

**STA REQUEST
AND DESCRIPTION OF OPERATIONS**

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 (the “Facilities”) specified in the instant STA Request. STA is requested for a period of six (6) months, with a current commencement date of October 15, 2007.

We are in the process of coordinating with our government customer (DARPA) to determine whether there is any flexibility with respect to the commencement date of the requested testing. Depending on the government’s response, we may submit (under separate cover) a request for expedited processing should our customer deem it urgent to proceed no later than the above-specified October 15, 2007 date.

2. Purpose, Nature and Anticipated Timing of the Operation

BAE Systems Network Systems (NS), a business unit of BAE Systems Information and Electronic Systems Integration Inc., a wholly-owned subsidiary of BAE Systems Inc., will conduct the testing specified in this STA Request. NS is a leader in developing, testing and building technical systems for the U.S. Department of Defense and the United States’ allies in avionics, navigation, intelligence, and military communications. NS’s business areas include Command, Control, Computing and Intel (C3I) Systems and Communications & Tactical Networks (C&TN).

In connection with this STA Request, DARPA has solicited Optical Lasercom and RF CDL capability for a program called ORCA (“Optical RF Communication Adjunct”). In order to fully evaluate this critical warfighter capability, DARPA is requiring BAE Systems to demonstrate a Ku-Band (15 GHz) Common Data Link system running at a data rate of 274 Mbps. Demonstration of these capabilities are tied directly to a DoD user need. DARPA’s current schedule specifies that initial demonstration evaluations occur in October 2007. In order to keep to the source selection schedule intact, it is respectfully requested that this STA Request receive due consideration in order to ensure that the first round demonstration can occur during the DARPA mandated testing schedule. In addition, the full range of tests for which authority is requested are anticipated to occur within a six month period from grant. In light of the above, grant of this STA Request by October 15, 2007 (or a later date specified by DARPA) is appropriate.

The relevant contract/program information is as follows:

Agency/Customer: DARPA
Contract/Solicitation No.: BAA 07-55
DARPA Contact Person: Larry Stotts
Larry.stotts@darpa.mil
(571) 218-4346

3. Description of Test Procedures/Mitigation of Interference

A. Highly Directional Antennas

The experimental antennas being used for this experiment are highly directional, thereby minimizing potential for interference. Specifically, the half power beamwidth is 3°, and the polarization is Right Hand Circular Polarization (RHCP). The directional antennas will lock on its targets during transmission rather than rotating during transmission.

B. Non-Continuous Operations

Operation of the requested Facilities will not be continuous. Rather, authority for only limited and sporadic operation of the Facilities is requested during the authorized timeframe, i.e., at any given authorized location, the cumulative period of operation in any given 24 hour period will be no more than 8 hours. In the off state, no measurable power will be radiated.

C. Stop Buzzer

BAE Systems hereby advises that Mr. John Santillo will be available by wireless telephone at (201) 452-1010 and will act as a “stop buzzer” if any issues regarding interference arise during testing.

4. Transmitter Information

Manufacturer: BAE Systems
Model Number: R3T
Number of Units: 2
Experimental: Yes

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