

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

EXPERIMENTAL

(Nature of Service)

WL2XVA

(Call Sign)

XC MO

(Class of Station)

0427-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 Wallops Island, VA, within 5 km, centered around NL 37-51-26; WL 75-27-58
- (2) MOBILE: Temporary Fixed Joint Base Cape Cod, MA, within 5 km, centered around NL 41-39-33; WL 70-31-17
- (3) MOBILE: Temporary Fixed Fort Devens, MA, within 2.8 km, centered around NL 42-29-54; WL 71-39-06
- (4) MOBILE: Offshore Maritime Gulf of Mexico, GM, within 120 km, centered around NL 28-03-00; WL 85-45-00

Frequency Information

MOBILE: Temporary Fixed Wallops Island, VA, within 5 km, centered around NL 37-51-26; WL 75-27-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7.4 kHz	MO	200HF1D	500 W (ERP)	0.2 %
8.5-10.7 kHz	MO	NON	2440 W (ERP)	0.2 %

This authorization effective June 17, 2021 and
will expire 3:00 A.M. EST July 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Temporary Fixed Wallops Island, VA, within 5 km, centered around NL 37-51-26; WL 75-27-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8.9 kHz	MO	200HF1D	700 W (ERP)	0.2 %
10 kHz	MO	800HF1D	1150 W (ERP)	0.2 %
13-15.9 kHz	MO	N0N	7800 W (ERP)	0.2 %
15.5-16.8 kHz	MO	N0N	9700 W (ERP)	0.2 %
18.6 kHz	MO	800HF1D	13.9 kW (ERP)	0.2 %
21.4 kHz	MO	200HF1D	18.4 kW (ERP)	0.2 %
25.4-28.9 kHz	MO	N0N	31.5 kW (ERP)	0.2 %
30 kHz	MO	800HF1D	36.2 kW (ERP)	0.2 %
32 kHz	MO	600HF1D	41.1 kW (ERP)	0.2 %

Frequency Information

MOBILE: Temporary Fixed Joint Base Cape Cod, MA, within 5 km, centered around NL 41-39-33; WL 70-31-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7.4 kHz	MO	200HF1D	500 W (ERP)	0.2 %
8.5-10.7 kHz	MO	N0N	2440 W (ERP)	0.2 %
8.9 kHz	MO	200HF1D	700 W (ERP)	0.2 %
10 kHz	MO	800HF1D	1150 W (ERP)	0.2 %
13-15.9 kHz	MO	N0N	7800 W (ERP)	0.2 %
15.5-16.8 kHz	MO	N0N	9700 W (ERP)	0.2 %
18.6 kHz	MO	800HF1D	13.9 kW (ERP)	0.2 %
21.4 kHz	MO	200HF1D	18.4 kW (ERP)	0.2 %
25.4-28.9 kHz	MO	N0N	31.5 kW (ERP)	0.2 %
30 kHz	MO	800HF1D	36.2 kW (ERP)	0.2 %

Frequency Information

MOBILE: Temporary Fixed Joint Base Cape Cod, MA, within 5 km, centered around NL 41-39-33; WL 70-31-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
32 kHz	MO	600HF1D	41.1 kW (ERP)	0.2 %

MOBILE: Temporary Fixed Fort Devens, MA, within 2.8 km, centered around NL 42-29-54; WL 71-39-06

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7.4 kHz	MO	200HF1D	500 W (ERP)	0.2 %
8.5-10.7 kHz	MO	N0N	2440 W (ERP)	0.2 %
8.9 kHz	MO	200HF1D	700 W (ERP)	0.2 %
10 kHz	MO	800HF1D	1150 W (ERP)	0.2 %
13-15.9 kHz	MO	N0N	7800 W (ERP)	0.2 %
15.5-16.8 kHz	MO	N0N	9700 W (ERP)	0.2 %
18.6 kHz	MO	800HF1D	13.9 kW (ERP)	0.2 %
21.4 kHz	MO	200HF1D	18.4 kW (ERP)	0.2 %

Frequency Information

MOBILE: Temporary Fixed Fort Devens, MA, within 2.8 km, centered around NL 42-29-54; WL 71-39-06

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
25.4-28.9 kHz	MO	N0N	31.5 kW (ERP)	0.2 %
30 kHz	MO	800HF1D	36.2 kW (ERP)	0.2 %
32 kHz	MO	600HF1D	41.1 kW (ERP)	0.2 %

MOBILE: Offshore Maritime Gulf of Mexico, GM, within 120 km, centered around NL 28-03-00; WL 85-45-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7.4 kHz	MO	200HF1D	500 W (ERP)	0.2 %
8.5-10.7 kHz	MO	N0N	2440 W (ERP)	0.2 %
8.9 kHz	MO	200HF1D	700 W (ERP)	0.2 %
10 kHz	MO	800HF1D	1150 W (ERP)	0.2 %
13-15.9 kHz	MO	N0N	7800 W (ERP)	0.2 %
15.5-16.8 kHz	MO	N0N	9700 W (ERP)	0.2 %

Frequency Information

MOBILE: Offshore Maritime Gulf of Mexico, GM, within 120 km, centered around NL 28-03-00; WL 85-45-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
18.6 kHz	MO	800HF1D	13.9 kW (ERP)	0.2 %
21.4 kHz	MO	200HF1D	18.4 kW (ERP)	0.2 %
25.4-28.9 kHz	MO	NON	31.5 kW (ERP)	0.2 %
30 kHz	MO	800HF1D	36.2 kW (ERP)	0.2 %
32 kHz	MO	600HF1D	41.1 kW (ERP)	0.2 %

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) All operations shall be coordinated with the Wallops Flight Facility Spectrum Manager, Felipe Arroyo at 757-824-1623 or felipe.arroyo-1@nasa.gov, at least 30 days prior to operation.
- (4) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by DARPA, contract number N65236-20-C-8015. 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.
- (5) Stop buzzers: James Dolan at 202-580-5311; Greg Nannig at 617-470-4992; BAE Systems Emergency Services Center at 603-885-3842 and Matt Thoren at 603-320-6808.