	0.98	71.08	-10.00	103.19
145	0.92	66.32	-10.00	106.27
150	0.87	61.57	-10.00	108.45
155	0.82	56.85	-10.00	110.62
160	0.83	52.15	-10.00	110.36
165	0.83	47.50	-9.92	110.74
170	0.74	42.93	-8.82	115.69
175	0.61	38.47	-7.63	125.95
180	0.65	34.06	-6.31	128.28
185	0.35	29.99	-4.92	161.58

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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 (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.36	26.04	-3.39	167.42
195	0.32	22.51	-1.81	182.09
200	0.00	19.83	-0.43	211.06
205	0.00	17.82	0.73	218.02
210	0.00	17.05	1.21	220.97
215	0.00	17.67	0.82	218.59
220	0.00	19.55	-0.28	211.98
225	0.00	22.37	-1.74	203.39
230	0.00	25.84	-3.31	194.17
235	0.20	29.61	-4.78	185.60
240	0.00	33.87	-6.24	178.56
245	0.00	38.20	-7.55	172.07
250	0.00	42.66	-8.75	166.34
255	0.00	47.20	-9.85	161.30
260	0.00	51.82	-10.00	160.62
265	0.00	56.48	-10.00	160.62
270	0.00	61.18	-10.00	160.62
275	0.00	65.90	-10.00	160.62
280	0.00	70.64	-10.00	160.62
285	0.00	75.40	-10.00	160.62
290	0.00	80.17	-10.00	160.62
295	0.25	84.94	-10.00	153.87
300	0.43	89.73	-10.00	132.31
305	0.42	94.52	-10.00	133.55
310	0.42	99.31	-10.00	132.79
315	0.50	104.09	-10.00	125.45
320	0.83	108.90	-10.00	110.45
325	1.12	113.71	-10.00	100.00
330	0.80	118.42	-10.00	111.76
335	0.67	123.12	-10.00	115.95
340	0.72	127.82	-10.00	115.50
345	0.41	132.39	-10.00	134.06
350	0.23	136.91	-10.00	156.79
355	0.00	141.30	-10.00	160.62

ESV Break Points

Name	Latitude	Longitude
bp1	55.525	-155.185
bp1a	53.95	-163.133
bp1b	54.45	-165.283
bp2	55.76	-159.499
bp3	58.864	-153.264
bp4	59.077	-154.364
bp5	61.205	-151.27
bp6	61.321	-150.578
bp7	61.253	-149.977
bp8	61.407	-149.943
bp9	61.531	-149.359
bp10	61.484	-149.227
bp11	61.326	-149.753
bp12	61.202	-149.934
bp13	61.2	-150.014
bp14	61.157	-150.069
bp15	60.841	-148.935
bp16	60.958	-150.62
bp17	60.647	-151.358
bp18	60.544	-151.218
bp19	59.701	-151.779
bp20	59.836	-150.836
bp21	59.199	-151.731
bp22	59.753	-150.206
bp23	57.804	-150.833
bp24	55.525	-155.185
port1	61.241	-149.888
port2	61.268	-149.914
port3	60.532	-151.253
port4	59.603	-151.41
port5	59.439	-151.72
port6	57.787	-152.402





