

Skjei Telecom, Inc.
Earth Station Data Sheet

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 seaward of this route within 200 km of the baseline of the United States or 200 km from any fixed service offshore installations.

Skjei Telecom, Inc.
Earth Station Data Sheet

Date: 05/28/2010
Job Number: 100528SKJTEL01

Administrative Information

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

Site Information **KAUAINIIHAU, HI**

Venue Name
Latitude (NAD 83) 21° 57' 3.6" N
Longitude (NAD 83) 159° 21' 28.8" W
Climate Zone B
Rain Zone 4
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 220.4° to 220.4°
Corresponding Elevation Angles 57.4° / 57.4°
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

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Coordination Values

KAUAINIIHAU, HI

Licensee Name	Vizada Satellite Inc -ESV In-Motion		
Latitude (NAD 83)	21° 57' 3.6" N		
Longitude (NAD 83)	159° 21' 28.8" 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	1.88	115.51	-10.00	100.00
5	1.62	117.26	-10.00	100.00
10	1.26	118.69	-10.00	100.00
15	0.80	119.78	-10.00	111.76
20	0.71	120.94	-10.00	115.84
25	0.64	121.86	-10.00	117.61
30	0.57	122.51	-10.00	121.22
35	0.56	122.95	-10.00	121.77
40	0.55	123.10	-10.00	122.11
45	0.53	122.96	-10.00	123.47
50	0.44	122.47	-10.00	130.74
55	0.54	121.89	-10.00	122.96
60	0.50	120.92	-10.00	125.00
65	0.22	119.48	-10.00	158.13
70	0.00	117.89	-10.00	160.62
75	0.00	116.28	-10.00	160.62
80	0.00	114.49	-10.00	160.62
85	0.00	112.52	-10.00	160.62
90	0.00	110.40	-10.00	160.62
95	0.00	108.16	-10.00	160.62
100	0.00	105.79	-10.00	160.62
105	0.00	103.34	-10.00	160.62
110	0.00	100.80	-10.00	160.62
115	0.86	98.40	-10.00	108.94
120	1.77	95.84	-10.00	100.00
125	3.01	93.13	-10.00	100.00
130	5.62	90.24	-10.00	100.00
135	7.41	87.04	-10.00	100.00
140	10.12	83.50	-10.00	100.00
145	13.77	79.49	-10.00	100.00
150	11.46	76.51	-10.00	100.00
155	10.40	73.51	-10.00	100.00
160	9.37	70.72	-10.00	100.00
165	9.75	67.52	-10.00	100.00
170	9.36	64.79	-10.00	100.00
175	10.44	61.38	-10.00	100.00
180	10.32	58.79	-10.00	100.00
185	11.33	55.59	-10.00	100.00

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Latitude (NAD 83)	21° 57' 3.6" N
Longitude (NAD 83)	159° 21' 28.8" 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)
190	11.96	52.79	-10.00	100.00
195	12.63	50.14	-10.00	100.00
200	14.86	46.36	-9.65	100.00
205	13.71	45.84	-9.53	100.00
210	11.98	46.39	-9.66	100.00
215	11.49	46.20	-9.62	100.00
220	11.39	46.06	-9.58	100.00
225	11.99	45.64	-9.48	100.00
230	9.81	48.37	-10.00	100.00
235	6.41	52.52	-10.00	100.00
240	6.27	53.81	-10.00	100.00
245	3.83	57.37	-10.00	100.00
250	3.25	59.43	-10.00	100.00
255	2.13	62.08	-10.00	100.00
260	1.77	64.25	-10.00	100.00
265	1.65	66.41	-10.00	100.00
270	2.12	68.37	-10.00	100.00
275	1.58	71.04	-10.00	100.00
280	1.37	73.60	-10.00	100.00
285	1.25	76.20	-10.00	100.00
290	1.17	78.85	-10.00	100.00
295	1.45	81.47	-10.00	100.00
300	1.64	84.18	-10.00	100.00
305	1.84	86.96	-10.00	100.00
310	1.92	89.78	-10.00	100.00
315	1.79	92.60	-10.00	100.00
320	2.36	95.48	-10.00	100.00
325	2.30	98.29	-10.00	100.00
330	2.19	101.03	-10.00	100.00
335	2.09	103.69	-10.00	100.00
340	1.92	106.24	-10.00	100.00
345	1.92	108.76	-10.00	100.00
350	1.72	111.04	-10.00	100.00
355	1.67	113.26	-10.00	100.00

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ESV Break Points

Name	Latitude	Longitude
Port 1	21.951	159.358
BP1	21.948	159.358
BP2	21.955	159.348
BP3	21.933	159.346
BP4	21.865	159.437
BP5	21.894	159.595
BP6	21.9	159.588
BP7	21.886	159.607
BP8	21.947	159.67
BP9	21.978	159.761
BP10	22.016	159.789
BP11	21.975	160.06
BP12	21.896	160.073
BP13	21.835	160.165
BP14	21.768	160.208
BP15	21.817	160.264
BP16	21.911	160.221
BP17	21.963	160.129
BP18	22.012	160.103
BP19	22.055	159.792
BP20	22.152	159.725
BP21	22.236	159.562
BP22	22.209	159.505
BP23	22.232	159.493
BP24	22.233	159.403
BP25	22.208	159.326
BP26	22.137	159.288
BP27	21.952	159.332
SW	21.669	159.211
SE	21.93	159.01

The coordination contours include all 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.

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