

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL

(Nature of Service)

XT FX MO

(Class of Station)

WA8XFD

(Call Sign)

1284-EX-ST-2026

(File Number)

NAME MIT Lincoln Laboratory

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

This request is to support an experiment in the greater New England region around MIT Haystack Observatory. The experiment will be used to explore coexistence approaches for use of the lower

Station Locations

- (1) Westford (MIDDLESEX), MA - NL 42-36-47; WL 71-29-51
- (2) Westford (MIDDLESEX), MA - NL 42-36-47; WL 71-29-51
- (3) Cambridge (SUFFOLK), MA - NL 42-21-38; WL 71-05-21
- (4) Durham (STRAFFORD), NH - NL 43-08-05; WL 70-56-10
- (5) Albany (ALBANY), NY - NL 42-41-00; WL 73-49-26
- (6) MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24
- (7) MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24
- (8) MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24
- (9) MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24
- (10) MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24
- (11) MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency Information

Westford (MIDDLESEX), MA - NL 42-36-47; WL 71-29-51

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7133.125 MHz	FX	4K00N0N	46.238 kW (ERP)	1.0E-6 %

This authorization effective July 28, 2026 and
will expire 3:00 A.M. ET August 27, 2026

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Westford (MIDDLESEX), MA - NL 42-36-47; WL 71-29-51

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7133.125 MHz	FX	125KW1D 2K50W1D 150HA1A 1M20G1X 6M00D1X	46.238 kW (ERP)	1.0E-6 %

Westford (MIDDLESEX), MA - NL 42-36-47; WL 71-29-51

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7120-7140 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HH1A 10M0W7X 20M0W7X	12.2 W (ERP)	1.0E-6 %
7290-7310 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HA1A 10M0W7X 20M0W7X	12.2 W (ERP)	1.0E-6 %
7690-7710 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HA1A 10M0W7X	12.2 W (ERP)	1.0E-6 %

Frequency Information

Westford (MIDDLESEX), MA - NL 42-36-47; WL 71-29-51

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7690-7710 MHz	FX	20M0W7X	12.2 W (ERP)	1.0E-6 %

Cambridge (SUFFOLK), MA - NL 42-21-38; WL 71-05-21

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7135 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	20 W (ERP)	1.0E-6 %
7295-7305 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	20 W (ERP)	1.0E-6 %
7695-7705 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10S0D1X 10M0W7X	20 W (ERP)	1.0E-6 %

Frequency Information

Durham (STRAFFORD), NH - NL 43-08-05; WL 70-56-10

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7135 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	20 W (ERP)	1.0E-6 %
7295-7305 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	20 W (ERP)	1.0E-6 %
7695-7705 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	20 W (ERP)	1.0E-6 %

Albany (ALBANY), NY - NL 42-41-00; WL 73-49-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7135 MHz	FX	4K00N0N 125KW1D	20 W (ERP)	1.0E-6 %

Frequency Information

Albany (ALBANY), NY - NL 42-41-00; WL 73-49-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7135 MHz	FX	2K50W1D 150HA1A 1M00D1X 10M0D1X	20 W (ERP)	1.0E-6 %
7295-7305 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	20 W (ERP)	1.0E-6 %
7695-7705 MHz	FX	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	20 W (ERP)	1.0E-6 %

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7133.125 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X	2.5 W (ERP)	1.0E-6 %

Frequency Information

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7133.125 MHz	MO	10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %
7295-7305 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %
7695-7705 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7133.125 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X	2.5 W (ERP)	1.0E-6 %

Frequency Information

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7133.125 MHz	MO	10M0W7X	2.5 W (ERP)	1.0E-6 %
7295-7305 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %
7695-7705 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7133.125 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %

Frequency Information

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7295-7305 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %
7695-7705 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7133.125 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %
7295-7305 MHz	MO	4K00N0N 125KW1D	2.5 W (ERP)	1.0E-6 %

Frequency Information

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7295-7305 MHz	MO	2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %
7695-7705 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7133.125 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %
7295-7305 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A	2.5 W (ERP)	1.0E-6 %

Frequency Information

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7295-7305 MHz	MO	1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %
7695-7705 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7125-7133.125 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %
7295-7305 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X	2.5 W (ERP)	1.0E-6 %

Frequency Information

MOBILE: Westford, MA, within 250 km, centered around NL 42-36-36; WL 71-29-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7295-7305 MHz	MO	10M0W7X	2.5 W (ERP)	1.0E-6 %
7695-7705 MHz	MO	4K00N0N 125KW1D 2K50W1D 150HA1A 1M00D1X 10M0D1X 10M0W7X	2.5 W (ERP)	1.0E-6 %

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) MIT-LL must cease all transmissions with an Effective Radiated Power (ERP) greater than 20W (e.g., 46.238kW) if the limb of the moon is within ± 0.5 degrees of the transmitting antenna's boresight.
- (3) Notch 7135 MHz (+/- 1.875 MHz) at the Westford, MA location.