

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 six month period, from 03/10/2017 through 09/10/2017.

2. 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. This unit's lines of business include Electronic Warfare/Electronic Protection, Electronic Warfare/Information Warfare, Integrated Defense Solutions, and Mission Electronics with products and services spanning the whole electromagnetic spectrum.

BAE Systems developed and produces SIGINT systems used by US Government military customers. The Second Generation SIGINT system must be tested for electromagnetic compatibility (EMC) prior to being flown on an unmanned aircraft system (UAS) operated at Dugway Proving Ground (DPG), Dugway UT. This technology will be incorporated into active military weapons systems, which in turn will directly improve the success and utility of the military missions flown by the SIGINT system in the areas of deployment.

The US Army Aviation Engineering Directorate (AED) requires the UAS manufacturer validate the SIGINT payload will not significantly degraded the UAS performance.

The SIGINT payload antenna height is a maximum of 10 feet above ground level, resulting in less than 10km view to the horizon, for all of these tests. The test signals will therefore be limited to the DPG Michael Army Airfield.

This request is in direct support of US Army and their contract with BAE Systems, as follows:

Customer:	US Army
Contract No. :	Contract # W56KGY-16-D-0013
Customer Contract POC:	Freddie Lee – (443) 861-2309; Freddie.a.lee.ctr@mail.mil

3. Transmitting Equipment

Manufacturer	Model No.	# Units	Experimental (Yes or No)
JEM Engineering	901-0127-002	1	N
Trivec Avant Cobham	AV 201	1	N
BAE Systems Custom EW System	N/A	1	N

4. Directionality/Orientation

For each directional antenna, the following information is provided:

Antenna Description	Width of Beam in degrees at half-power point	Orientation in horizontal plane	Orientation in vertical plane
High Band Ant.	90 deg Az; 22 deg El	90 deg to starboard	-30 deg from waterline
Mid Band Ant.	360 deg Az; 15 deg El	Omni	0 deg (Waterline and down)

5. Description of Frequency Requirements

At any given time, BAE Systems will not occupy the entirety of the bands listed in the Application. In fact, at any given time, only one frequency will be transmitted. Specifically, within each such 30 MHz sub-band, BAE Systems will operate as follows:

- Transmit will occur on 47 frequencies.
- Modulation: Continuous Sine Wave
- Transmit duration will be determined by test director for an undetermined number of seconds.

6. Waiver of Station ID

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

7. Stop Buzzer

The designated point-of-contacts to terminate transmissions if interference occurs is:

BAE Systems Stop Buzzers:
Robert Lombardi; Test Lead; 603-930-9151

Note: Because Dugway Proving Ground is in a very remote area and is surrounded on three sides by mountain ranges, cell coverage may be limited. Accordingly, the following additional "Stop Buzzers" are provided, with their landline numbers, who are located on site

DPG RIAC Test Facility; Test Leads;
Doug McDaniel; 256-759-7642; 435-831-7841
Nate Critchlow; 435-841-1474

DPG Spectrum Manager;
Jason Straughan; 435-831-3411