

US Naval Research Laboratory (DF) Spinner Antenna System Specifications

Introduction

- The Naval Research Laboratory is searching for a spinning, steerable, lightweight direction finding antenna with the maximum amount of gain, frequency range, and beamwidth possible that is integrate-able into a custom system via serial cable connection. Antenna must also be able to operate in a harsh environment with large temperature swings, significant particle contamination, and with frequent mechanical vibrations.

Specifications:

- Designed to meet MIL-STD-810F, 18 dB of gain, 15 degrees of elevation beamwidth, 1-4 degrees of azimuth beamwidth, .5-18 GHz frequency range. Variable spin rate 0-200 RPM, sector scan capability, 250 kHz antenna position refresh rate, operational range of -20 to 50 degrees Celsius. Antenna housing weight under 50 lbs. Upright or inverted operation capable, RS-422 controllable, slant linear polarization.

Delivery Date:

- Delivery shall be no later than 26 weeks (180 days) from the date of award.

Installation:

- Within 8 weeks of system delivery

Technical Support:

- Periodic remote technical support (telecon and email) for engineers building control software and the installation team for 12 months after system delivery.

Warranty:

- A minimum, a warranty of twelve months from receipt of equipment including mechanical, optical and electrical parts and labor on defects in the system and on the specifications of the system is required.

Documentation (manuals):

- NRL requires (1) electronic copy in either PDF or Microsoft Word format of the following documents: the Operation and Maintenance Manuals, the Interface Control Document (ICD), and the Installation Manuals.