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:	100526SKJTEL07

Administrative Information

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

Site Information	**PRINCEWILLIA, AK**
Venue Name	
Latitude (NAD 83)	60° 46' 40.8" N
Longitude (NAD 83)	148° 41' 34.8" 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	211.7° to 211.7°
Corresponding Elevation Angles	17.1° / 17.1°
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	160.6 km / 99.8 mi
Precipitation Scatter Contour Radius	100.0 km / 62.1 mi

Coordination Values	**PRINCEWILLIA, AK**
Licensee Name	Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83)	60° 46' 40.8" N
Longitude (NAD 83)	148° 41' 34.8" 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)

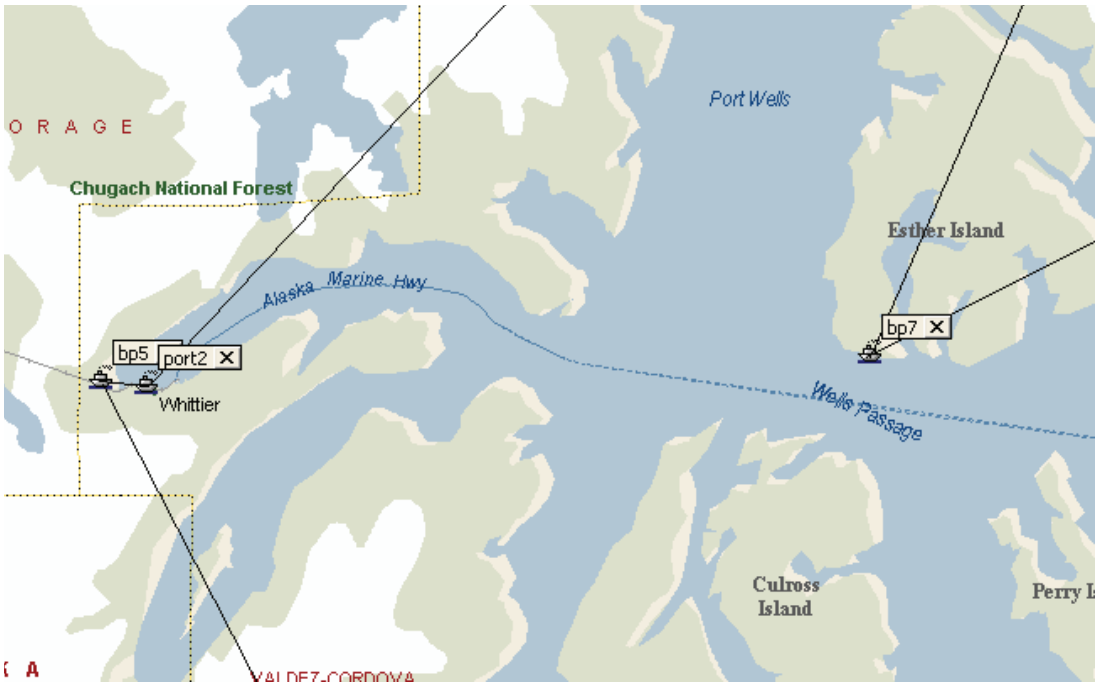
			Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)
0	17.15	148.32	-10.00	100.00
5	14.96	153.24	-10.00	100.00
10	13.51	158.03	-10.00	100.00
15	11.62	162.46	-10.00	100.00
20	9.97	166.32	-10.00	100.00
25	8.35	168.97	-10.00	100.00
30	6.07	168.79	-10.00	100.00
35	3.69	166.15	-10.00	100.00
40	1.41	162.25	-10.00	100.00
45	0.57	158.85	-10.00	121.12
50	0.00	155.11	-10.00	160.62
55	0.00	151.34	-10.00	160.62
60	0.00	147.26	-10.00	160.62
65	0.00	142.98	-10.00	160.62
70	1.52	139.07	-10.00	100.00
75	3.01	134.87	-10.00	100.00
80	4.64	130.48	-10.00	100.00
85	5.39	125.79	-10.00	100.00
90	6.37	121.06	-10.00	100.00
95	8.20	116.33	-10.00	100.00
100	9.07	111.45	-10.00	100.00
105	10.33	106.56	-10.00	100.00
110	9.87	101.58	-10.00	100.00
115	10.52	96.63	-10.00	100.00
120	10.78	91.67	-10.00	100.00
125	10.81	86.70	-10.00	100.00
130	12.03	81.71	-10.00	100.00
135	13.49	76.71	-10.00	100.00
140	13.86	71.71	-10.00	100.00
145	14.08	66.71	-10.00	100.00
150	13.99	61.72	-10.00	100.00
155	13.45	56.76	-10.00	100.00
160	13.37	51.78	-10.00	100.00
165	13.25	46.80	-9.76	100.00
170	12.88	41.86	-8.54	100.00
175	12.57	36.92	-7.18	100.00
180	12.52	31.98	-5.62	100.00
185	12.63	27.03	-3.80	100.00

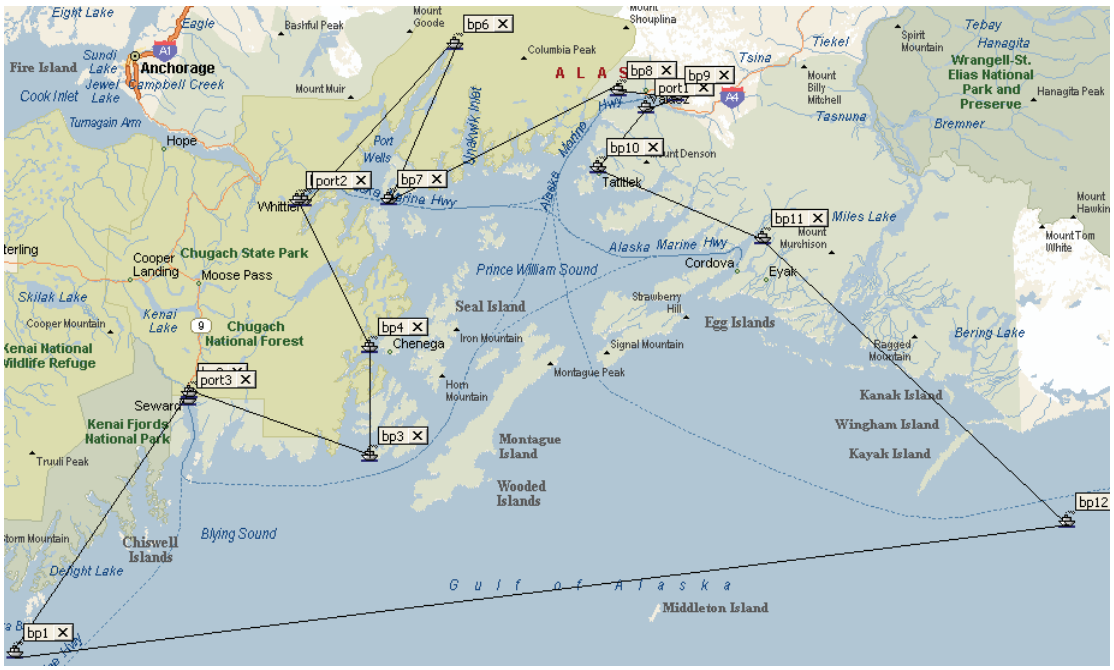
Coordination Values	**PRINCEWILLIA, AK**
Licensee Name	Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83)	60° 46' 40.8" N
Longitude (NAD 83)	148° 41' 34.8" W
Ground Elevation (AMSL)	0.0 m / 0.0 ft
Antenna Centerline (AGL)	15.54 m / 51.0 ft
Antenna Model	FCC Reference 32-25LOG(THETA)
Antenna Mode	Transmit 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)

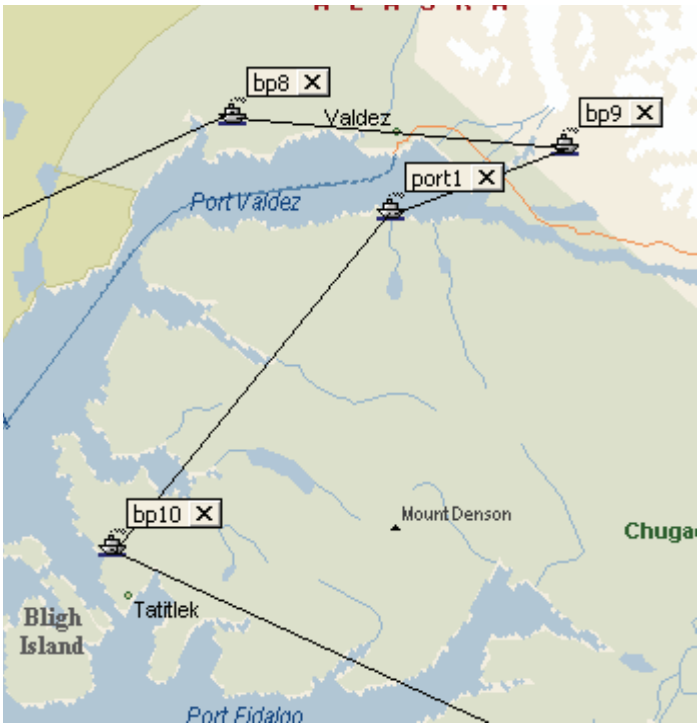
			Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)
190	12.22	22.20	-1.66	100.00
195	13.54	17.05	1.21	100.00
200	17.62	11.69	5.31	100.00
205	18.42	6.80	11.19	100.00
210	17.98	1.87	25.20	100.00
215	17.72	3.37	18.80	100.00
220	16.95	8.32	8.99	100.00
225	16.67	13.33	3.88	100.00
230	14.93	18.45	0.35	100.00
235	11.33	24.00	-2.50	100.00
240	8.22	29.58	-4.78	100.00
245	6.36	34.83	-6.55	100.00
250	6.34	39.59	-7.94	100.00
255	5.57	44.54	-9.22	100.00
260	7.67	49.01	-10.00	100.00
265	10.35	53.62	-10.00	100.00
270	12.43	58.44	-10.00	100.00
275	13.32	63.39	-10.00	100.00
280	13.81	68.36	-10.00	100.00
285	13.96	73.35	-10.00	100.00
290	15.57	78.33	-10.00	100.00
295	14.92	83.33	-10.00	100.00
300	15.39	88.32	-10.00	100.00
305	15.54	93.32	-10.00	100.00
310	17.04	98.32	-10.00	100.00
315	15.87	103.32	-10.00	100.00
320	11.28	108.22	-10.00	100.00
325	9.90	113.12	-10.00	100.00
330	11.54	118.17	-10.00	100.00
335	14.17	123.27	-10.00	100.00
340	14.63	128.28	-10.00	100.00
345	15.52	133.30	-10.00	100.00
350	16.23	138.31	-10.00	100.00
355	18.08	143.31	-10.00	100.00

ESV Break Points

Name	Latitude	Longitude
bp1	59.272	-150.486
bp2	60.142	-149.414
bp3	59.954	-148.214
bp4	60.308	-148.223
bp5	60.78	-148.73
bp6	61.295	-147.675
bp7	60.79	-148.114
bp8	61.144	-146.557
bp9	61.127	-146.157
bp10	60.896	-146.698
bp11	60.658	-145.586
bp12	59.702	-143.634
bp13	59.272	-150.486
port1	61.09	-146.367
port2	60.778	-148.693
port3	60.12	-149.424


Port Wells
Chugach National Forest
Esther Island
Alaska Marine Hwy
bp5
port2
bp7
Whittier
Wells Passage
Culross Island
Perry I


Eight Lake
Eagle
Bashful Peak
Mount Goode
bp6
Columbia Peak
Mount Shoupiina
Tebay
Hanagita
Tiekel
Spirit Mountain
Wrangell-St. Elias National Park and Preserve
Hanagita Peak
Fire Island
Sundi Lake
Jewel Lake
Anchorage
Campbell Creek
Cook Inlet
Mount Muir
bp8
bp9
port1
Tsina
Mount Billy Mitchell
Tasnuna
Bremner
Turnagain Arm
Hope
Port Wells
Shelikof Inlet
Alaska Marine Hwy
bp10
Mount Denson
Tatitlek
port2
bp7
Whittier
bp11
Miles Lake
Mount Hawkin
Mount Tom White
Cooper Landing
Chugach State Park
Moose Pass
Alaska Marine Hwy
Cordova
Eyak
Prince William Sound
Skilak Lake
Seal Island
Strawberry Hill
Egg Islands
Kenai Lake
Cooper Mountain
Chugach National Forest
bp4
Chenega
Iron Mountain
Signal Mountain
Bering Lake
Ragged Mountain
Kenai National Wildlife Refuge
port3
Montague Peak
Seward
Horn Mountain
Kanak Island
Kenai Fjords National Park
Wingham Island
bp3
Montague Island
Kayak Island
Truuli Peak
Wooded Islands
bp12
Chiswell Islands
Blying Sound
Delight Lake
G u l f o f A l a s k a
Middleton Island
bp1


bp8
Valdez
bp9
port1
Port Valdez
bp10
Mount Denson
Tatitlek
Bligh
Island
Port Fidalgo