

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

EXPERIMENTAL

(Nature of Service)

XT FX

(Class of Station)

WD2XSG

(Call Sign)

0477-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(d g) of the Commission's Rules

Station Locations

- (1) Merrimack (HILLSBOROUGH), NH - NL 42-48-30; WL 71-29-15
- (2) Merrimack (HILLSBOROUGH), NH - NL 42-48-39; WL 71-29-19

Frequency Information

Merrimack (HILLSBOROUGH), NH - NL 42-48-30; WL 71-29-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
30-74.8 MHz	FX	NON	0.00316 W (ERP)	
75.2-108 MHz	FX	NON	0.00316 W (ERP)	
137-152.855 MHz	FX	NON	0.00316 W (ERP)	
154-156.515 MHz	FX	NON	0.00316 W (ERP)	

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

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Merrimack (HILLSBOROUGH), NH - NL 42-48-30; WL 71-29-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
156.535-156.79 MHz	FX	N0N	0.00316 W (ERP)	
156.8125-161.625 MHz	FX	N0N	0.00316 W (ERP)	
161.775-162 MHz	FX	N0N	0.00316 W (ERP)	
174-215 MHz	FX	N0N	0.00316 W (ERP)	
451-454 MHz	FX	N0N	0.00316 W (ERP)	
456-470 MHz	FX	N0N	0.00316 W (ERP)	
809-928 MHz	FX	N0N	0.00398 W (ERP)	
933-935 MHz	FX	N0N	0.00398 W (ERP)	
941-944 MHz	FX	N0N	0.00398 W (ERP)	
1.215 GHz	FX	N0N	0.00398 W (ERP)	

Frequency Information

Merrimack (HILLSBOROUGH), NH - NL 42-48-30; WL 71-29-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1.2276 GHz	FX	N0N	0.00398 W (ERP)	
1.25 GHz	FX	N0N	0.00398 W (ERP)	
1.27 GHz	FX	N0N	0.00398 W (ERP)	
1.37 GHz	FX	N0N	0.00398 W (ERP)	
1.41 GHz	FX	N0N	0.00398 W (ERP)	
1.55 GHz	FX	N0N	0.00398 W (ERP)	
1.62-1.85 GHz	FX	N0N	0.00398 W (ERP)	
2.15-2.16 GHz	FX	N0N	0.00398 W (ERP)	
2.2-2.3 GHz	FX	N0N	0.00398 W (ERP)	
2.4-2.45 GHz	FX	N0N	0.00398 W (ERP)	

Frequency Information

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3.1-4.2 GHz	FX	N0N	0.00398 W (ERP)	
4.4-5 GHz	FX	N0N	0.00398 W (ERP)	
5.25-5.5 GHz	FX	N0N	0.00398 W (ERP)	
5.7-5.925 GHz	FX	N0N	0.00398 W (ERP)	
7.125-8.99 GHz	FX	N0N	0.00398 W (ERP)	
9.21-10 GHz	FX	N0N	0.00398 W (ERP)	
10-10.55 GHz	FX	N0N	0.00398 W (ERP)	
11.7-12.7 GHz	FX	N0N	0.00398 W (ERP)	
13.25-15.6 GHz	FX	N0N	0.00398 W (ERP)	
16.3-17.7 GHz	FX	N0N	0.00398 W (ERP)	

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16.3-17.7 GHz	FX	N0N	0.00398 W (ERP)	
19.7-20 GHz	FX	N0N	0.00398 W (ERP)	
20-21.2 GHz	FX	N0N	0.00398 W (ERP)	
24-24.25 GHz	FX	N0N	0.00398 W (ERP)	
24.45-25.05 GHz	FX	N0N	0.00398 W (ERP)	
25.25-26 GHz	FX	N0N	0.00398 W (ERP)	

Merrimack (HILLSBOROUGH), NH - NL 42-48-39; WL 71-29-19

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
30-74.8 MHz	FX	N0N	0.00316 W (ERP)	
75.2-108 MHz	FX	N0N	0.00316 W (ERP)	
137-152.855 MHz	FX	N0N	0.00316 W (ERP)	

Frequency Information

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
154-156.515 MHz	FX	N0N	0.00316 W (ERP)	
156.535-156.79 MHz	FX	N0N	0.00316 W (ERP)	
156.8125-161.625 MHz	FX	N0N	0.00316 W (ERP)	
161.775-162 MHz	FX	N0N	0.00316 W (ERP)	
174-215 MHz	FX	N0N	0.00316 W (ERP)	
451-454 MHz	FX	N0N	0.00316 W (ERP)	
456-470 MHz	FX	N0N	0.00316 W (ERP)	
809-928 MHz	FX	N0N	0.00398 W (ERP)	
933-935 MHz	FX	N0N	0.00398 W (ERP)	
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1.215 GHz	FX	N0N	0.00398 W (ERP)	
1.2276 GHz	FX	N0N	0.00398 W (ERP)	
1.25 GHz	FX	N0N	0.00398 W (ERP)	
1.27 GHz	FX	N0N	0.00398 W (ERP)	
1.37 GHz	FX	N0N	0.00398 W (ERP)	
1.41 GHz	FX	N0N	0.00398 W (ERP)	
1.55 GHz	FX	N0N	0.00398 W (ERP)	
1.62-1.85 GHz	FX	N0N	0.00398 W (ERP)	
2.15-2.16 GHz	FX	N0N	0.00398 W (ERP)	
2.2-2.3 GHz	FX	N0N	0.00398 W (ERP)	

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2.4-2.45 GHz	FX	N0N	0.00398 W (ERP)	
3.1-4.2 GHz	FX	N0N	0.00398 W (ERP)	
4.4-5 GHz	FX	N0N	0.00398 W (ERP)	
5.25-5.5 GHz	FX	N0N	0.00398 W (ERP)	
5.7-5.925 GHz	FX	N0N	0.00398 W (ERP)	
7.125-8.99 GHz	FX	N0N	0.00398 W (ERP)	
9.21-10 GHz	FX	N0N	0.00398 W (ERP)	
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24-24.25 GHz	FX	N0N	0.00398 W (ERP)	
24.45-25.05 GHz	FX	N0N	0.00398 W (ERP)	
25.25-26 GHz	FX	N0N	0.00398 W (ERP)	

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) 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.
- (3) In the band 7125-10000 MHz, licensee shall exclude operations on the following frequencies plus or minus 10 MHz: M7186, M7310, M7410, M7500, M7605, M7700, M7710, M7810, M7925, M8005, M8090, M8170, M8210, M8250, M8290, M8330.
- (4) The designed point-of-contact to terminate transmissions if interference occurs is Mr. George Moynihan at 603-689-8630 and BAE Systems Emergency Services Center - (603) 885-3842.
- (5) Operation in the frequency bands 960-1400 MHz is subject to prior coordination with the FAA Regional Office.
- (6) Operation is NOT PERMITTED use of the following frequency bands 156.5125-156.5375 MHz, 156.7625-156.8125 MHz, 161.9625-161.9875 MHz on this license due to potential interference to Federal Government operations.

Special Conditions:

- (7) The use of frequencies under the authority of this assignment is subject to further coordination with HQ USAF frequency coordinator in Alexandria, VA to ensure compatibility with existing uses.
- (8) The FAA frequency band was coordinated prior to authorization with FAA Headquarters, 800 Independence Avenue, S.W., Washington, DC 20591. Phone 202-267-8699.
- (9) Operations granted on an experimental basis shall be on an unprotected, non-interference basis to authorized federal stations.
- (10) The BAE company shall be aware of that operational use of the subject equipment in the 2200-2290 MHz frequency band may not be possible and the BAE company shall have no expect that future requests will be approved.
- (11) 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:
 - 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)
- (12) 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.
- (13) 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>