

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

EXPERIMENTAL

(Nature of Service)

XC FX MO

(Class of Station)

WL2XMS

(Call Sign)

0122-EX-CM-2021

(File Number)

NAME MIT Lincoln Laboratory

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(c) of the Commission's Rules

Station Locations

- (1) Lexington (MIDDLESEX), MA - NL 42-27-22; WL 71-15-56; MOBILE: , within 50 km, centered around NL 42-27-22; WL 71-15-56
- (2) MOBILE: Stockbridge, NY, Griffiss Institute in the Rome NY area, within 50 km, centered around NL 43-01-55; WL 75-39-04

Frequency Information

Lexington (MIDDLESEX), MA - NL 42-27-22; WL 71-15-56; MOBILE: , within 50 km, centered around NL 42-27-22; WL 71-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1.7-5.9 MHz	MO		8 kW (ERP)	0.00001 %
		2K00J3E		
		3K00J3E		
		600HF1B		
		3K00D2D		
		6K00D2D		
		9K00D2D		
		12K0D2D		
		15K0D2D		
		18K0D2D		
		21K0D2D		
		24K0D2D		
		30K0D2D		

This authorization effective August 25, 2021 and
will expire 3:00 A.M. EST March 01, 2024

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Lexington (MIDDLESEX), MA - NL 42-27-22; WL 71-15-56; MOBILE: , within 50 km, centered around NL 42-27-22; WL 71-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1.7-5.9 MHz	MO	36K0D2D 42K0D2D 48K0D2D	8 kW (ERP)	0.00001 %
6.2-7.2 MHz	MO	2K00J3E 3K00J3E 600HF1B 3K00D2D 6K00D2D 9K00D2D 12K0D2D 15K0D2D 18K0D2D 21K0D2D 24K0D2D 30K0D2D 36K0D2D 42K0D2D 48K0D2D	8 kW (ERP)	0.00001 %
7.45-9.4 MHz	MO	2K00J3E 3K00J3E 600HF1B 3K00D2D 6K00D2D 9K00D2D 12K0D2D 15K0D2D 18K0D2D 21K0D2D 24K0D2D 30K0D2D 36K0D2D	8 kW (ERP)	0.00001 %

Frequency Information

Lexington (MIDDLESEX), MA - NL 42-27-22; WL 71-15-56; MOBILE: , within 50 km, centered around NL 42-27-22; WL 71-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7.45-9.4 MHz	MO	42K0D2D 48K0D2D	8 kW (ERP)	0.00001 %
9.9-11.6 MHz	MO	48K0D2D 42K0D2D 36K0D2D 30K0D2D 24K0D2D 21K0D2D 18K0D2D 15K0D2D 12K0D2D 9K0D2D 6K0D2D 3K0D2D 600HF1B 3K0J3E 2K0J3E	8 kW (ERP)	0.00001 %
12.1-13.57 MHz	MO	2K0J3E 3K0J3E 600HF1B 3K0D2D 6K0D2D 9K0D2D 12K0D2D 15K0D2D 18K0D2D 21K0D2D 24K0D2D 30K0D2D 36K0D2D 42K0D2D	8 kW (ERP)	0.00001 %

Frequency Information

Lexington (MIDDLESEX), MA - NL 42-27-22; WL 71-15-56; MOBILE: , within 50 km, centered around NL 42-27-22; WL 71-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
12.1-13.57 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
13.87-15.1 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
		42K0D2D		
		36K0D2D		
		30K0D2D		
		24K0D2D		
		21K0D2D		
		18K0D2D		
		15K0D2D		
		12K0D2D		
		9K00D2D		
		6K00D2D		
		3K00D2D		
		600HF1B		
		3K00J3E		
		2K00J3E		
15.8-17.48 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
		42K0D2D		
		36K0D2D		
		30K0D2D		
		24K0D2D		
		21K0D2D		
		18K0D2D		
		15K0D2D		
		12K0D2D		
		9K00D2D		
		6K00D2D		
		3K00D2D		
		600HF1B		
		3K00J3E		

Frequency Information

Lexington (MIDDLESEX), MA - NL 42-27-22; WL 71-15-56; MOBILE: , within 50 km, centered around NL 42-27-22; WL 71-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.8-17.48 MHz	MO	2K00J3E	8 kW (ERP)	0.00001 %
17.9-18.9 MHz	MO	2K00J3E	8 kW (ERP)	0.00001 %
		3K00J3E		
		600HF1B		
		3K00D2D		
		6K00D2D		
		9K00D2D		
		12K0D2D		
		15K0D2D		
		18K0D2D		
		21K0D2D		
		24K0D2D		
		30K0D2D		
		36K0D2D		
		42K0D2D		
		48K0D2D		
19.02-21.45 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
		42K0D2D		
		36K0D2D		
		30K0D2D		
		24K0D2D		
		21K0D2D		
		18K0D2D		
		15K0D2D		
		12K0D2D		
		9K00D2D		
		6K00D2D		
		3K00D2D		
		600HF1B		
		3K00J3E		

Frequency Information

Lexington (MIDDLESEX), MA - NL 42-27-22; WL 71-15-56; MOBILE: , within 50 km, centered around NL 42-27-22; WL 71-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
19.02-21.45 MHz	MO	2K00J3E	8 kW (ERP)	0.00001 %
21.85-25.67 MHz	MO	48K0D2D 42K0D2D 36K0D2D 30K0D2D 24K0D2D 21K0D2D 18K0D2D 15K0D2D 12K0D2D 9K00D2D 6K00D2D 3K00D2D 600HF1B 3K00J3E 2K00J3E	8 kW (ERP)	0.00001 %
26.1-30 MHz	MO	2K00J3E 3K00J3E 600HF1B 3K00D2D 6K00D2D 9K00D2D 12K0D2D 15K0D2D 18K0D2D 21K0D2D 24K0D2D 30K0D2D 36K0D2D 42K0D2D	8 kW (ERP)	0.00001 %

Frequency Information

Lexington (MIDDLESEX), MA - NL 42-27-22; WL 71-15-56; MOBILE: , within 50 km, centered around NL 42-27-22; WL 71-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
26.1-30 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %

MOBILE: Stockbridge, NY, Griffiss Institute in the Rome NY area, within 50 km, centered around NL 43-01-55; WL 75-39-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1.7-2.495 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
2.505-2.85 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
3.025-3.4 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
3.5-4.65 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
4.7-5.45 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
5.68-5.9 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
6.2-7.2 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
7.45-9.4 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %

Frequency Information

MOBILE: Stockbridge, NY, Griffiss Institute in the Rome NY area, within 50 km, centered around NL 43-01-55; WL 75-39-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.9-9.995 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
10.005-11.6 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
12.1-13.57 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
13.87-14.99 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
15.01-15.1 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
15.8-17.48 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
17.9-18.9 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
19.02-19.99 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
20.01-21.45 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
21.85-24.99 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %

Frequency Information

MOBILE: Stockbridge, NY, Griffiss Institute in the Rome NY area, within 50 km, centered around NL 43-01-55; WL 75-39-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
25.01-25.67 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %
26.1-30 MHz	MO	48K0D2D	8 kW (ERP)	0.00001 %

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) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at <http://sbe.org/wp-content/uploads/freqcoor.pdf> to find the appropriate coordinator.
- (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) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the U.S. Government; contract number FA8702-15-D-0001. 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.
- (6) The stop buzzer POC is James Vian at (781) 981-3301.
- (7) Operation in Stockbridge, NY location is not permitted using follow the frequency bands below:
 2.85-3.025 MHz,
 3.4-3.5 MHz,
 4.65-4.7 MHz,
 4.995-5.005 MHz,
 5.45-5.68 MHz,
 9.995-10.005 MHz,
 14.99-15.01 MHz,
 19.99-20.01 MHz,
 24.99-25.01 MHz,