

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. STA is requested for a period of six (6) months.

2. Purpose of the Operation

The testing conducted by BAE Systems is a critical part of the manufacture and delivery of military systems provided to the Armed Forces in support of their efforts. This STA request is sought to allow BAE Systems to characterize performance for an antenna under development.

The purpose of these tests is to measured gain over field of view of an antenna that is a critical part of the system delivered to the customer. This testing is required to verify total system performance.

3. Contract Information

The contract information associated with the operation under this STA is as follows:

Agency/Customer: US Air Force
Contract Number: FA8600-21-9018
Contract POC: Ethan Kaiser (937) 656-9900 – Ethan.Kaiser@us.af.mil

4. Waiver of Station ID Requirements

Waiver of the Station ID rules set forth at Section 5.115 is respectfully requested.

5. Other Issues

A. Transmit Directionality

The experiment requires transmission from this location.

Station	North Latitude	West Longitude	Reference	Transmit Direction
1	42-48-18	71-25-34	LIT1C Range	34 degree Line of Bearing (LOB)

B. 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		
				Freq MHz	E-Plane deg	H-Plane deg
Sunol Sciences	JB6	30-6000 MHz	0-7.4 dBi 200-2100 MHz	200	60	100
				500	60	100
				1000	45	100
				1500	45	100
				2000	45	110

C. RF Source

An HP 8340B Synthesized Sweeper, or equivalent will be used as the RF Source for these operations.

D. Additional Signal Amplification

Additional signal amplification is necessary to achieve a useful signal to noise ratio for the received signal. The output power of the system will be measured and verified to comply with the radiated output power limits set forth in the license.

Mfg.	Model Number	Frequency Range	Gain
Mini-Circuits	TVA-11-422A+ (or equivalent)	10-4200 MHz	+40 dB

E. Prevention of Interference

BAE Systems hereby advises the Commission that the tests to be conducted under the requested Commission authorization are to be conducted near the center of BAE Systems' Litchfield, New Hampshire facilities. Such location will result in the separation of the test facilities from other existing transmit or receive facilities.

F. Stop Buzzers

Primary: George Moynihan - (603) 689-8630

Alternate: BAE Systems Emergency Services Center - (603) 885-3842