

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

EXPERIMENTAL

(Nature of Service)

WL2XLF

(Call Sign)

XC MO

(Class of Station)

1076-EX-CN-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(h) of the Commission's Rules

Station Locations

- (1) MOBILE: Temporary Fixed Ground Operations, Hudson, NH, within 0.16 km, centered around NL 42-42-21; WL 71-25-42
- (2) MOBILE: Temporary Fixed Ground Operation, Devens, MA, within 2.1 km, centered around NL 42-29-37; WL 71-40-23
- (3) MOBILE: Temporary Fixed Ground Operations, Merrimack, NH, within 0.43 km, centered around NL 42-48-37; WL 71-29-15
- (4) MOBILE: Airborne Operations, Merrimack, NH, within 0.43 km, centered around NL 42-48-37; WL 71-29-15
- (5) MOBILE: Airborne Operations, Devens, MA, within 2.1 km, centered around NL 42-29-37; WL 71-40-23
- (6) MOBILE: Airborne Operations, Hudson, NH, within 0.16 km, centered around NL 42-42-21; WL 71-25-42
- (7) MOBILE: Temporary Fixed Ground Operations, Preston, MD, within 0.7 km, centered around NL 38-44-24; WL 75-58-08
- (8) MOBILE: Airborne Operations, Preston, MD, within 0.7 km, centered around NL 38-44-24; WL 75-58-08

This authorization effective February 12, 2021 and
will expire 3:00 A.M. EST February 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Temporary Fixed Ground Operations, Hudson, NH, within 0.16 km, centered around NL 42-42-21; WL 71-25-42

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-927 MHz	MO	25M0V1D	3.429 W (ERP)	

MOBILE: Temporary Fixed Ground Operation, Devens, MA, within 2.1 km, centered around NL 42-29-37; WL 71-40-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
100-107 MHz	MO	5K00P0N 5K00P1N	0.00015 W (ERP)	
175-200 MHz	MO	5K00P0N 5K00P1N	0.00015 W (ERP)	
650-697 MHz	MO	5K00P0N 5K00P1N	0.00061 W (ERP)	
902-927 MHz	MO	25M0V1D	3.429 W (ERP)	
2401-2473 MHz	MO	20M0D1D	15.43 W (ERP)	
3000-3200 MHz	MO	5K00P0N 5K00P1N	0.00143 W (ERP)	
6000-6100 MHz	MO	5K00P0N	0.00009 W (ERP)	

Frequency Information

MOBILE: Temporary Fixed Ground Operation, Devens, MA, within 2.1 km, centered around NL 42-29-37; WL 71-40-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
6000-6100 MHz	MO	5K00P1N	0.00009 W (ERP)	

MOBILE: Temporary Fixed Ground Operations, Merrimack, NH, within 0.43 km, centered around NL 42-48-37; WL 71-29-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
100-107 MHz	MO	5K00P0N 5K00P1N	0.00015 W (ERP)	
175-200 MHz	MO	5K00P0N 5K00P1N	0.00015 W (ERP)	
650-697 MHz	MO	5K00P0N 5K00P1N	0.00061 W (ERP)	
902-927 MHz	MO	25M0V1D	3.429 W (ERP)	
2401-2473 MHz	MO	20M0D1D	15.43 W (ERP)	
3000-3200 MHz	MO	5K00P0N 5K00P1N	0.00143 W (ERP)	
6000-6100 MHz	MO	5K00P0N	0.00009 W (ERP)	

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MOBILE: Temporary Fixed Ground Operations, Merrimack, NH, within 0.43 km, centered around NL 42-48-37; WL 71-29-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
6000-6100 MHz	MO	5K00P1N	0.00009 W (ERP)	

MOBILE: Airborne Operations, Merrimack, NH, within 0.43 km, centered around NL 42-48-37; WL 71-29-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
100-107 MHz	MO	5K00P0N 5K00P1N	0.021 W (ERP)	
175-200 MHz	MO	5K00P0N 5K00P1N	0.021 W (ERP)	
650-697 MHz	MO	5K00P0N 5K00P1N	0.0005 W (ERP)	
902-927 MHz	MO	25M0V1D	0.944 W (ERP)	
902.5-906.5 MHz	MO	4M00V1N	1.21 W (ERP)	
2401-2473 MHz	MO	20M0D1D	0.973 W (ERP)	
3000-3200 MHz	MO	5K00P0N 5K00P1N	0.00002 W (ERP)	

Frequency Information

MOBILE: Airborne Operations, Merrimack, NH, within 0.43 km, centered around NL 42-48-37; WL 71-29-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
6000-6100 MHz	MO	5K00P0N 5K00P1N	0.00009 W (ERP)	

MOBILE: Airborne Operations, Devens, MA, within 2.1 km, centered around NL 42-29-37; WL 71-40-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
100-107 MHz	MO	5K00P0N 5K00P1N	0.021 W (ERP)	
175-200 MHz	MO	5K00P0N 5K00P1N	0.021 W (ERP)	
650-697 MHz	MO	5K00P0N 5K00P1N	0.0005 W (ERP)	
902-927 MHz	MO	25M0V1D	0.944 W (ERP)	
902.5-906.5 MHz	MO	4M00V1N	1.21 W (ERP)	
2401-2473 MHz	MO	20M0D1D	0.973 W (ERP)	
3000-3200 MHz	MO	5K00P0N	0.00002 W (ERP)	

Frequency Information

MOBILE: Airborne Operations, Devens, MA, within 2.1 km, centered around NL 42-29-37; WL 71-40-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3000-3200 MHz	MO	5K00P1N	0.00002 W (ERP)	
6000-6100 MHz	MO	5K00P0N 5K00P1N	0.00009 W (ERP)	

MOBILE: Airborne Operations, Hudson, NH, within 0.16 km, centered around NL 42-42-21; WL 71-25-42

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-927 MHz	MO	25M0V1D	0.944 W (ERP)	
902.5-906.5 MHz	MO	4M00V1N	1.21 W (ERP)	
2401-2473 MHz	MO	20M0D1D	0.973 W (ERP)	

MOBILE: Temporary Fixed Ground Operations, Preston, MD, within 0.7 km, centered around NL 38-44-24; WL 75-58-08

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
100-107 MHz	MO	5K00P0N 5K00P1N	0.00015 W (ERP)	
175-200 MHz	MO	5K00P0N	0.00015 W (ERP)	

Frequency Information

MOBILE: Temporary Fixed Ground Operations, Preston, MD, within 0.7 km, centered around NL 38-44-24; WL 75-58-08

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
175-200 MHz	MO	5K00P1N	0.00015 W (ERP)	
650-697 MHz	MO	5K00P0N 5K00P1N	0.00061 W (ERP)	
902-927 MHz	MO	25M0V1D	3.429 W (ERP)	
2401-2473 MHz	MO	20M0D1D	15.43 W (ERP)	
3000-3200 MHz	MO	5K00P0N 5K00P1N	0.00143 W (ERP)	
6000-6100 MHz	MO	5K00P0N 5K00P1N	0.00009 W (ERP)	

MOBILE: Airborne Operations, Preston, MD, within 0.7 km, centered around NL 38-44-24; WL 75-58-08

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
100-107 MHz	MO	5K00P0N 5K00P1N	0.021 W (ERP)	
175-200 MHz	MO	5K00P0N	0.021 W (ERP)	

Frequency Information

MOBILE: Airborne Operations, Preston, MD, within 0.7 km, centered around NL 38-44-24; WL 75-58-08

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
175-200 MHz	MO	5K00P1N	0.021 W (ERP)	
650-697 MHz	MO	5K00P0N 5K00P1N	0.0005 W (ERP)	
902-927 MHz	MO	25M0V1D	0.944 W (ERP)	
902.5-906.5 MHz	MO	4M00V1N	1.21 W (ERP)	
2401-2473 MHz	MO	20M0D1D	0.973 W (ERP)	
3000-3200 MHz	MO	5K00P0N 5K00P1N	0.00002 W (ERP)	
6000-6100 MHz	MO	5K00P0N 5K00P1N	0.00009 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) Operation is subject to prior coordination with the local Society of Broadcast Engineers frequency coordinator and the Fixed Microwave Service licensees in each proposed area to protect the services.

Special Conditions:

- (4) For operations at Preston, MD, BAE Systems Information and Electronic Systems Integration Inc. must notch 2460 - 2464 MHz to prevent harmful interference to federal operations.
- (5) Stop buzzer, John Vanderburgh at 603-674-6965.
- (6) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by Air Force Research Laboratory, Contract Number: FA8650-19-C-7925. 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.
- (7) Prior to commencing any operations in the frequencies below, the applicant must obtain consent from the following within 82 miles of the contours of the testing area:
 - Location & Monitoring Service licensees (902-928 MHz)