

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

WL2XQO

(Call Sign)

XT MO

(Class of Station)

0248-EX-CN-2021

(File Number)

NAME BAE Systems Information and Electronic Systems Integration Inc.

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(h) of the Commission's Rules

Station Locations

- (1) MOBILE: Temporary Fixed Ground Operations Merrimack, NH, within 0.5 km, centered around NL 42-48-39; WL 71-29-19

Frequency Information

MOBILE: Temporary Fixed Ground Operations Merrimack, NH, within 0.5 km, centered around NL 42-48-39; WL 71-29-19

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3.1-3.3 GHz	MO	N0N	2000 W (ERP)	
		100MP0N		
		100MQ1N		
		100MQ3N		
		150MP0N		
		150MQ1N		
		150MQ3N		
		15M0P0N		
		15M0Q1N		
		15M0Q3N		
		200MP0N		
		200MQ1N		

This authorization effective August 20, 2021 and
will expire 3:00 A.M. EST September 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3.1-3.3 GHz	MO	200MQ3N	2000 W (ERP)	
5.25-5.5 GHz	MO	N0N 100MP0N 100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N	2000 W (ERP)	
5.7-5.93 GHz	MO	N0N 100MP0N 100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N	2000 W (ERP)	
7.235-8.99 GHz	MO	N0N 100MP0N	2000 W (ERP)	

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7.235-8.99 GHz	MO	100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N 300MP0N 300MQ1N 300MQ3N	2000 W (ERP)	
9.21-10 GHz	MO	N0N 100MP0N 100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N 300MP0N 300MQ1N 300MQ3N	2000 W (ERP)	
11.7-12.7 GHz	MO	N0N	2000 W (ERP)	

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11.7-12.7 GHz	MO	100MP0N 100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N 300MP0N 300MQ1N 300MQ3N	2000 W (ERP)	
13.25-14.8909 GHz	MO	N0N 100MP0N 100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N 300MP0N 300MQ1N 300MQ3N	2000 W (ERP)	

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.3-17.7 GHz	MO	N0N 100MP0N 100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N 300MP0N 300MQ1N 300MQ3N	2000 W (ERP)	
19.7-20 GHz	MO	N0N 100MP0N 100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N	2000 W (ERP)	
20-21.2 GHz	MO	N0N 100MP0N	2000 W (ERP)	

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
20-21.2 GHz	MO	100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N 300MP0N 300MQ1N 300MQ3N	2000 W (ERP)	
24.15 GHz	MO	N0N 100MP0N 100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N	2000 W (ERP)	
24.45-25.05 GHz	MO	N0N 100MP0N 100MQ1N 100MQ3N	2000 W (ERP)	

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
24.45-25.05 GHz	MO	150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N 300MP0N 300MQ1N 300MQ3N	2000 W (ERP)	
25.25-26 GHz	MO	N0N 100MP0N 100MQ1N 100MQ3N 150MP0N 150MQ1N 150MQ3N 15M0P0N 15M0Q1N 15M0Q3N 200MP0N 200MQ1N 200MQ3N	2000 W (ERP)	
30-40 GHz	MO	N0N 100MP0N 100MQ1N 100MQ3N 150MP0N 150MQ1N	2000 W (ERP)	

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
30-40 GHz	MO	150MQ3N	2000 W (ERP)	
		15M0P0N		
		15M0Q1N		
		15M0Q3N		
		200MP0N		
		200MQ1N		
		200MQ3N		

Special Conditions:

- (1) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) Operation is not permitted using the frequency band 7140-7235 MHz, 8025-8500 MHz, 13772-13778 MHz, 14890.9-15115.9 MHz, 15300-15600 MHz, 24000-24050 MHz and 31300-31800 MHz.
- (4) The stop buzzers: Eduardo Martony at 603-305-4284 and Ray Patel at 817-401-0310.

Special Conditions:

- (5) Prior to commencing any operations in the 11.7-12.2 GHz and 19.7-20.2 GHz frequency bands, experimental licensee must notify licensees of earth stations. The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test. Please notify the following licensees:

Call Sign: E920048

Frequency bands: 11.7-12.2 GHz

Licensee: Hearst Properties Inc.

ATTN: Mark J. Prak

Phone: 919-839-0300 Fax: 919-839-0304

ATTN: ROGER ROSENDAHL 606-669-9999

Call Sign: E180118

Frequency bands: 11.7-12.2 GHz and 19.7-20.2 GHz

Licensee: MIT Lincoln Laboratory

ATTN: Mr Joseph Fischetti

Phone: 781-981-7689 Fax: 781-981-0189 E-Mail: Fischetti@LL.MIT.EDU

ATTN: John Pineau 781-981-2109

- (6) Prior to commencing any in the 12.2 -12.7 GHz band, experimental licensee must notify licensees of Dish Network (Mr. Mariam Sorond, Email: Mariam.sorond@dish.com Charles Ergen, Email: charlie.ergen@dish.com) EchoStar (Mr. Jaime Londono Email: Jaime.londono@echostar.com), and DirecTV/AT&T (Mr. Raquel Noriega Email: raquel.noriega@att.com). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna pattern, antenna height(s), antenna orientation, eirp density) and day and times of each test.
- (7) Prior to commencing any in the 12.2 -12.7 GHz band, experimental licensee must notify licensees of DISH Operating L.L.C. (Blanket Earth Stations call sign: E090020), DISH Broadcasting Corporation (Blanket Earth Stations call sign: E080107) and EchoStar 77 Corp. (Blanket Earth Stations call sign: E050196). Phone Number: 202-463-3709 or 202-293-0981, E-Mail: Alison.Minea@dish.com Attention: Alison Minea). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna pattern, antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.
- (8) Prior to commencing any in the 17.3-17.7 GHz band, experimental licensee must notify licensees of DIRECTV Enterprises, LLC (Phone Number: 310-964-3589 E-Mail: nm704u@att.com Attention: Navid Motamed) and DirecTV/AT&T (Mr. Raquel Noriega Email: raquel.noriega@att.com). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna pattern, antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.

Special Conditions:

- (9) Prior to commencing any in the 17.3-17.7 GHz band, experimental licensee must notify licensees of DISH Operating L.L.C. (Blanket Earth Stations call sign: E140100. Phone Number: 202-463-3709 E-Mail: Alison.Minea@dish.com Attention: Alison Minea). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna pattern, antenna height(s), antenna orientation, EIRP, EIRP density) and day and times of each test.
- (10) Operation is not permitted the use of the frequency band 4.4-5 GHz and 10-10.55 GHz.
- (11) Licensee must successfully secure consents from the Upper Microwave Flexible Use Service licensees in the proposed area prior to accessing to 24.45-25.05 GHz and 37-40 GHz bands.
- (12) Licensee must successfully coordinate with Fixed Microwave Service licensees in accordance with 47 C.F.R, Part 101.103(d) prior to operation in 5700-5930 MHz, 11.7-12.7 GHz bands.