

Exhibit 1

BAE Systems Information and Electronic Systems Integration Inc. (“BAE Systems”) seeks Commission consent for an Experimental Special Temporary Authority for the facilities specified herein.

The requested STA is sought as an extension and continuation of the operations previously authorized under STA call sign WI9XOS (0444-EX-ST-2015), which permitted operations within or adjacent to the frequencies licensed to FirstNet. Pursuant to applicable policy which allows authority on these frequencies only pursuant to STA, and because BAE Systems requires continued operations on these frequencies, this filing is being presented as an STA seeking authority for a 6 month period. Because the prior granted STA under WI9XOS is scheduled to expire on January 2, 2016, grant of the instant application is respectfully requested by January 2, 2016 to allow for uninterrupted operations supporting the contracts listed below.

The requested facilities are intended for continued operation of the frequencies authorized in WI9XOS in conjunction with the currently granted parameters under call sign WF2XAM. Because the requested facilities in this application are within or adjacent to the frequencies licensed to FirstNet, a separate application has been submitted to the Commission for these frequencies, to allow for separate review of these frequencies.

I. General Purpose of the Experiment

Continued testing conducted under this STA, the prior granted Station WI9XOS and the WF2XAM license 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, and in support of the following contract and other efforts:

Customer: United States Army, PM SAI
Government Agency: ACC-APG DIVISION C
Contract No.: W15P7T-14-D-C015
Customer POC: ABEER AMEER
POC Telephone #: 443-861-5363
POC email: ABEER.J.AMEER.CIV@MAIL.MIL

As a general matter, continued operation of the requested facilities (along with the granted license under call sign WF2XAM) will permit BAE Systems to determine the requirement for calibration of the arrays installed on the candidate platform, generate calibration parameters if required and verify the accuracy of the calibration parameters by conducting carefully controlled flight tests. The transmissions on the subject frequencies will be solely ground-based, fixed transmissions, initiated from BAE Systems’ antenna range at the company’s campus location at Litchfield, NH (42-48-22 N.Lat; 071-25-33 W.Long. (NAD83)).

II. Specific Description of Transmissions (Location, Power Levels, Emissions)

The application seeks continued authority for the following specific types of transmissions:

CW Transmissions Directed at Full-Scale Aircraft Models

- a. Ground-based CW transmissions initiated at BAE Systems’ antenna range (Litchfield, NH: 42-48-22 N.Lat; 071-25-33 W.Long. (NAD83)) and directed at full-scale model aircraft also located at the same antenna range. The purpose of these transmissions is to measure individually the performance of full-scale antennas of various types (i.e., loop, monopole, dipole), and measure the performance of the antennas on a full-scale aircraft replica.

The target model aircraft may be utilized while resting at ground level or resting on a platform raised no higher than 12.5 feet above ground level, with a transmit distance of no more than 100 feet (see figure attached hereto).

- b. Output Power and ERP: .007W (Mean)

Note: The transmitter will not be left on continuously due to the nature of the experiment and the need to physically reposition the model under test between measurements, cycle through frequencies, change elevation angles of the transmit antenna, etc. where the transmit power is reduced to zero.

- c. Emissions Designator: “NON”

III. Directionality/Beamwidth and Orientation of Antennas

The following information describes the directionality, beamwidth and orientation of the antennas associated with these requested transmissions (all below 6m):

Directional Antennas

Manufacturer	Model #	Quantity	Gain (Nominal)	3dB BW E (Vertical)	3dB BW H (Horizontal)
KMA	26500	1	-6dBi	90°	90°
SA	26-0.1	1	+8 dBi	60°	120°
SA	29-0.1	2	+8 dBi	60°	120°
SA	27-1.0/8	1	+8 dBi	9°	1.5°
SA	28-1.0/8/10	1	+8 dBi	9°	4.5°
Sanders	1/2 Horn	1	+8dBi	60-30°	N/A
Sanders	Dual Horn	1	+8dBi	60-30°	60-30°
Sanders	1/2 Horn	1	+8dBi	60-45°	N/A
Condor	AS-48461	1	+5-18 dBi	60-10°	60-10°
AEL	H-1498	1	+8-12 dBi	60-30°	60-30°
SA	28-2.0/8/10	1	+8 dBi	60-30°	60-30°

Non-Directional Antennas

Manufacturer	Model #	Quantity	Gain (Nominal)	3dB BW E (Vertical)	3dB BW H (Horizontal)
Sanders	1/4Mon	4	-5.2 dBi	OMNI	N/A
Electro Metrics	EM-6924	2	+2.6 dBi	OMNI	120°
Sanders	TASES 36	2	-60 to -5dBi	OMNI	N/A
Sanders	TASES 24	2	-31.5 to +1.1 dBi	OMNI	N/A
Sanders	TASES 12	2	-10 to -5	OMNI	N/A
Sanders	Slant	1	-20 to -5	OMNI	N/A

Ground-Based Data-Link (Uplink) Transmissions:

Manufacturer	Model #	Quantity	Gain (Nominal)	3dB BW E (Vertical)	3dB BW H (Horizontal)
TCDL	9.5	1	+26 DbI	7°	7°

Transmitting Equipment and Additional Signal Amplification

Transmitters associated with Ground-Based CW Transmissions (all non-experimental):

Manufacturer	Model	Quantity
HP	HP8645A	1
HP	HP8341	1
HP	HP8643A	1
HP	HP8340B	1
HP	HP8662A	1
HP	HP8671A	1
HP	HP8753A	1
HP	HP8753D	1
HP	HP8753E	1
HP	HP8510B	1
HP	HP8510C	1
Agilent	E8257D	1

Additional Signal Amplification:

Additional signal amplification may be utilized as follows:

Power Amplifiers	Model	Frequency Band	Power Output	Quantity
OPHIR	5163	.8GHz-4.2GHz	50W	1
OPHIR	5162	20-10000 MHz	50W	1
OPHIR	5127	20-1000 MHz	250W	1
OPHIR	5069	.5MHz to 500MHz	8W	1
OPHIR	5094	1MHz to 1000MHz	3W	1
OPHIR	5160	.8GHz to 4.2GHz	7W	1
CPI	VZV-2776K4/K6	4.0GHz to 18GHz	25W	1
ENI	510L	1.7MHz to 500MHz	9.5W	1
ENI	603L	.8 MHz to 1000MHz	3W	1

IV. Stop Buzzers

The “Stop Buzzer” contacts in the event of any interference are as follows:

Mr. Sean Hallinan – (603) 361-5959

Mr. Richard C. Ball – (603) 318-6913;

and

BAE Systems Emergency Services Center - (603) 885-3842