
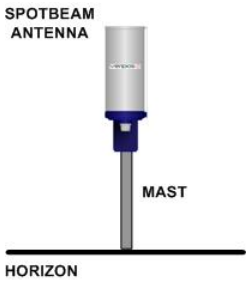

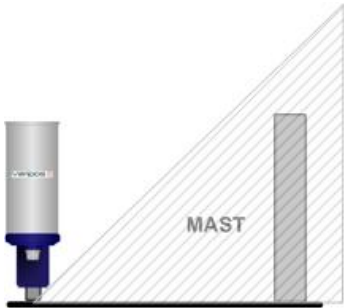
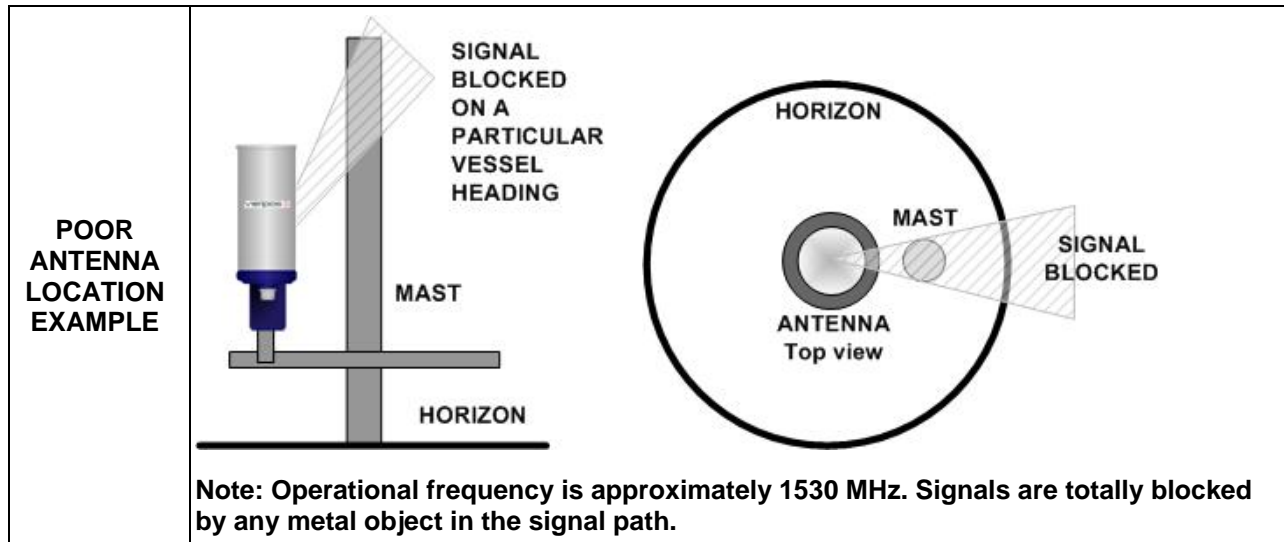


VERIPOS Spotbeam Antenna Installation: Gulf of Mexico

(Differential Corrections Antenna / L- band Antenna)

<p>VERIPOS SPOTBEAM ANTENNA EXAMPLE</p>	 <p>90984 Spotbeam antenna</p>
<p>GOOD LOCATION REQUIRED</p>	<ul style="list-style-type: none"> • Antenna needs a clear view of the sky all round so that the signal is not blocked as the vessel turns. • The satellites transmitting Veripos data are geostationary. • '98W' is at 98° West, over the Equator. • In the GoM the 98W satellite elevation is approximately 60° above the horizon. Azimuth is approximately 190° <div style="display: flex; justify-content: space-around; align-items: center;"> <div data-bbox="451 976 695 1255">  <p>SPOTBEAM ANTENNA MAST HORIZON</p> </div> <div data-bbox="808 970 1101 1255">  <p>HORIZON ANTENNA Top view</p> </div> </div> <p>IDEAL ANTENNA LOCATION - CLEAR VIEW OF THE SKY</p> <p>ADEQUATE LOCATION FOR GULF OF MEXICO OPERATIONS:</p> <ul style="list-style-type: none"> • Antenna needs a clear view of the sky all round and above about 45° elevation <div data-bbox="771 1480 1112 1785">  <p>MAST</p> </div>

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POSSIBLE SOURCES OF SIGNAL INTERFERENCE:
 Interference is not usually a problem since L-band signal levels are higher than GPS signal levels. However if it does occur it may be from the same sources as GPS interference:

- Onboard vessel
 - Communications domes, as above
 - Television antenna amplifiers & satellite television domes
 - Any transmitting antenna within a few inches
 - Radar at the same height and close
- Onshore or on platforms
 - Television transmitters
 - High power radar
 - Microwave data links

SPOTBEAM ANTENNA CABLES

- Use only good quality coaxial cable with properly fitted coaxial connectors
- Avoid sharp bends in the cable
- Avoid cuts in the cable casing
- Secure the cable so that there is no weight on the antenna connector
- Tape external connections with self-amalgamating tape to keep out water

APPROXIMATE MAXIMUM USEABLE CABLE LENGTHS	
Gulf of Mexico, 98W beam. (Based on a cable loss of 20dB)	
RG58 1/4" coax	100 feet
RG213 1/2" coax	210 feet
LMR400 3/8" coax (inner aluminium screen, special connectors)	390 feet
LDF4-50 1/2" semi-rigid coax (uses special connectors)	700 feet

Note: maximum cable length will partly depend on the electrical environment in which the cable runs. As far as possible keep antenna cables separate from other cables which may cause interference. Power cables, radio transmitter cables, Inmarsat and Vsat cables, are examples.

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