

**1. 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 operate the facilities (the “Facilities”) specified in the instant application.

**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 Homeland Security as well as war efforts.

In support of both Internal Research and Development as well as the contract listed below, the purpose of these tests – a continuation of the operations previously authorized under STA under call sign WM9XLW – is to determine the viability of detecting small arms fire pursuant to protecting military helicopter pilots operating regions with hostile fire.

In addition to IR&D, the following government contract will be supported by these operations:

Customer/Agency: US Army Research Laboratory  
Contract Number: W911NF-17-2-0139  
Government POC: Dave Wikner 301-394-0865

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

**3. Other Issues**

**A. Transmitting Equipment**

<b>Manufacturer</b>	<b>Model No</b>	<b>RF Power</b>	<b># Units</b>	<b>Modulating Signal(s)</b>	<b>Experimental? Yes/No</b>
BAE Systems	N/A	5 W, CW	1	No modulation	Yes

**B. Antenna Data**

<b>Manufacturer</b>	<b>Model Number</b>	<b>Gain</b>	<b>Width of Beam @ 1/2 Power Point</b>	<b>Orientation in Horiz. Pane</b>	<b>Orientation in Vert. Pane</b>
Echodyne	MESA-K-EVU	21 dB	4° az x 12° el	Depends on site geometry; electronically scanned +/- 60 degrees	Electronically scanned 0+/-40 degrees.

**4. Interference Mitigation**

BAE Systems hereby advises the Commission that the tests to be conducted under the requested authorization are to be conducted at the Sig Sauer Academy, 233 Exeter Rd, Epping, NH. All electronics are within a metal enclosure. The transmission will be placed within the allocated bandwidth in order to minimize interference.

**5. Stop Buzzers**

Primary: Bruce Partin, (603) 885-1020  
Alternate: Eric Rundquist, (603) 809-8960