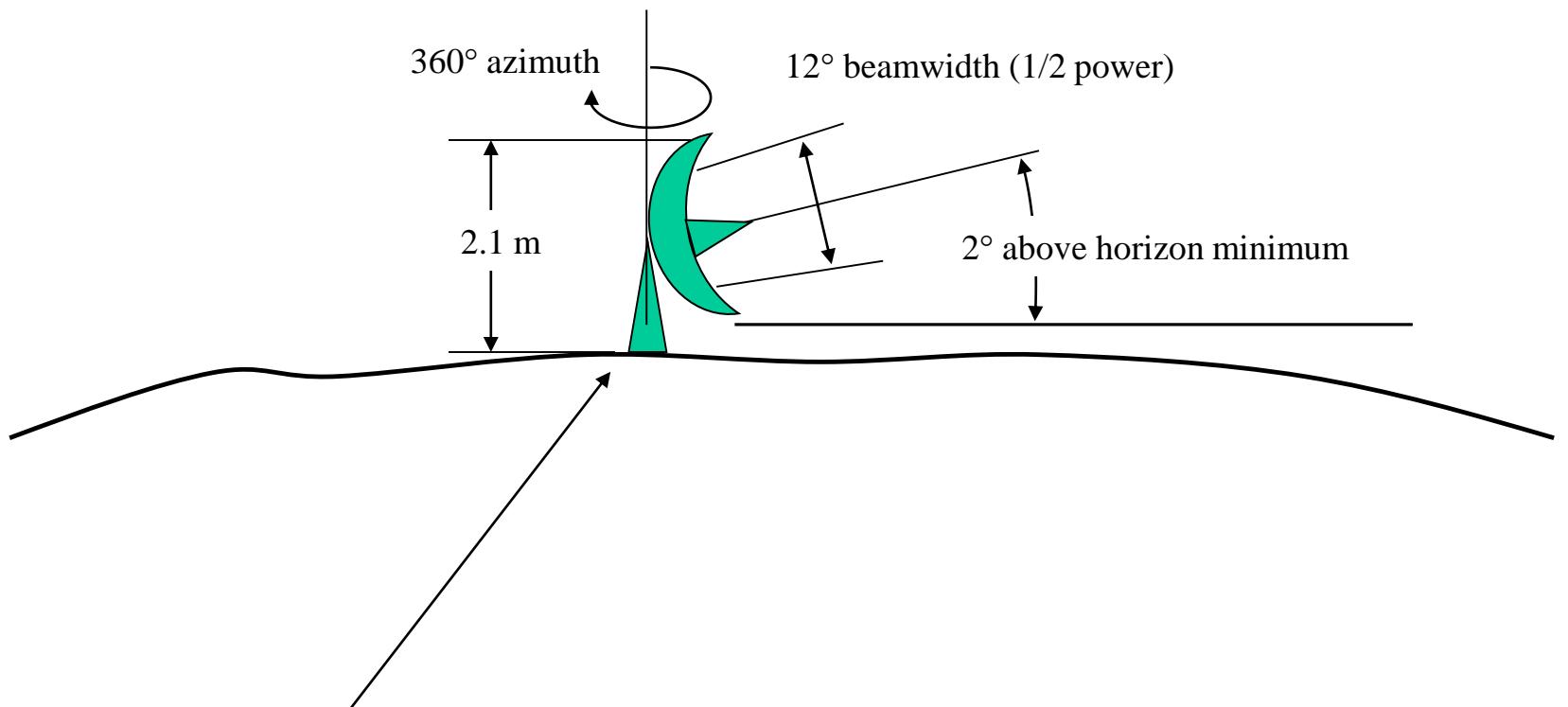


1) Texas A&M antenna

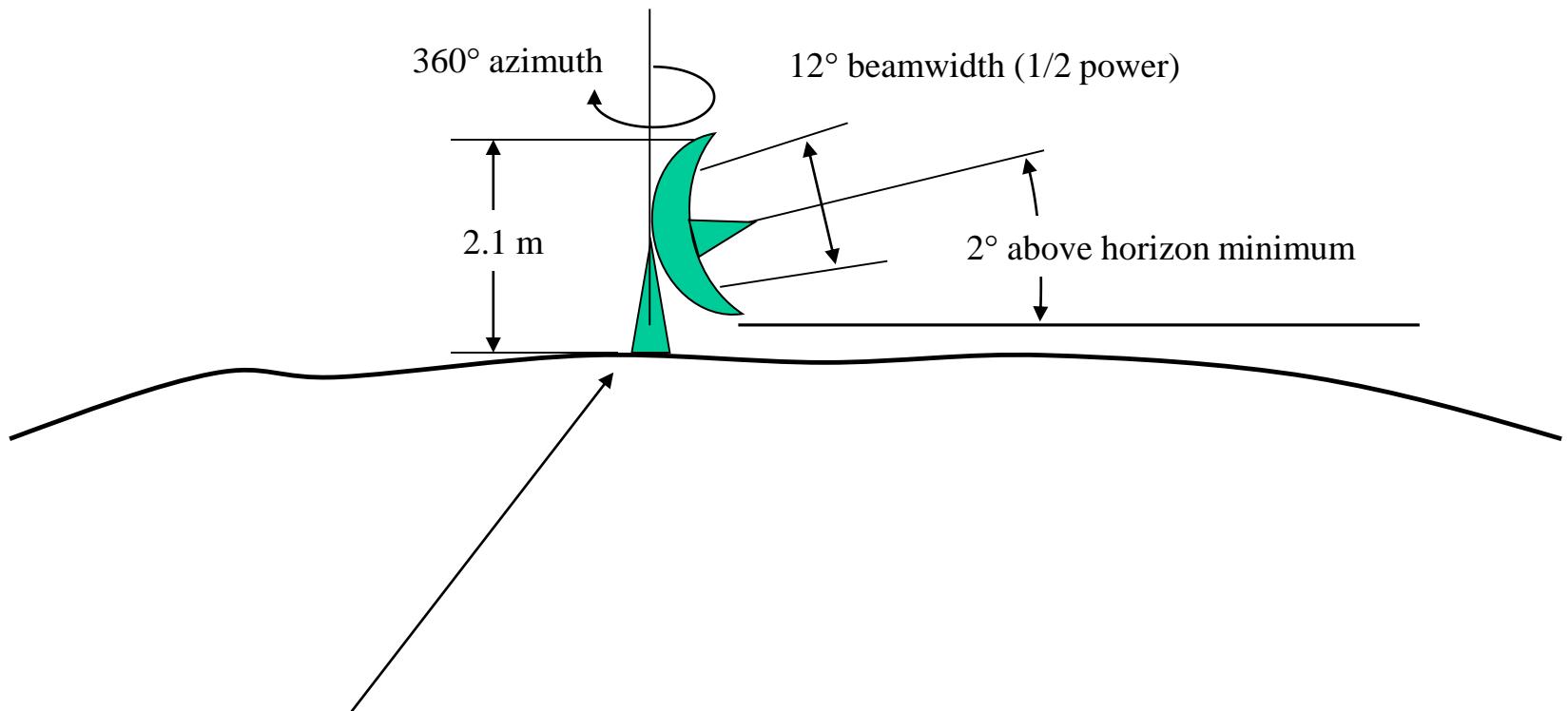
Beam Characteristics and FAA sketch



Bryan, Texas (Brazos county)
($30^{\circ} 38' 35''$ N, $96^{\circ} 28' 21''$ W)
81 meters above sea level
30.6431, -96.4725

2) University of Florida, Gainesville, FL

Beam Characteristics and FAA sketch



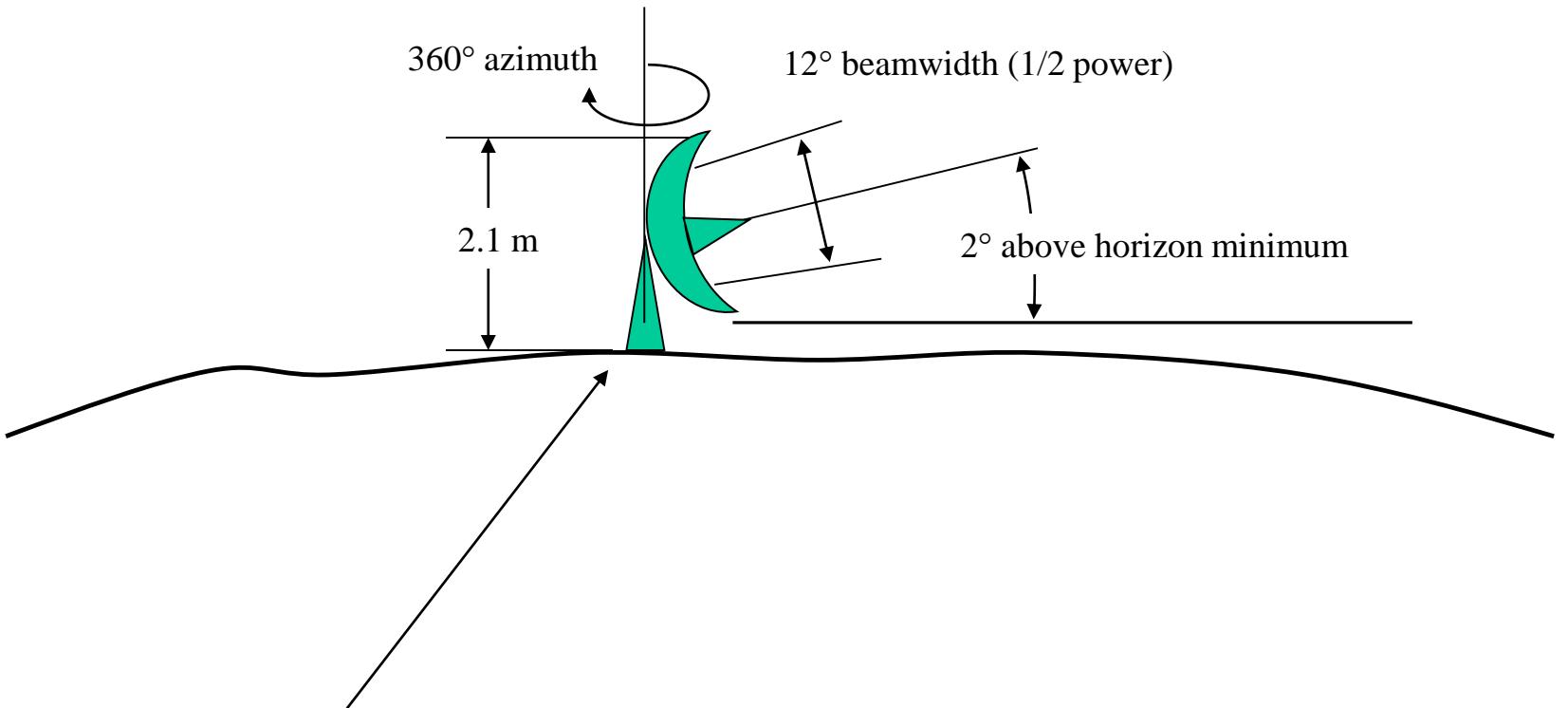
Gainesville, Florida (Alachua county)

($29^{\circ} 37' 37''$ N, $82^{\circ} 21' 39''$ W)

25 meters above sea level

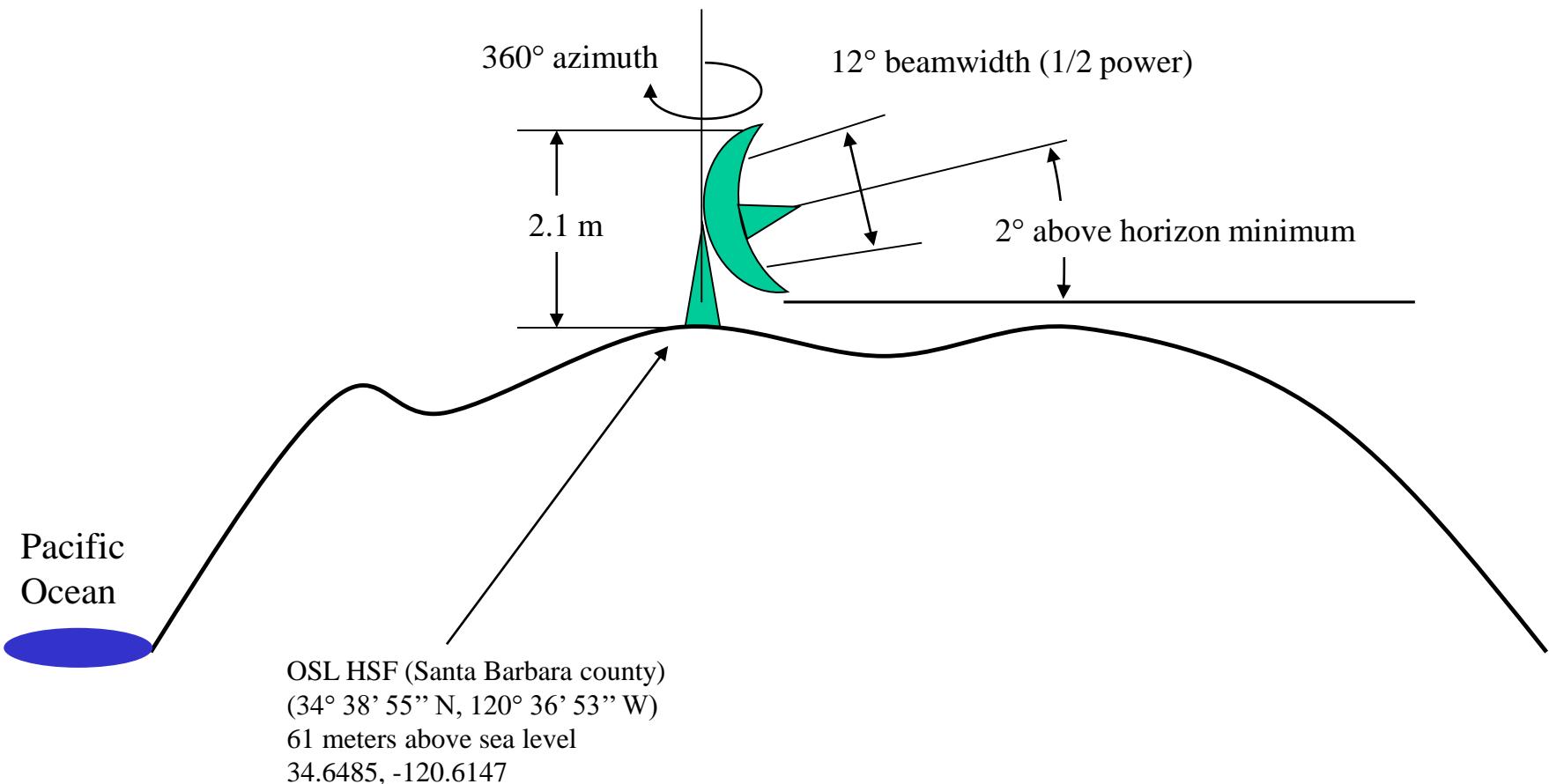
29.6268, -82.3607

3) AFRL/RDSM, Kihei, Maui, HI Beam Characteristics and FAA sketch

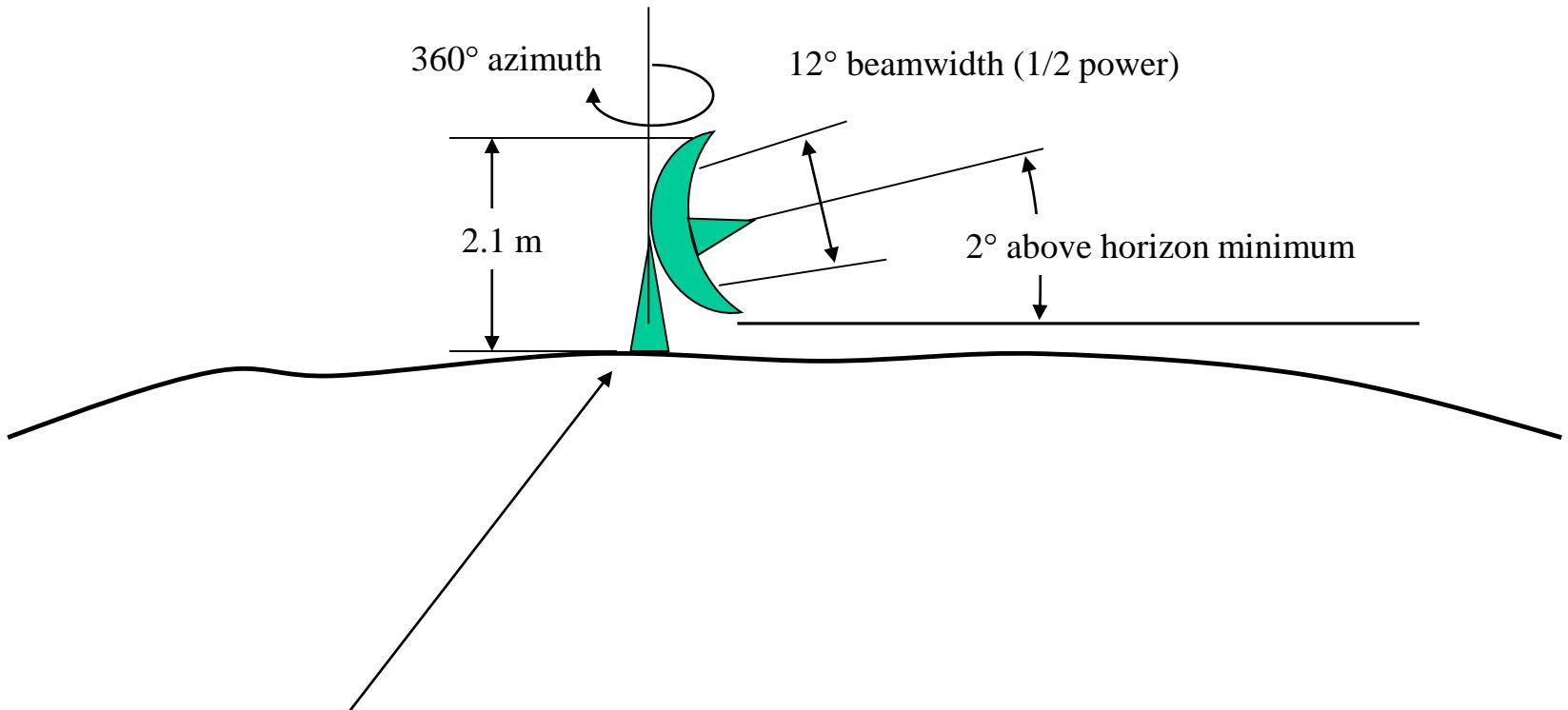


Kihei, HI (Maui county)
($20^{\circ} 44' 48''$ N, $156^{\circ} 25' 53''$ W)
84 meters above sea level
20.7466, -156.4315

4) USAF Base, Vandenberg, CA Beam Characteristics and FAA sketch



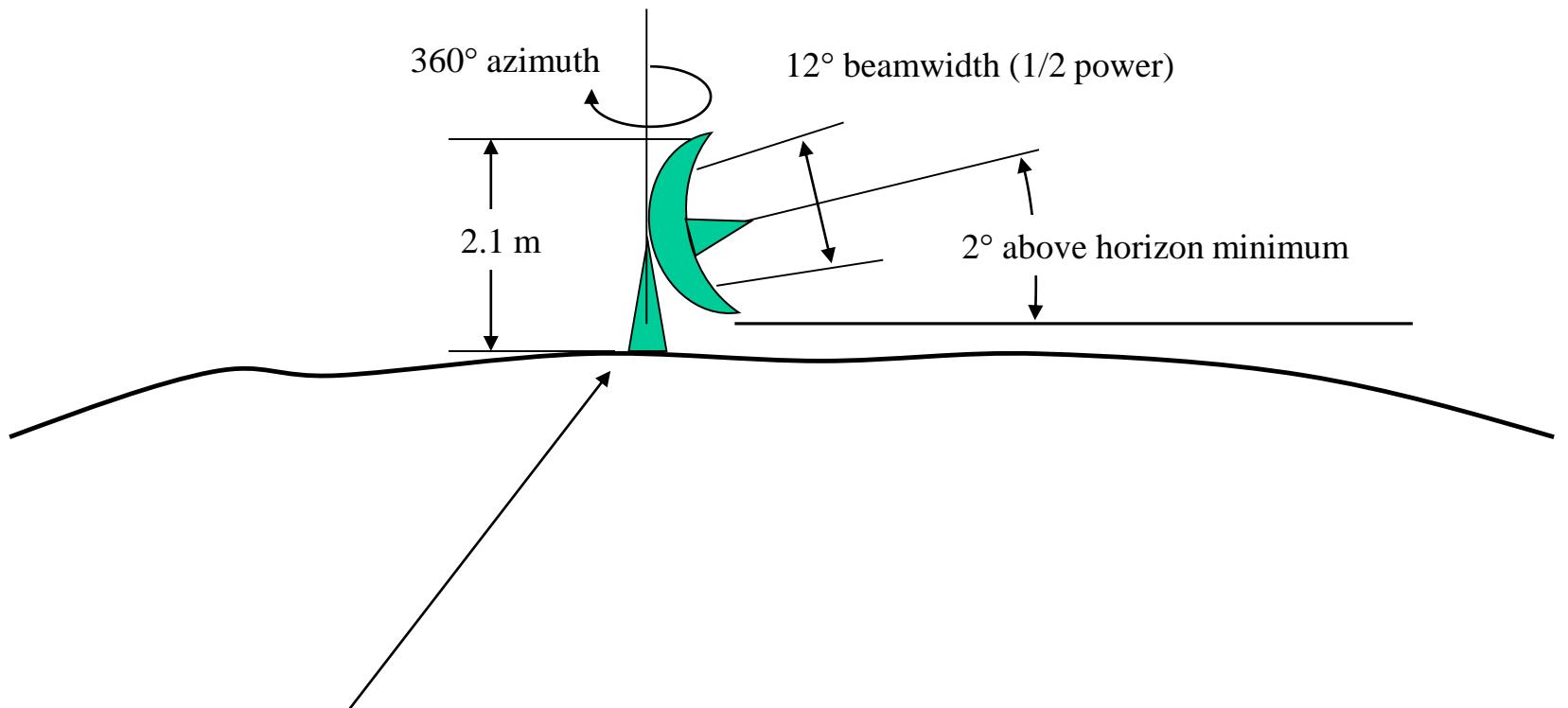
5) University of Minnesota, Ash River, Minnesota Beam Characteristics and FAA sketch



Orr, Minnesota (Nova Far facility, St. Louis county)
(48° 22' 45" N, 92° 49' 56" W)
374 meters above sea level
48.3792, -92.8322

6) LDA, Limestone, ME

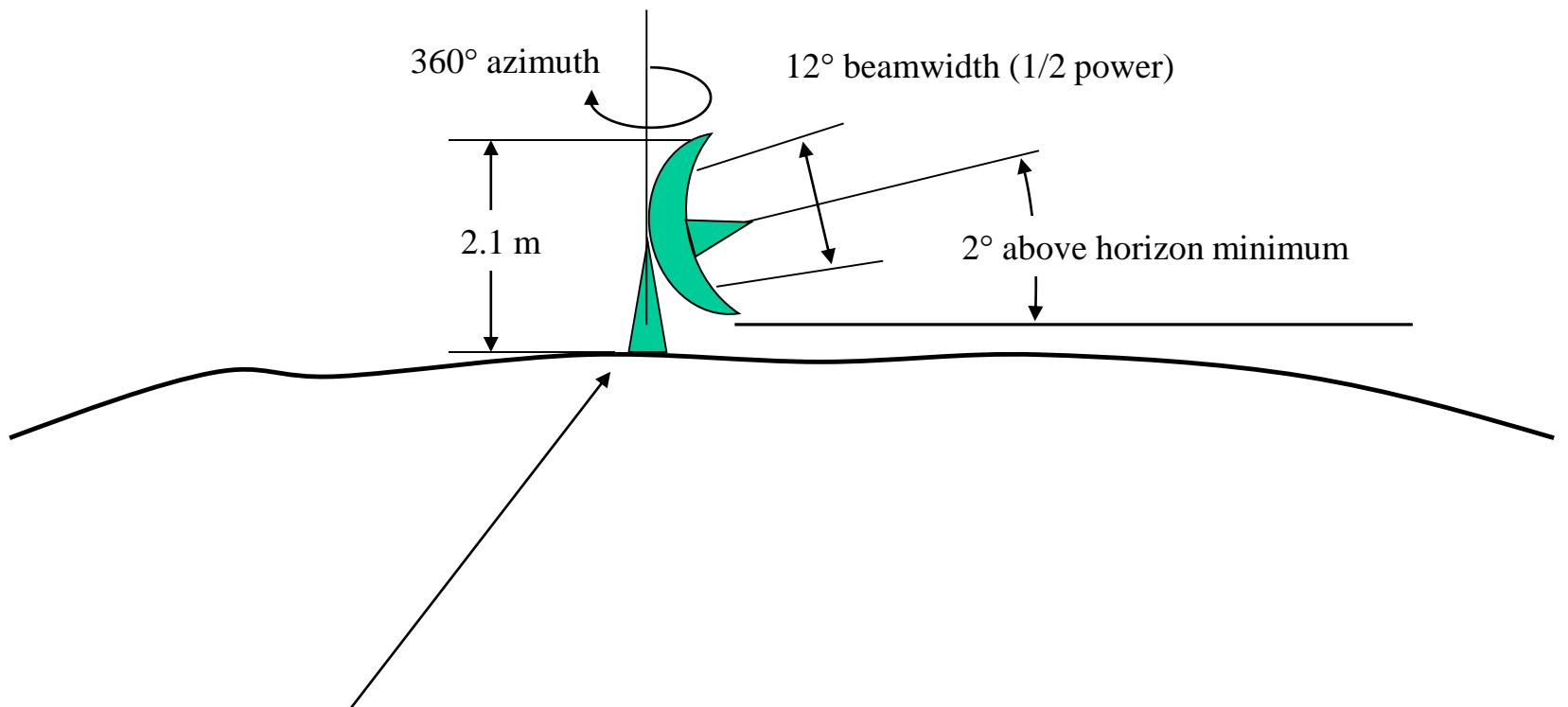
Beam Characteristics and FAA sketch



Limestone, ME (Aroostook county)
($46^{\circ} 56' 27''$ N, $67^{\circ} 53' 58''$ W)
215 meters above sea level
46.9408, -67.8994

7) Fairchild AFB, Spokane WA

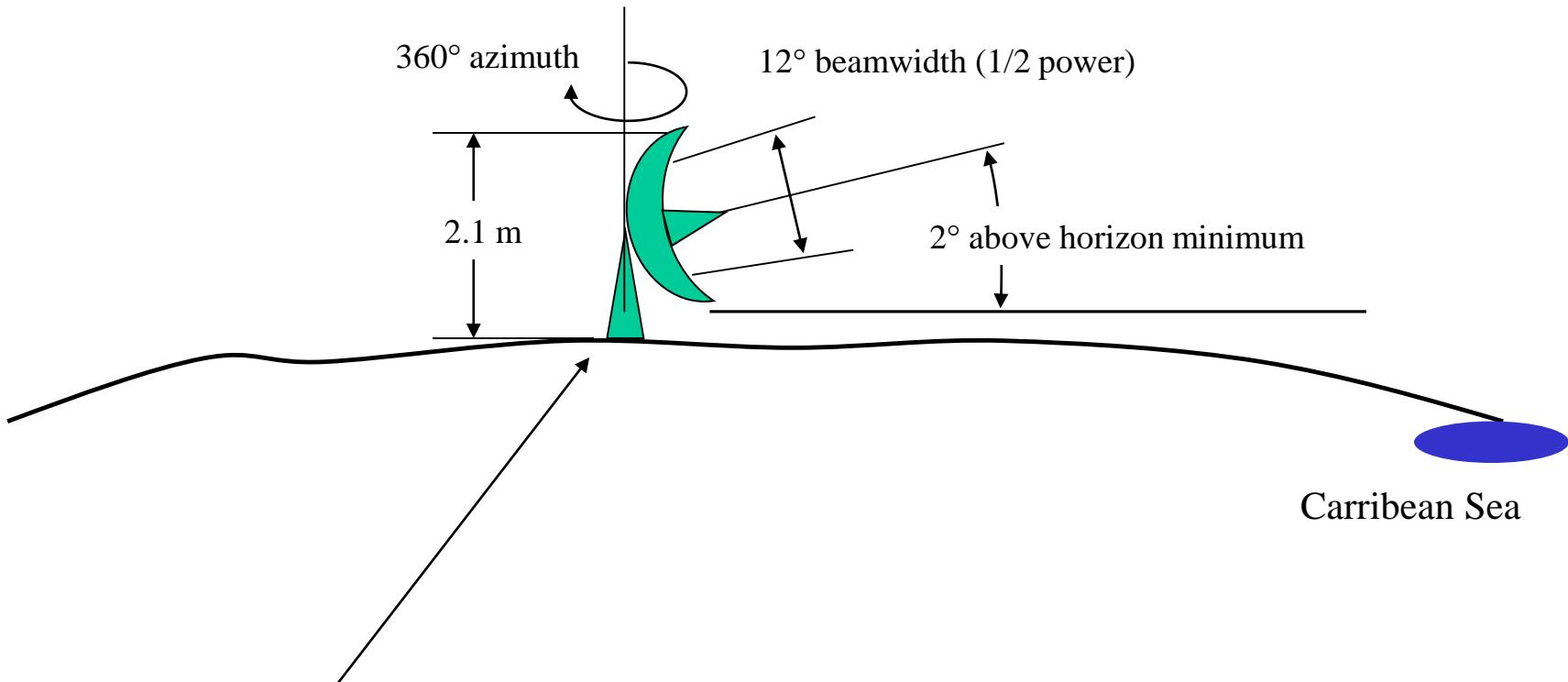
Beam Characteristics and FAA sketch



Spokane WA (Spokane county)
($47^{\circ} 38' 05''$ N, $117^{\circ} 37' 58''$ W)
741 meters above sea level
47.6346, -117.6328

8) Guayama, Puerto Rico

Beam Characteristics and FAA sketch



Guayama, Puerto Rico (Spokane county)
($17^{\circ} 57' 55''$ N, $66^{\circ} 06' 28''$ W)
26 meters above sea level
17.9654, -66.1077

9) Hartebeesthoek , South Africa

Beam Characteristics and FAA sketch

Hartebeesthoek , South Africa
25° 53' 08" S, 27°42' 20" E
-25.885556, 27.705556
1541 meters

		3.7m S/X band antenna	
		S-band	X-band
Reflector Size	3.7m	3.7m	
Downlink band	2200 – 2300 MHz		8000-8400 MHz
G/T 20°	12.60 dB/K		26.50 dB/K
Polarization	RHCP or LHCP		RHCP or LHCP
Uplink band	2025-2110 MHz		N/A
EIRP	44.8 dBW		N/A

Table 1 – Antenna performance of the KSAT Lite Antennas

10) Chemin Grenier, Mauritas Beam Characteristics and FAA sketch

Chemin Grenier, Mauritas
20° 30' 03" S, 057° 27' 2" E
-20.500833, 57.450556
31 meters

		3.7m S/X band antenna	
		S-band	X-band
Reflector Size	3.7m	3.7m	
Downlink band	2200 – 2300 MHz		8000-8400 MHz
G/T 20°	12.60 dB/K		26.50 dB/K
Polarization	RHCP or LHCP		RHCP or LHCP
Uplink band	2025-2110 MHz		N/A
EIRP	44.8 dBW		N/A

Table 1 – Antenna performance of the KSAT Lite Antennas

11) Puertollano, Spain

Beam Characteristics and FAA sketch

Puertollano, Spain
38° 40' 19" N, 4°09' 43" W
38.671944, -4.161944
683 meters

		3.7m S/X band antenna	
		S-band	X-band
Reflector Size	3.7m	3.7m	
Downlink band	2200 – 2300 MHz		8000-8400 MHz
G/T 20°	12.60 dB/K	26.50 dB/K	
Polarization	RHCP or LHCP		RHCP or LHCP
Uplink band	2025-2110 MHz	N/A	
EIRP	44.8 dBW	N/A	

Table 1 – Antenna performance of the KSAT Lite Antennas

12) Nemea, Greece

Beam Characteristics and FAA sketch

Nemea, Greece
37°50'43N, 022°37'24E
37.845278, 22.623333
276 meters

		3.7m S/X band antenna	
		S-band	X-band
Reflector Size	3.7m	3.7m	
Downlink band	2200 – 2300 MHz	8000-8400 MHz	
G/T 20°	12.60 dB/K	26.50 dB/K	
Polarization	RHCP or LHCP	RHCP or LHCP	
Uplink band	2025-2110 MHz	N/A	
EIRP	44.8 dBW	N/A	

Table 1 – Antenna performance of the KSAT Lite Antennas

13) Awarua, New Zealand

Beam Characteristics and FAA sketch

Awarua, New Zealand
46° 31' 44" S, 168° 22' 47" E
-46.528889, 168.379722
12 meters

		3.7m S/X band antenna
	S-band	X-band
Reflector Size	3.7m	3.7m
Downlink band	2200 – 2300 MHz	8000-8400 MHz
G/T 20°	12.60 dB/K	26.50 dB/K
Polarization	RHCP or LHCP	RHCP or LHCP
Uplink band	2025-2110 MHz	N/A
EIRP	44.8 dBW	N/A

Table 1 – Antenna performance of the KSAT Lite Antennas

14) Punta Arenas, Chile

Beam Characteristics and FAA sketch

Punta Arenas, Chile
52° 56' 06" S, 70° 52' 14" W
-52.935000, -70.870556
16 meters

		3.7m S/X band antenna
		S-band
Reflector Size	3.7m	3.7m
Downlink band	2200 – 2300 MHz	8000-8400 MHz
G/T 20°	12.60 dB/K	26.50 dB/K
Polarization	RHCP or LHCP	RHCP or LHCP
Uplink band	2025-2110 MHz	N/A
EIRP	44.8 dBW	N/A

Table 1 – Antenna performance of the KSAT Lite Antennas