

**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 from the date of grant.

2. Purpose and Nature of the Operation

BAE Systems Networked Enabled Solutions (NES), a business unit within the Electronics and Integrated Solutions operating group within BAE Systems Inc., will conduct the testing specified in this Application. NES 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, and military communications. NES’ lines of business include C3I systems and communication systems integration, guidance and navigation, electronic identification, and reconnaissance systems.

The experiment for which approval is requested involves the internal research and development (IR&D) of a radio network that is part of BAE Systems’ provision of critical Future Force combat systems to the United States military. This particular experiment involves the development of BAE Systems’ “TWNN” solution (Tactical Warfare Network node), which provides on-the-move, self-forming, self-healing, networked communications with greater bandwidth capacity and increased range for improved FBCB2 operation and enhancement of the Army’s Data Distribution System. TWNN can provide connectivity to the dismounted Soldier back to a company or battalion.

3. Transmitter Information

Manufacturer: BAE Systems Wayne, NJ

Model Number: Tactical Warfare Network Node (TWNN)

Number of Units: 10 (Wayne, NJ Area of Operations); 10 (San Diego, CA area of operations)

Experimental: YES

4. **Omni Directional Antenna Gain Information**

Mfg.	Model Number	Gain
Hyperlink Technologies	HG5808U	9dBi Vertical Polarization

5. **Note Regarding Mean Power Designation**

During transmissions there will be short duration pulses that will be 10dB higher than the mean power output. These pulses only last 2uS but can happen anywhere inside the occupied bandwidth.

6. **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.

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