

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

EXPERIMENTAL

(Nature of Service)

WF2XUB

(Call Sign)

XT MO

(Class of Station)

0461-EX-CR-2020

(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(i) of the Commission's Rules

Station Locations

(1) MOBILE: Merrimack, NH, within 0.46 km, centered around NL 42-48-36; WL 71-29-18

Frequency Information

MOBILE: Merrimack, NH, within 0.46 km, centered around NL 42-48-36; WL 71-29-18

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
140.1-147.9 MHz	FX	N0N	0.007 W (ERP)	
153.4 MHz	FX	N0N	0.007 W (ERP)	
162.85 MHz	FX	N0N	0.007 W (ERP)	
164-166 MHz	FX	N0N	0.007 W (ERP)	

This authorization effective August 31, 2020 and
will expire 3:00 A.M. EST September 01, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
168 MHz	FX	N0N	0.007 W (ERP)	
170 MHz	FX	N0N	0.007 W (ERP)	
173.6 MHz	FX	N0N	0.007 W (ERP)	
472.225 MHz	FX	N0N	0.007 W (ERP)	
476.95 MHz	FX	N0N	0.007 W (ERP)	
481.725 MHz	FX	N0N	0.007 W (ERP)	
486.525 MHz	FX	N0N	0.007 W (ERP)	
491.4 MHz	FX	N0N	0.007 W (ERP)	
496.3 MHz	FX	N0N	0.007 W (ERP)	
500 MHz	FX	N0N	0.007 W (ERP)	

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
510 MHz	FX	N0N	0.007 W (ERP)	
530-542 MHz	FX	N0N	0.007 W (ERP)	
548-554 MHz	FX	N0N	0.007 W (ERP)	
563.1 MHz	FX	N0N	0.007 W (ERP)	
574.35 MHz	FX	N0N	0.007 W (ERP)	
578-584 MHz	FX	N0N	0.007 W (ERP)	
627-632 MHz	MO	N0N	0.007 W (ERP)	
634.125 MHz	FX	N0N	0.007 W (ERP)	
646.825 MHz	FX	N0N	0.007 W (ERP)	
659.75 MHz	FX	N0N	0.007 W (ERP)	

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
662-668 MHz	FX	N0N	0.007 W (ERP)	
672.95 MHz	FX	N0N	0.007 W (ERP)	
686.4 MHz	FX	N0N	0.007 W (ERP)	
700.125 MHz	FX	N0N	0.007 W (ERP)	
714.125 MHz	FX	N0N	0.007 W (ERP)	
728.425 MHz	FX	N0N	0.007 W (ERP)	
734-740 MHz	FX	N0N	0.007 W (ERP)	
742.975 MHz	FX	N0N	0.007 W (ERP)	
757.85 MHz	FX	N0N	0.007 W (ERP)	
811 MHz	FX	N0N	0.007 W (ERP)	

Frequency Information

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
820 MHz	FX	N0N	0.007 W (ERP)	
830 MHz	FX	N0N	0.007 W (ERP)	
840 MHz	FX	N0N	0.007 W (ERP)	
850 MHz	FX	N0N	0.007 W (ERP)	
865 MHz	FX	N0N	0.007 W (ERP)	
880 MHz	FX	N0N	0.007 W (ERP)	
890 MHz	FX	N0N	0.007 W (ERP)	
1251-1390 MHz	MO	N0N	0.007 W (ERP)	
1540-1570 MHz	MO	N0N	0.007 W (ERP)	
1670-1709 MHz	MO	N0N	0.007 W (ERP)	

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1756-1850 MHz	FX	N0N	0.007 W (ERP)	
1863.555 MHz	FX	N0N	0.007 W (ERP)	
1890.945 MHz	FX	N0N	0.007 W (ERP)	
1909.965 MHz	FX	N0N	0.007 W (ERP)	
1910.025 MHz	FX	N0N	0.007 W (ERP)	
1929.975 MHz	FX	N0N	0.007 W (ERP)	
1946.925 MHz	FX	N0N	0.007 W (ERP)	
1960.575 MHz	FX	N0N	0.007 W (ERP)	
1975.545 MHz	FX	N0N	0.007 W (ERP)	
1990.025 MHz	FX	N0N	0.007 W (ERP)	

Frequency Information

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2100 MHz	FX	N0N	0.007 W (ERP)	
2200 MHz	FX	N0N	0.007 W (ERP)	
2300 MHz	FX	N0N	0.007 W (ERP)	
2430 MHz	FX	N0N	0.007 W (ERP)	
2900-3640 MHz	FX	N0N	0.007 W (ERP)	
3710-4000 MHz	FX	N0N	0.007 W (ERP)	

Special Conditions:

- (1) Operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9102 North Meridian Street, Suite 305; Indianapolis, IN 46260; telephone, (866) 632-4222; FAX, (317) 846-9120; e-mail, executivedir@sbe.org; information, www.sbe.org.
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) 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.
- (5) No operation is permitted to transmit in any public safety frequencies listed under Part 90.20 unless coordinated with the licensed public safety entity.
- (6) Operation is subject to prior coordination with the existing and future Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d).
- (7) Operation must be maintain separation from the incumbent, grandfathered fixed satellite service earth stations as defined in Part 90, Subpart Z.

Special Conditions:

- (8) The designated point-of-contact to terminate transmissions if interference occurs is Mr. George Moynihan at (603) 689-8630 and BAE Systems Emergency Services Center at (603) 885-3842.
- (9) Operation is subject to prior coordination with FAA.
- (10) Using the frequency band 2700-2900 MHz, transmissions are required to be blanked between 0-270 degrees reference to true North.
- (11) Use of this frequency band 1251-1850 MHz under the authority of this assignment is subject to further coordination with HQ USAF frequency coordinator, Alexandria, VA to ensure compatibility with existing uses.
- (12) Prior to commencing any operations in the frequencies below, the applicant must obtain consent from the following within 20 miles of the contours of the testing area:
 - 700 MHz Lower Band "A" block licensees (698-704 MHz/728-734 MHz)
 - 700 MHz Lower Band "B" block licensees (704-710 MHz/734-740 MHz)
 - 700 MHz Lower Band "C" block licensees (710-716 MHz/740-746 MHz)
 - 700 MHz Guard Band licensees (757-758 MHz/787-788 MHz)
 - SMR licensees (809-824 MHz/854-869 MHz)
 - B/ILT licensees (809-824 MHz/854-869 MHz)
 - Cellular licensees (824-849 MHz/869-894 MHz)
 - Commercial Air-Ground licensee (849-851 MHz/894-896 MHz)
 - 1670-1675 MHz Band licensee and/or lessee
 - Broadband PCS licensees (1850-1910 MHz/1930-1990 MHz)
 - 1910-1915 MHz/1990-1995 MHz Bands licensee
- (13) The applicant must coordinate its operations in 3550-3640 MHz band with one or more authorized Spectrum Access System (SAS) administrators to obtain channel assignments and avoid causing harmful interference to authorized users of the band, including General Authorized Access (GAA) users.
- (14) With respect to operations in 3710-4000 MHz band, the applicant should be made aware that they must avoid causing interference to existing Fixed Service operators and FSS earth stations in the band.? For applicant's reference, a list of registered incumbent?FSS earth stations in the band can be found at the following link:
<https://docs.fcc.gov/public/attachments/DA-20-823A2.xls>