

**This Revised Exhibit Supersedes and Replaces  
The Original Exhibit 1 Submitted on 7/24/2020  
Revisions to Exhibit Specified in Yellow Below**

**Exhibit 1**

**I. 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.

**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.

The transmissions will occur from the rooftop of a building located BAE Systems’ Hudson, NH campus. The purpose of this STA will be to conduct testing and experiments as part of 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