

SUBJECT: Agilent Network Analyzer - Application for Special Temporary Authorization, File Number 0355-EX-ST-2009 (replaces File Number 0312-EX-ST-2009)

Purpose of Operation. Raytheon NCS requests special temporary authorization to operate a radio frequency emitter at Towson, MD, and Largo, FL. As systems integrator for the DDG 1000 Zumwalt IFF system, Raytheon Towson and Raytheon Largo will use the authorization to meet the requirement of Department of the Navy Contract Number N00024-05-C-5346.

STA Explanation. Raytheon will be conducting evaluation and Factory Acceptance Testing (FAT) for deliverable IFF electronic Scan Antennas, ensuring through the FAT process that new antennas are capable of performing to specifications outlined in the contract. Evaluation and FAT testing will include antenna pattern and antenna gain measurements.

FAA Coordination. There are seven specific frequencies required for the tests: 600 MHz, 800 MHz, 1030 MHz, 1090 MHz, 1200 MHz, 1400 MHz and 1600 MHz. Since three of these frequencies fall within the aeronautical radionavigation services band, FAA coordination was accomplished under the following technical parameters:

Frequencies: 1030 MHz/1090 MHz/1200 MHz

Power: (PEP) 1 Watt

Emission: NON

Antenna: Fixed Beam Linear Array

Antenna Gain: -1 dBi net gain (+17 dBi gain-18 dB attenuation)

Terrain Elevation: Towson, MD - 150 Meters

Largo, FL - 17 Meters

Antenna Height: Towson, MD - 23 Meters

Largo, FL - 14 Meters

Antenna Polarization: Towson, MD - Vertical

Largo, FL - Vertical

Antenna Azimuth: Towson, MD - 223 Degrees relative to True North

Largo, FL - 200 Degrees relative to True North

Pulse Repetition Rate: N/A (CW)

Pulse Width: N/A (CW)

Equipment Nomen: Agilent Network Analyzer, Model E8363

Blanking Capable: No

Location: Towson, MD - 392345N0763433W

Largo, FL - 275219N0824359W

Operating Radius: Fixed

Description of Operation: Perform antenna pattern tests and conduct antenna gain measurements in support of evaluation and Factory Acceptance Testing of IFF Electronic Scan Antennas.

In response to coordination requests for Towson and Largo, FAA issued the following NGT numbers:

Towson - M1030/NG T090415 M1090/NG T090416 M1200/NG T090414

Largo - M1030/NG T090417 M1090/NG T090418 M1200/NG T090419

Test signal is CW tone with no information transmitted. Thus, bandwidth requirement is null.

Stop Buzzer point of contact is Jesse Ellisor, phone number 714-204-5585;
or Joe Acoraci, phone number 410-583-4345.

Your favorable and expeditious response to this STA request would be greatly appreciated.

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