

Exhibit 1

1. Introduction

By the instant application (“Application”), BAE Systems Information and Electronic Systems Integration Inc. (“BAE Systems”) requests that the Commission grant special temporary authority (“STA”) to permit BAE Systems to operate the facilities (the “Facilities”) specified in the instant application. STA is requested for a period of six (6) months.

2. Purpose of the Operation

The testing at the Merrimack Antenna Test Facilities is a critical part of the manufacture and delivery of military systems provided to the Armed Forces in support of Homeland Security as well as war efforts. Specifically, this demonstration will be conducted as part of deliverable requirements of a government contract.

The system test will occur at the outdoor test range and adjacent environmental lab and will require an operational area that is specified in the license request. The systems will be set up individually and transmit at stated power. The purpose of this request is to support of a system level inter-operability test. The goal of this test is to ensure that the waveform works properly, to characterize network performance parameters and to test the system in an over-the-air environment subject to manmade/natural noise, multipath and weather related issues.

The contract that applies to this effort:

Ultimate Customer: US Army
Contracting Prime: General Dynamics
Prime Contract No.: WIN-T HRFU-EK CONTRACT #: BBM520XC7
Subcontract with
BAE Systems: DAAB07-02-C-F404

Contract POCs:

Program Managers
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3. Other Issues

Antenna Data/RF Source

Antennas to be used in connection with this experiment are non-directional in nature. BAE proprietary hardware will be used to generate the RF signal. The output power of the system will be measured and verified to meet the output power requirements set forth in the license.

Manufacturer	Model	Quantity	Experimental?
BAE Systems/General Dynamics	N/A	12	Yes

ERP/Test Duration

There will be short duration periods that will result in 6300 W of radiated power. These instances will occur approximately 6 times during the 6-month period of operation, with each instance consisting of a 4-hour period during which a series of ground-based transmissions will be emitted at 6300 W. Each transmission will last no more than 10 seconds with a total duration of all transmissions not to exceed 15 minutes within the 4-hour operational period. Other than these few instances of operation at 6300W, the applicant intends to operate at power levels of 2000W or less ERP.

Prevention of Interference

BAE Systems hereby advises the Commission that the tests to be conducted under the requested Commission authorization are to be conducted near the center of BAE Systems' Merrimack, New Hampshire facilities. Such location will result in the separation of the test facilities from other existing transmit or receive facilities.

The applicant will be using an enclosure and RF blocking material for safety and to reduce potential interference when performing tests inside the environmental lab temperature/altitude and vibration/shock test station. Specifically, RF blocking material, Emerson & Cuming ECCOSORB AN-73 or equivalent will be used, which has a minimum reflectivity loss of -17dB. An estimate of the expected RF power level at the outer surface of the RF absorber box is -4 dBm based on EIRP of +63 dBm (2000 W) – see following table.

EIRP during EQT operating tests	63	dBm	
Approx Path Loss due to Separation distance from HRFU-EK to Enclosure Walls	50	dB	Loss
Minimum RF absorber reflectivity loss	17	dB	Loss
RF level at surface of Enclosure	-4	dBm	

Stop Buzzers

Primary: Primary: George Moynihan - (603) 689-8630

Alternate: BAE Systems Emergency Services Center - (603) 885-3842