

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”) for a six month period from April 9- October 9, 2018 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 is to determine the viability of this radar to help military helicopter pilots operating degraded visual environments (night, smoke, dust, fog, snow).

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

Manufacturer	Model No.	Modulating Signal	RF Power	# Units	Experimental? Yes/No
Echodyne	700-005- 201_DAA_NC	Linear FM, saw-tooth, 45 MHz over 200 µsec	2 W, CW	1	Yes

B. Antenna Data

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

4. Interference Mitigation

BAE Systems herby advised the commission that the tests to be conducted under the requested authorization are to be conducted at the BAE Systems Merrimack, NH facility. All electronics are within a metal enclosure. The transmission will be placed within the allocated bandwidth in order to minimize interference. The operation will be sporadic over the 6 month period.

5. Stop Buzzers

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