
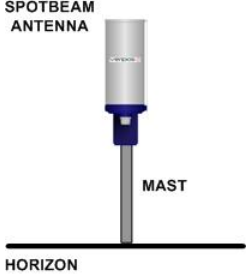

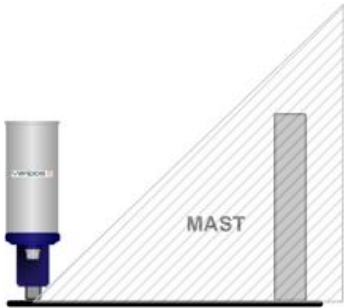
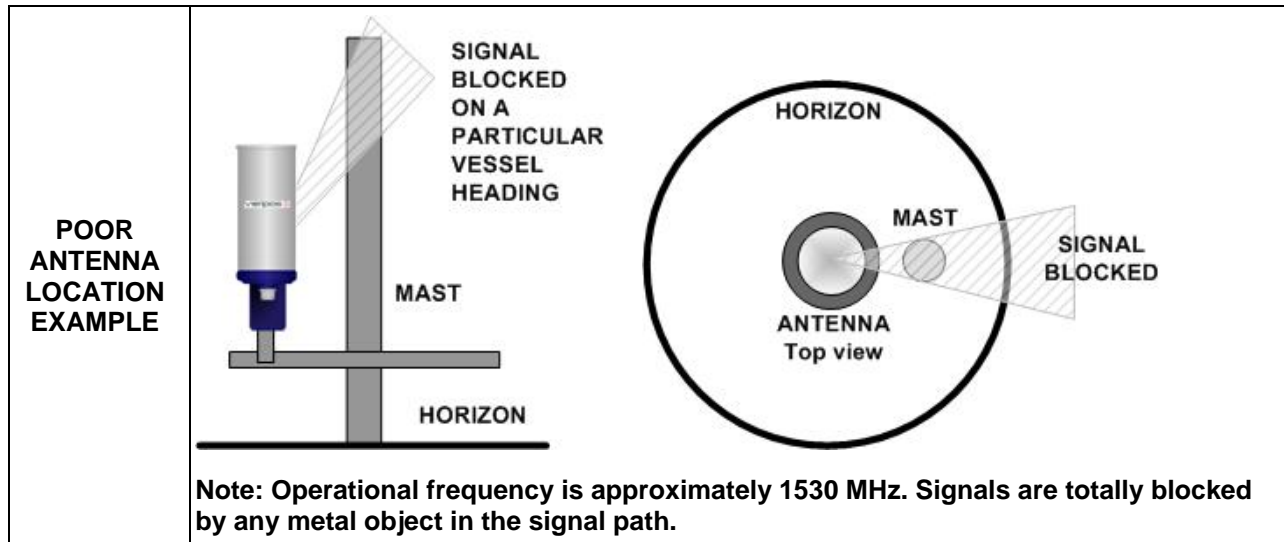


VERIPOS Spotbeam Antenna Installation: Asia Pac

(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. • '109E' is at 109° East, over the Equator. <div style="display: flex; justify-content: space-around; align-items: center;"> <div data-bbox="451 919 695 1192">  <p>SPOTBEAM ANTENNA</p> <p>MAST</p> <p>HORIZON</p> </div> <div data-bbox="808 907 1101 1192">  <p>HORIZON</p> <p>ANTENNA Top view</p> </div> </div> <p>IDEAL ANTENNA LOCATION - CLEAR VIEW OF THE SKY</p> <p>ADEQUATE LOCATION FOR EAME 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 1417 1112 1722">  <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	
Asia Pac, 109E 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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