Public Interest Statement

By the instant application ("STA Request"), BAE Systems Information and Electronic Systems Integration Inc. ("BAE Systems") requests that the Commission grant Special Temporary Authority ("STA") to permit near-term operation of the facilities specified herein.

1. Purpose of Operation

The requested operations are to support radiating testing requirements set forth under the following government contract:

Contract Number:	N00019-15-C-0038
Agency Customer:	NAVAIR, PMA-213
Contract POC:	Michael Hurley
POC Telephone #:	301-342-5998
POC Email:	michael.s.hurley@navy.mil

These operations have been licensed at Lebanon, NJ under call sign WD2XDP for many years.

This STA Request seeks Commission authority for similar operations at Merrimack, NH, to evaluate on a short term basis the feasibility of these operations at a new location. The primary difference is that – for this STA Request - the ERP for 1059.6-1060.4 MHz is requested at 100W (rather than 10kW as specified in the WD2XDP license).

- The operations relate to BAE Systems' manufacture and testing of the OE-120/UPX antenna using a U.S. Navy Acceptance Test Procedures. The OE-120/UPX is an advanced electronically steered circular antenna system developed for the U.S. Navy. It is part of the AEGIS battle control system installed on all Navy surface warfare platforms, including Navy destroyers, cruisers, amphibious assault, and aircraft carrier platforms. Its primary purpose is to provide IFF (Identification Friend or Foe) data to the battle control system with a secondary purpose of providing fire control data to the AEGIS system if main radar is degraded.

- The AIMS antenna is used as the passive transmit/receive element of the shipboard antenna system that operates with the IFF system in all military IFF modes or in military and commercial air traffic control radar beacon system (ATCRBS) equipment.

2. Equipment/Signal Characteristics

The following transmitting equipment will be used *(or equivalent thereof)*:

Antenna:

Manufacturer	Model	Gain *(1030 – 1090 MHz)*	Beamwidth *(1030 – 1090 MHz)*
ETS Lindgren	3164-06	8.5 dBi	E-Plane: 34° H-Plane: 64°
Scientific Atlanta	Feed: 27-1.0/8 Reflector: 22-8A	25 dBi	8°

Transmit Characteristics:

Direction - Azimuth line of bearing	Tower Height
192°	50 feet

RF Source:

Manufacturer	Model	Description
Agilent	N5230A	PNA-L Network Analyzer

Amplifier:

Manufacturer	Model	Gain
Teledyne Cougar	A3CP6025	24 dB, typical

3. Mitigation of Interference / Stop Buzzer

BAE Systems is well aware of its obligation under Commission rules to immediately terminate operation in the event of interference to any other licensed emitter. BAE Systems is a long-standing Commission licensee and the company will take any and all actions to ensure that it complies with its obligations as a licensee of experimental facilities.

The Stop Buzzer in the event of interference is:

Sean Hallinan - 603-361-5959
George Moynihan - 603-689-8630
BAE Systems Emergency Services Center - 603-885-3842