

Request for Very Brief Two Day Special Temporary Authority
Transmissions to Occur on October 30 and 31, 2018

Exhibit 1

1. Introduction

By the instant application (“Application”), 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 application, for only a 2 day period, on October 30 and October 31, 2018.

A Request for Expedited Processing has been submitted in support of this request.

2. Purpose of the Operation

The proposed ground testing at BAE Systems’ Merrimack, NH campus is a critical part of the manufacture and delivery of military systems provided to the Armed Forces in support of Homeland Security as well as war efforts.

Specifically, in this case the proposed operations are in support of a joint venture between BAE and the US Army to demonstrate an option for increased performance of the fielded Common Missile Warning System. This is a quick reaction project aimed at providing added protection to aircrews in hostile areas.

Contract Information:

Contract: W58RGZ-13-D-0245
Agency: US Army AMC
POC: Col Kevin Chaney

A waiver of the Commission’s Station ID requirements in Section 5.115 is requested.

3. Mitigation of Interference

The technical and operational characteristic of the transmissions will ensure mitigation of impact to co-channel operations, as follows:

- The duration of each transmission will not to exceed 150 milliseconds
- The beam is narrow and fixed focused and does not scan, the computer steers the antenna to the target before radiating
- The target (located on the ground) is at a fixed location

4. **Other Issues**

A. **Antenna Data**

For the convenience of the Commission, the following chart defines certain specifications relating to the directional antennas that are to be used in the experiment:

Mfg.	Model Number	Frequency Range	Gain	BW
BIRD Aerosystems	BAS0030000	34.1-34.9 GHz	33 dBi	E-Plane H-Plane <u>deg</u> <u>deg</u> 3.5 3.5

B. **RF Source**

The RF source is integral to the BIRD Aerosystems MACS Sensor.

C. **Additional Signal Amplification**

Additional signal amplification is integral to the BIRD Aerosystems MACS Sensor.

E. **Stop Buzzers**

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