

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

EXPERIMENTAL

(Nature of Service)

XR FX

(Class of Station)

W12XFX

(Call Sign)

0051-EX-ST-2018

(File Number)

NAME University of Alaska Fairbanks Geophysical Institute

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:

HAARP is a high frequency ionospheric heater dedicated to furthering our understanding of the processes and mechanisms that inhabit the upper atmosphere.

Station Locations

(1) Gakona (Valdez-Cordova), AK - NL 63-19-20; WL 145-10-50

Frequency Information

Gakona (Valdez-Cordova), AK - NL 63-19-20; WL 145-10-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3025-3154 kHz	FX	16K0N0N 40K5A3N 43K0H0N 26K0P0N 16K0M0N 46K0F3N	645.654 MW (ERP)	1.6 %
3500-4437 kHz	FX	26K0N0N 40K5A3N	1.071 GW (ERP)	1.3 %

This authorization effective April 09, 2018 and
will expire 3:00 A.M. EST October 09, 2018

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Gakona (Valdez-Cordova), AK - NL 63-19-20; WL 145-10-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3500-4437 kHz	FX	43K0H0N 26K0P0N 16K0M0N 46K0F3N	1.071 GW (ERP)	1.3 %
4651-4749 kHz	FX	26K0N0N 40K5A3N 43K0H0N 26K0P0N 16K0M0N 46K0F3N	1.2 GW (ERP)	0.98 %
4996-5004 kHz	FX	16K0N0N 40K5A3N 43K0H0N 26K0P0N 16K0M0N 46K0F3N	1.47 GW (ERP)	0.92 %
5680-5729 kHz	FX	16K0N0N 40K5A3N 43K0H0N 26K0P0N 16K0M0N 46K0F3N	1.819 GW (ERP)	0.77 %
6200-6525 kHz	FX	16K0N0N 40K5A3N 43K0H0N 26K0P0N	2.45 GW (ERP)	0.65 %

Frequency Information

Gakona (Valdez-Cordova), AK - NL 63-19-20; WL 145-10-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
6200-6525 kHz	FX	16K0M0N 46K0F3N	2.45 GW (ERP)	0.65 %
6685-6764 kHz	FX	46K0F3N 16K0M0N 26K0P0N 43K0H0N 40K5A3N 16K0N0N	2.45 GW (ERP)	0.65 %
7001-7299 kHz	FX	16K0N0N 40K5A3N 43K0H0N 26K0P0N 16K0M0N 46K0F3N	2.818 GW (ERP)	0.65 %

Special Conditions:

- (1) University of Alaska - Fairbanks Geophysical Institute must notch out 5951-6200 kHz.

Special Conditions:

- (2) University of Alaska - Fairbanks Geophysical Institute must notch out the following frequencies;
- K3024.4 +/- 1.4 kHz
 - K3054.4 +/- 1.4 kHz
 - K3057.4 +/- 1.4 kHz
 - K3120.4 +/- 1.4 kHz
 - K3123.4 +/- 1.4 kHz
 - K4050 +/- 1.4 kHz
 - K4126.4 +/- 1.4 kHz
 - K4147.4 +/- 1.4 kHz
 - K4150.4 +/- 1.4 kHz
 - K4177.5 +/- 150Hz
 - K4207.5 +/- 152Hz
 - K4210 +/- 150Hz
 - K4298 +/- 2k
 - K4304 +/- 512K
 - K4334 +/- 512K
 - K4337 +/- 512K
 - K4355.4 +/- 1.4 kHz
 - K4376.4 +/- 1.4 kHz
 - K4418.4 +/- 1.4 kHz
 - K4427.4 +/- 1.4 kHz
 - K5681.4 +/- 1.4 kHz
 - K5694.4 +/- 1.4 kHz
 - K5697.4 +/- 1.4 kHz
 - K5700.4 +/- 1.4 kHz
 - K6216.4 +/- 1.4 kHz
 - K6225.4 +/- 1.4 kHz
 - K6228.4 +/- 1.4 kHz
 - K6231.4 +/- 1.4 kHz
 - K6268 +/- 150Hz
 - K6312 +/- 152Hz
 - K6314 +/- 150Hz
 - K6340.5 +/- 2k
 - K6379.5 +/- 2k
 - K6383 +/- 512K
 - K6425 +/- 2k
 - K6502.4 +/- 1.4 kHz
 - K6508.4 +/- 1.4 kHz
 - K6523.4 +/- 1.4 kHz
 - K6517.4 +/- 1.4 kHz
 - K6710.4 +/- 1.4 kHz
 - K6743.4 +/- 1.4 kHz
- (3) University of Alaska - Fairbanks Geophysical Institute must notch out the following sub bands;
- 2850-3025 kHz
 - 3400-3500 kHz
 - 5450-5680 kHz
 - 6525-6685 kHz

Special Conditions:

- (4) Experimental use is secondary to, and must not interfere with, Flight Test operations. SPECIAL CONDITIONS: SCHEDULING WITH AFTRCC IS REQUIRED. Licensee must provide notification to AFTRCC at least 24 hours in advance of operations via email to coord_hf@aftrcc.org, and include a current Stop Buzzer POC and phone number.

Renewal of this STA is subject to prior coordination with AFTRCC Frequency Advisory Committee, www.aftrcc.org.