

Exhibit 1

1. Introduction

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 BAE Systems to operate the facilities (“Facilities”) specified in the instant STA Request.

As explained herein, STA is being requested so that the commencement of operation of the proposed Facilities can occur by January 2, 2007. STA is requested for a period of six (6) months from the date of grant of this STA Request.

2. Purpose of the Operation

BAE Systems Electronics & Integrated Solutions (“E&IS”) Operating Group is the group within BAE Systems that will conduct the testing specified in this STA Request. E&IS is a major producer of military systems for all branches of the armed forces. The E&IS includes the Sensor Systems line of business (LOB), which contains the Space Systems and Electronics (SS&E) business area from which this STA request originates. The subject testing will consist of standard satellite communications from our BAE Systems’ Merrimack Satellite Antenna facility located in Merrimack, NH.

BAE Systems has developed proprietary communications signal processing methods for a variety of applications. BAE Systems has completed laboratory tests of these algorithms. To complete the development and verification of these algorithms, BAE Systems wishes to perform VSAT satellite communication tests over commercially available transponders using Very Small Aperture Terminal (VSAT) equipment.

Transmission will be at standard satellite Ku-band uplink frequencies (14.0-14.5 GHz) and will consist of common digitally modulated signals generated by commercial off the shelf (COTS) equipment. The transmit antennas are also COTS and are located in the Satellite Antenna facility in Merrimack, NH. Transmission will be directed towards U.S.-licensed, commercially available GSO FSS satellites (ALSAT) within view of Merrimack, NH.

As part of the testing activities, BAE Systems may demonstrate these capabilities to potential customers.

3. Why STA is in the Public Interest

This STA is being requested in order to obtain processing by the Commission as expeditiously as possible so that the commencement of testing of the Facilities can occur as soon as possible. As a leader in technological advancements, BAE Systems continually drives new research efforts in support of our military customers and support national security. Each of these candidate algorithms will be tested prior to being

integrated into a candidate system concept which may be applicable for ongoing and future war efforts. In this particular case, authority to operate the Facilities under STA is necessary so that BAE Systems can demonstrate and verify performance of the technology in preparation of future potential contracts for which BAE Systems will be competing. The requested STA will be used to support testing that will last no longer than six months.

For the forgoing reasons, approval of this STA Request is in the public interest, convenience and necessity.

4. Additional Information

A. *Antenna and Signal Amplification Data*

For the convenience of the Commission, Tables 1 and 2 below identify the antennas and associated transceiver/amplifier equipment that will be used as part of the experiment for which authority is requested in this STA Request. The equipment is available COTS and has not been modified in any manner by BAE Systems.

Table 1. Antenna Information

Manufacturer	Model Number	Description	Number of Units	Frequency Range	Nominal Gain (Mid-Band)
Prodelin Corporation (now part of General Dynamics)	1256	2.4 Meter Rx/Tx Ku-Band Dual Axis Tracking Antenna	2	14.000 – 14.500 GHz	TX 49.2 dBi

The antennas are sold by Prodelin, now part of General Dynamics. Additional specifications on these antennas can be found at:

http://www.gdsatcom.com/Antennas/Data_Sheets/5002-199.pdf

These antennas meet the Commission's antenna performance standards as defined in Part 25.209 relating to antenna sidelobe isolation. No interference is expected during BAE Systems testing due to the sidelobe characteristics of the antennas being used. In addition, BAE Systems will be coordinating with the commercial GSO FSS provider to prevent unwanted interference due to mis-pointing and/or polarization mis-alignment prior to testing activities.

These antennas are located at our BAE Systems Merrimack Satellite Antenna Facility located at 144 Daniel Webster Highway, Merrimack, NH. Both antennas are located in a fixed radome at 42° 48' 59" N.Lat. and 71° 29' 17" W.Long.

Table 2. Amplification Information

Manufacturer	Model Number	Description	Number of Units	Frequency Range	Max Output Power
Codan Transceiver	5900 Series	Ku-band Transceiver	2	14.000 – 14.500 GHz	4.5 Watts

The transmit amplification equipment, also COTS, was delivered with the antennas above as a turnkey solution provided by Polarsat, Inc. This equipment is used to transmit and receive signals generated by the equipment identified in Table 3, below.

The overall transmitted EIRP of each Earth station will not exceed 55.7 dBW, or 331.6 kW. The ERP is 202.4 kW.

B. Transmission Equipment Data

In response to the request for transmitting equipment to be installed, the following table is provided.

Table 3. Transmission Equipment List

Manufacturer	Model Number	Number of Units	Experimental
PolarSat & NSI Communications	VSATPlus II	3	No
Radyne ComStream	DMD 20	2	No

The transmitting sources are COTS equipment used for satellite communications. This equipment has not been modified in anyway by BAE Systems. All signal processing testing will be performed on the received signals only.

C. Directionality/Oreintation of Transmissions

The following information describes the directionality and orientation of the antennas associated with this experiment (all below 6m):

Width of Beam at the half-power point	3 dB BW Vertical	3 dB BW Horizontal
0.6°	ALSAT (commercially available GSO FSS satellites within view of Merrimack, NH)	ALSAT (commercially available GSO FSS satellites within view of Merrimack, NH)

D. Prevention of Interference

BAE Systems hereby advises the Commission that the communications tests to be performed under the requested Commission authorization are to be conducted by obtaining commercially available satellite time and bandwidth. In addition, the testing will be conducted at the BAE Systems' Merrimack, New Hampshire facility which provides adequate separation of test facilities from other local or company transmit or

receive facilities operating in this frequency range. A radius point search of 10 km from our transmit location on the Commission's website indicate no conflicting Experimental license applicants nor Universal License System applicants. Under the International Bureau Database, a single hit was obtained for an Earth Station 8.99 km away in Nashua, New Hampshire. The Earth Station is licensed by MCI Communications Services, Inc. with a Call Sign of E980478.

In addition, as explained above, these antennas meet the Commission's antenna performance standards as defined in Part 25.209 relating to antenna sidelobe isolation. No interference is expected during BAE Systems testing due to the sidelobe characteristics of the antennas being used. In addition, BAE Systems will be coordinating with the commercial GSO FSS provider to prevent unwanted interference due to mis-pointing and/or polarization mis-alignment prior to testing activities.

Further, BAE Systems has determined that we would be compliant with CFR Part 25.134 associated with VSAT operations by using commercially available GSO satellites. BAE Systems test operators will coordinate with the service provider to ensure that adequate pointing and orientation of the antennas is achieved to prevent undesirable interference with users on adjacent satellites.

Finally, BAE Systems' David Nigg will be personally conducting the tests and will be available by pager at (603) 423-5140. Mr. Nigg will act as the authority to terminate transmission in case any issues regarding interference arise during testing.

The following points of contacts can be used:

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