

Antenna Information for Antenna Registration #2**9380-9440 MHz**

The following information is provided with respect to the facilities identified at Antenna Registration #2 of the instant STA Request:

Area of Operation

As indicated in the accompanying FCC Form, the facilities identified at Antenna Registration #2 specify “Fixed” facilities at the specified geographic coordinates. In order to accommodate the requirements of the subject contract, by this STA Request, BAE Systems requests authority to operate the specified fixed transmissions within a 1,500 foot radius from the centerpoint geographic coordinates identified in the STA Request (i.e., 1,500 foot radius around 42-48-22 N.Lat.; 071-25-33 W.Long. [NAD 83]). Commission approval of such area of operation will provide BAE Systems with the flexibility it requires to move the specified test equipment to any appropriate testing location on the Litchfield Antenna Test Range during the authorized term of operation, in accordance with the requirements of the experiment.

Transmitting Equipment

Manufacturer	Model	Quantity	Experimental
Furuno Electric Co. LTD	1623	1	No

Beamwidth and Orientation of Antenna and Other Technical Issues

This directional antenna is a mechanically rotating dish (360°) with three rotational speeds (41 RPM, 31 RPM, 24 RPM) which increases or decreases the rate of data collection.

3dB BW E (Vertical)	3dB BW H (Horizontal)
25°	6.2°

Note Regarding “Mean” Power Designation

The FCC Form specifies a “Mean” Output Power and ERP of 1.056W. This is a pulsed CW marine radar. The pulse duration and duty cycle (PRR) are adjustable within the limits specified below, resulting in a variable average power, to a maximum of the specified 1.056W:

Pulse Duration/PRR	Average Power
0.08 us/3000 Hz	.528 Watts
0.30 us/1200Hz	.927 Watts
0.80 us/600Hz	1.056 Watts

As this is a pulsed system with no capability to operate outside of these defined parameters, the “Mean” power approach is the most accurate in defining output power and ERP.