

DESCRIPTION OF OPERATIONS

1. Introduction

By the instant application (“Application”), BAE Systems Information and Electronic Systems Integration Inc. (“BAE Systems”) requests that the Commission grant a two year experimental license to permit BAE Systems to operate the facilities (the “Facilities”) specified in this instant FCC Form 442.

2. Purpose and Nature of the Operation

BAE Systems Sensor Systems (S2), a business unit within the Electronics and Integrated Solutions operating group within BAE Systems Inc., will conduct the testing specified in this STA Request. S2 is a leader in developing, testing and building technical systems for the U.S. Department of Defense and the United States’ allies in avionics, targeting, and identification. S2's lines of business include precision targeting, situation awareness, electronic identification, surveillance, and reconnaissance systems.

The requested testing at BAE Systems’ Greenlawn campus will support the internal development of a dismounted soldier CID system that enables commanders to identify, and possibly locate, friendly soldiers in the battlespace. The Combat ID services is a self contained application that will enable the dismounted soldier to further help him in Situation Awareness information and last second fire decisions in near real time . The purpose of the Combat ID demonstration test program is to investigate the range of various Combat ID sensors that will play a role in various combat situations. Some of the variables include terrain, location, and soldier orientation and positions in the battlespace. The transmitting equipment to be utilized for this experiment will be on loan from the US Military. To summarize:

- Dismounted soldiers provided CID capability via existing C2/SA device with no impact to SWaP infrastructures.
- Network services find, task, manage off-board net-enabled CID sensors when soldier selects CID function.
- Near real-time SA from CID sensors can be integrated with FBCB2 SA to provide enhanced tactical picture including more complete low level blue picture.

3. **Contract/Program Information:**

In addition to operating the facilities for purposes of Internal Research and Development (“IR&D”), operation will be related to the following contracts:

Contract numbers: W15P7T-06-C-P420/ W15P7T-07-C-P427
Contracts Issued: COMMANDER US ARMY CECOM, ACQ CENTER
AMSEL-ACCC-RTZE
CARMEL COSTA
FORT MONMOUTH, NJ 07703-5008
Tech. POC: Manuel J. Bobbio
U.S. Army Communications-Electronics RD&E Center
Intelligence & Information Warfare Directorate
Fort Monmouth NJ 07703
Tel: (732) 532-4758

4. **Transmitting Equipment and Modulation Information**

The following information is provided with respect to the transmitting equipment to be involved in the experiment.

Manufacturer	Model	Quantity	Experimental?
ITT A/O Division	ITT RT-1523C/D/E(C)/U	6	YES

Spread Spectrum:

Yes

5. **Antennas – Directionality/Orientation**

The Antennas to be used in the experiment are OmniDirectional.

Orientation of Directional Antenna:

Manufacturer	Model Number	Peak Power	3dB BW E (Vertical)	3dB BW H (Horizontal)
General Dynamics	AS-3900/VRC	Output – 5 W ERP – 12.14 W	60°	360°
ITT A/O DIV	AS-3684/VRC	Output – 5 W ERP – 12.14	60°	360°
ITT A/O DIV	AS-3685/VRC	Output – 5 W ERP – 6.09 W	60°	360°

6. Stop Buzzer

BAE Systems hereby advises that Ronnie Milione will be available by telephone at 631-912-8882 and will act as a “stop buzzer” if any issues regarding interference arise during testing.

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