

## **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: 100526SKJTEL02

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**Administrative Information**

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

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**Site Information NOME, AK**

Venue Name  
Latitude (NAD 83) 64° 30' 7.2" N  
Longitude (NAD 83) 165° 25' 33.6" W  
Climate Zone B  
Rain Zone 2  
Ground Elevation (AMSL) 0.0 m / 0.0 ft

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**Link Information**

Satellite Type Geostationary  
Mode TO - Transmit-Only  
Modulation Digital  
Satellite Arc 177° W to 177° West Longitude  
Azimuth Range 192.8° to 192.8°  
Corresponding Elevation Angles 16.6° / 16.6°  
Antenna Centerline (AGL) 15.54 m / 51.0 ft

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**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%

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**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 222.1 km / 138.0 mi  
Precipitation Scatter Contour Radius 100.0 km / 62.1 mi

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**Coordination Values****NOME, AK**

Licensee Name Vizada Satellite Inc -ESV In-Motion  
Latitude (NAD 83) 64° 30' 7.2" N  
Longitude (NAD 83) 165° 25' 33.6" 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	1.44	160.26	-10.00	100.00
5	0.45	162.11	-10.00	129.78
10	1.50	164.64	-10.00	100.00
15	2.46	165.68	-10.00	100.00
20	2.47	164.15	-10.00	100.00
25	2.06	161.09	-10.00	100.00
30	1.59	157.30	-10.00	100.00
35	1.14	153.15	-10.00	100.00
40	2.18	149.45	-10.00	100.00
45	1.61	144.80	-10.00	100.00
50	1.39	140.21	-10.00	100.00
55	0.71	135.42	-10.00	115.94
60	0.69	130.78	-10.00	117.26
65	0.58	126.07	-10.00	120.63
70	0.29	121.31	-10.00	148.24
75	0.39	116.59	-10.00	136.20
80	0.52	111.84	-10.00	124.10
85	0.52	107.06	-10.00	123.76
90	0.48	102.27	-10.00	126.80
95	0.00	97.45	-10.00	160.62
100	0.00	92.66	-10.00	160.62
105	0.00	87.87	-10.00	160.62
110	0.00	83.08	-10.00	160.62
115	0.00	78.30	-10.00	160.62
120	0.00	73.52	-10.00	160.62
125	0.00	68.75	-10.00	160.62
130	0.00	64.00	-10.00	160.62
135	0.00	59.28	-10.00	160.62
140	0.00	54.58	-10.00	160.62
145	0.00	49.91	-10.00	160.62
150	0.00	45.31	-9.40	163.32
155	0.00	40.77	-8.26	168.66
160	0.00	36.33	-7.01	174.74
165	0.00	32.03	-5.64	181.67
170	0.00	27.93	-4.15	189.54
175	0.00	24.15	-2.57	198.66
180	0.00	20.85	-0.98	207.84
185	0.00	18.30	0.44	216.28

<b>Coordination Values</b>		<b>NOME, AK</b>	
Licensee Name	Vizada Satellite Inc -ESV In-Motion		
Latitude (NAD 83)	64° 30' 7.2" N		
Longitude (NAD 83)	165° 25' 33.6" 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)
190	0.00	16.84	1.34	221.79
195	0.00	16.75	1.40	222.12
200	0.00	18.07	0.58	217.10
205	0.00	20.52	-0.80	208.86
210	0.00	23.75	-2.39	199.68
215	0.00	27.49	-3.98	190.48
220	0.00	31.55	-5.48	182.51
225	0.00	35.83	-6.86	175.48
230	0.00	40.26	-8.12	169.31
235	0.00	44.79	-9.28	163.89
240	0.00	49.39	-10.00	160.62
245	0.00	54.05	-10.00	160.62
250	0.00	58.75	-10.00	160.62
255	0.00	63.47	-10.00	160.62
260	0.00	68.22	-10.00	160.62
265	0.00	72.98	-10.00	160.62
270	0.00	77.76	-10.00	160.62
275	0.00	82.55	-10.00	160.62
280	0.00	87.34	-10.00	160.62
285	0.00	92.13	-10.00	160.62
290	0.00	96.92	-10.00	160.62
295	0.00	101.70	-10.00	160.62
300	0.00	106.48	-10.00	160.62
305	0.00	111.25	-10.00	160.62
310	0.00	116.00	-10.00	160.62
315	0.00	120.72	-10.00	160.62
320	0.00	125.42	-10.00	160.62
325	0.00	130.09	-10.00	160.62
330	0.00	134.69	-10.00	160.62
335	0.00	139.23	-10.00	160.62
340	0.00	143.67	-10.00	160.62
345	0.00	147.97	-10.00	160.62
350	0.47	152.33	-10.00	127.70
355	1.10	156.57	-10.00	100.00

### ESV Break Points

Name	Latitude	Longitude
Port	64.502	-165.426
BP1	64.491	-165.439
West	64.608	-166.95
South	64.216	-165.426
East	64.205	-163.857



