

PUBLIC INTEREST STATEMENT

1. Introduction

By the instant request (“STA Request”), BAE Systems Information and Electronic Systems Integration Inc. (“BAE Systems”) requests that the Commission grant to BAE Systems Special Temporary Authority (“STA”) to operate the facilities (the “Facilities”) specified in the instant STA Request. A Start Date of November 1, 2009 is respectfully requested.

2. Purpose and Nature of the Operation

As the Commission is well aware, BAE Systems manufactures and tests antennas as well as RF systems for DOD as well as other governmental customers. 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 STA Request. 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.

This particular experiment involves the development of a robust and reliable microwave data link for manned and unmanned vehicles. This experiment seeks authority to support IR&D activities.

3. Mitigation of Interference

With respect to interference mitigation, the following is provided:

- The antennas will be low to the ground.
- Only the least amount of power will be used to establish a link
- The frequencies requested are susceptible to high attenuations due to oxygen and moisture in the air.

4. Directionality of Airborne Antennas

Width of Beam in Degrees at Half-Power Point	Orientation in Horizontal Plane	Orientation in Vertical Plan
The antenna is a flat-plate design with an elevation-over-azimuth positioner which controls its pointing angle. The Horizontal 3dB beamwidth is 30 and its vertical beamwidth is 13 degrees.	3°	13°

5. **Stop Buzzer.**

BAE Systems advises that 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, BAE Systems respectfully submits that approval of this STA Request is in the public interest, convenience and necessity.