

Exhibit 1

I. Introduction

By the instant application (“Application”), BAE Systems Information and Electronic Systems Integration Inc. (“BAE Systems”) requests that the Commission grant a 2 year conventional experimental license to permit BAE Systems to operate the facilities (the “Facilities”) specified in the instant Application.

II. Purpose and Nature of the Operation

BAE Systems manufactures and tests RF systems as well as antennas for DOD as well as other governmental customers. The testing specified in this Application will be conducted by BAE Systems Information and Electronic Systems Integration Inc., which is a major producer of electronic warfare systems, protection systems, and tactical surveillance and intelligence systems for all branches of the armed forces.

A waiver of the Station ID requirements of 47 CFR §5.115(a) is respectfully requested.

These transmissions will be a continuation of the operations previously authorized by STA under call sign WQ9XUP. Continued operations will be required because system integration efforts will continue through February 2023 due to planned system upgrades on a government contract that require connectivity to commercial satellite communication services. Transmissions will continue to occur from the rooftop of a building located BAE Systems’ Hudson, NH campus. The operations will continue to support BAE Systems’ product development in support of the following government contract:

Agency: United States Air Force/ AFMC/AFLCMC
Contract No. FA8620-16-G-3028
POC: NICOLE L. CANTRELL 937-255-2451

III. Beamwidth/Directionality/Orientation

Width of beam in degrees at the half power point: 150°

Directionality Orientation:

1626.5-1660.5 MHz:

The equipment is a Cobham HGA-6000 modem and a Honeywell HD710 Inmarsat modem. The antenna is directional and will point toward the INMARSAT 4-F3 satellite. The pointing directions from the BAE Systems facility are 215.9° from true north and an elevation angle of 34.1°

14000.0-14500.0 MHz:

The equipment is a Viasat VR-12C antenna and a Viasat MBR-4020 modem. The antenna is directional and will access the network using two satellites: VIASAT-1 and VIASAT-2. The pointing directions from the BAE Systems facility to VIASAT-1 are 234.6° from true north and an elevation angle of 24.4°. The pointing directions to VIASAT-2 are 177.7° from true north and an elevation angle of 40.7°

1626.5-1660.5 MHz:

The equipment is a Viasat 1115604 antenna and a Viasat 1113215 modem. The antenna is directional and will point toward the INMARSAT 4-F3 satellite. The pointing directions from the BAE Systems facility are 215.9° from true north and an elevation angle of 34.1°.

IV. Modulating Signals

1626.5-1660.5 MHz – GMSK

14000-14500 MHz – GMSK, Direct Sequence Spread Spectrum and Internet Access

1626.5-1660.5 MHz – Spread GMSK

V. Interference Mitigation

BAE Systems is well aware of its obligations under Part 5 of the Commission's rules to avoid interference to co-channel licensees in non-experimental services, and will take all steps to ensure compliance with this obligation. In addition, the following factors will help mitigate any interference issues:

Outdoor testing will not be frequent. Testing will be sporadically planned and executed throughout the course of this license. Typically for periods of less than an hour at an expected frequency of several times a month. Testing will typically only occur between the hours of 8 AM to 5 PM EST on week days.

VI. Stop Buzzer

The following will be available by wireless telephone and will act as the "stop buzzer" if any issues arise during testing:

Stephan Notter – (603) 341-4322