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. The purpose of this test is to demonstrate the interoperability between a base source RF system and remote sources. The host system will receive, perform direction finding, and respond to the remote sources which will be located on the circle positioned with 220 meters of the centrally-located base system. The remote signals will be generated by test equipment. The source in the center point is the system under test.

3. Other Issues

A. Transmit Directionality

A combination of directive and omni antennas will be used in this experiment, as specified below.

B. Antenna Data

For the convenience of the Commission, the following chart defines certain specifications relating to the antennas that are to be used in the experiment:

Mfg.	Model Number	Frequency Range	Gain	BW
Sunol Sciences	JB1	30 – 2000 MHz	< 0 dBi below 100 MHz, < 5 dBi below 200 MHz, 7 dBi max 200-2000 MHz	Freq MHz / E-Plane deg / H-Plane deg 30 / 90 / Omni 200 / 60 / 100 1000 / 50 / 100 2000 / 50 / 100
EDO	AS-48461	2 – 18 GHz	10 dBi max 2-3 GHz, <13 dBi 3-5 GHz, <16 dBi 5-9 GHz, <18 dBi 9-15 GHz, <23 dBi 15-18 GHz	Freq GHz / E-Plane deg / H-Plane deg 2 / 60 / 60 18 / 10 / 10
BAE Systems	n/a	300 – 18000 MHz	0 dBi	Omni

The output power and ERP on the application are the same value, indicating 0 dBi gain for the base source transmitter/antenna configuration. Because directive antennas will be used with the remote sources, the transmitter power at each remote source will be reduced to account for the transmit antenna gain so as not to exceed the requested ERP value.

C. RF Sources

For the convenience of the Commission, the following chart defines certain specifications relating to the RF Sources that are to be used in the experiment:

Mfg.	**Model Number**	**Frequency Range**
Agilent	N5183B	9 kHz – 20 GHz
BAE Systems	Experimental	300 – 18000 MHz

D. 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.

In addition, BAE Systems notes that the transmitters will not continuously emit an RF signal due to the nature of the experiment. The transmission will be pulsed CW signals with a pulse width of 1 microsecond. Therefore necessary bandwidth for any signal will be 2 MHz.

E. Stop Buzzers

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