

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

EXPERIMENTAL

(Nature of Service)

WD2XJW

(Call Sign)

XC FX

(Class of Station)

0154-EX-ML-2011

(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(b) of the Commission's Rules

Station Locations

(1) Merrimack (HILLSBOROUGH), NH - NL 42-48-40; WL 71-29-26

Frequency Information

Merrimack (HILLSBOROUGH), NH - NL 42-48-40; WL 71-29-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
500-932 MHz	FX	N0N	10 W (ERP)	
933-960 MHz	FX	N0N	10 W (ERP)	
1215-2700 MHz	FX	N0N	10 W (ERP)	
2900-4200 MHz	FX	N0N	10 W (ERP)	
4400-5000 MHz	FX	N0N	10 W (ERP)	

This authorization effective October 07, 2011 and
will expire 3:00 A.M. EST July 01, 2013

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Merrimack (HILLSBOROUGH), NH - NL 42-48-40; WL 71-29-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4400-5000 MHz	FX	5M00G1W 10M0G7D 20M0G7D	10 W (ERP)	
5250-6000 MHz	FX	N0N 5M00G1W 10M0G7D 20M0G7D	10 W (ERP)	

Special Conditions:

- (1) Assignment in frequency bands 960-1400, 2700-2900, or 9000-9200 MHz was coordinated prior to authorization with the FAA New England Coordinator, Burlington, MA. Use of frequencies under the authority of this assignment is subject to such further coordination with the FAA New England Coordinator, Burlington, MA, as necessary to ensure compatibility with existing uses.
- (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 lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (5) Operation in the 1710-1755 or 2110-2155 MHz band requires consent of local Advanced Wireless Service (AWS) licensee(s) to avoid interference.
- (6) Operation in the 824-849 or 869-894 MHz band requires consent of local cellular licensee(s) to avoid interference.
- (7) Operation in the 763-768 or 793-798 MHz band requires consent of the Public Safety Spectrum Trust Corporation (PSST) to avoid interference.
- (8) Operation in the 763-768 or 793-798 MHz band requires consent of 700 MHz waiver recipient(s), in areas where such waivers have been awarded, to avoid interference.
- (9) This frequency assignment in one of the bands 1435-1525, 2310-2320 MHz and 2345-2390 MHz was coordinated prior to authorization with the HQ USAF Frequency Coordinator, Alexandria, VA, who also coordinated it, as appropriate, with the Aerospace and Flight Test Radio Coordinating Council. Use of this frequency under the authority of this assignment is subject to such further coordination with HQ USAF Frequency Coordinator, Alexandria, VA, as necessary to ensure compatibility with existing uses.

Special Conditions:

- (10) Operations in the band 1215-2700 MHz, shall exclude any transmission in the following sub bands: 1215-1240 MHz, 1760-1842 MHz, 2200-2300 MHz and 2320-2345 MHz. No transmissions are permitted in these bands.
- (11) Operations in the band 1215-2700 MHz shall be oriented with an antenna azimuth of 273 degrees referenced to true north, have a beamwidth no greater than 80 degrees, and peak power of 10 watts ERP.
- (12) No operations are in the use of the frequency band 2320-2345 MHz in order to protect SDARS.
- (13) The designated point-of-contact to terminate transmissions if interference occurs is Dawn Ingram at 603-885-2449 or George Moynihan at 603-689-8630.
- (14) Renewal of this license is subject to prior coordination with AFTRCC Frequency Advisory Committee, PO Box 200547, Cartersville, GA 30120-9010, (770) 494-2893; and FAA Regional Office.
- (15) Operation in the frequency band 5250 - 6000 MHz is subject to immediate cessation, if it causes harmful interference to FAA.
- (16) Operation is subject to prior coordination with Wireless Communication Service in order to use the frequency bands 2310-2320 MHz and 2345-2360 MHz.
- (17) Operation is NOT permitted on the frequency band 608-614 MHz.
- (18) Due to USAF assignments within 30 MIRAD, 24 hour prior coordination with Hanscom AFB Frequency Management is required. Point-of-contact is Mr. Kevin McGrath at (781) 377-7511 (kevin.mcgrath@hanscom.af.mil)
- (19) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by DARPA contract number W15P7T-06-C-P423. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.
- (20) Operation the frequency band 3650-3700 MHz is subject prior coordination with FSS stations in the area.
- (21) Operation is NOT permitted use of any public safety frequencies listed under rule 90.20.