

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

XT FX

(Class of Station)

WA9XKR

(Call Sign)

1019-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:

The purpose of this operation is to investigate the affects of auroral activity on HF radio signal propagation.

Station Locations

- (1) Christmas Valley (LAKE), OR - NL 43-16-01; WL 120-42-27
- (2) Fort Rock (LAKE), OR - NL 43-23-58; WL 120-59-37

Frequency Information

Christmas Valley (LAKE), OR - NL 43-16-01; WL 120-42-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5005-5450 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
6331-6481 kHz	FX	8K20F8N	10 MW (ERP)	0.005 %

This authorization effective July 06, 2026 and
will expire 3:00 A.M. EST December 21, 2026

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Christmas Valley (LAKE), OR - NL 43-16-01; WL 120-42-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
6331-6481 kHz	FX	8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
6781-6988 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
7638-8270 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
8434-8711 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
9040-9400 kHz	FX	8K20F8N 8K20G8N 21K0F8N	10 MW (ERP)	0.005 %

Frequency Information

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9040-9400 kHz	FX	21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
10162-10487 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
11400-11600 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
12100-12230 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
14405-14955 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N	10 MW (ERP)	0.005 %

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14405-14955 kHz	FX	101KG8N	10 MW (ERP)	0.005 %
15800-16360 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
16824-17421 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
19020-19680 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
19800-19999 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N	10 MW (ERP)	0.005 %

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19800-19999 kHz	FX	101KG8N	10 MW (ERP)	0.005 %
22855-22878 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
22881-24890 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
25330-25550 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
26480-26950 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N	10 MW (ERP)	0.005 %

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
26480-26950 kHz	FX	101KG8N	10 MW (ERP)	0.005 %
27540-28000 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
29999-30560 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
32000-33000 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 MW (ERP)	0.005 %
34000-35000 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N	10 MW (ERP)	0.005 %

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
34000-35000 kHz	FX	101KG8N	10 MW (ERP)	0.005 %

Fort Rock (LAKE), OR - NL 43-23-58; WL 120-59-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5005-5450 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 mW (ERP)	0.005 %
6331-6481 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N	10 mW (ERP)	0.005 %
6781-6988 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %
7638-8270 kHz	FX	8K20F8N 8K20G8N		0.005 %

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7638-8270 kHz	FX	21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %
8434-8711 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %
9040-9400 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %
10162-10487 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %
11400-11600 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N		0.005 %

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
11400-11600 kHz	FX	101KF8N 101KG8N		0.005 %
12100-12230 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %
14405-14955 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %
15800-16360 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %
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19800-19999 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %
22855-22878 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %
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34000-35000 kHz	FX	8K20F8N 8K20G8N 21K0F8N 21K0G8N 101KF8N 101KG8N		0.005 %

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) IMSAR LLC shall move the center point of flight circle 30 nautical miles south to NL 36-25-13; WL 75-59-49 and reduce maximum altitude to 7400 ft MSL.
- (3) Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.
- (4) Stop Buzzer: Mark G Besch
339-223-0849
beschm@ll.mit.edu