

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

EXPERIMENTAL

(Nature of Service)

WN9XYF

(Call Sign)

XT FX MO

(Class of Station)

2113-EX-ST-2018

(File Number)

NAME Insitu

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 experimental license application is being submitted to support DoD.

Station Locations

- (1) Bingen (KLICKITAT), WA - NL 45-42-23; WL 121-27-23
- (2) Hood River, OR - NL 45-40-18; WL 121-32-24
- (3) Boardman, OR - NL 45-44-54; WL 119-47-38
- (4) Wasco, OR - NL 45-31-19; WL 120-46-58
- (5) The Dalles, OR - NL 45-36-26; WL 121-19-53
- (6) Bald Peter, OR - NL 45-39-23; WL 121-41-33
- (7) Dee, OR - NL 45-34-31; WL 121-46-13
- (8) Opal City, OR - NL 45-25-04; WL 121-05-51
- (9) Arlington, WA - NL 45-43-13; WL 120-10-45
- (10) MOBILE: Boardman, OR. UAS Restricted Airspace Max Flight Level 10K Ft, within 50 km, centered around NL 45-44-54; WL 119-47-38
- (11) MOBILE: Bingen, WA. Manned Aircraft Flight Level 10K Ft, within 200 km, centered around NL 45-42-23; WL 121-27-23

This authorization effective March 13, 2019 and
will expire 3:00 A.M. EST August 30, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Bingen (KLICKITAT), WA - NL 45-42-23; WL 121-27-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2267 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2395-2483 MHz	FX	5M00D1D 10M0D1D	15 W (ERP)	

Frequency Information

Bingen (CLICKITAT), WA - NL 45-42-23; WL 121-27-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2395-2483 MHz	FX	20M0D1D	15 W (ERP)	
2395-2483 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

Hood River, OR - NL 45-40-18; WL 121-32-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2395-2483 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

Frequency Information

Boardman, OR - NL 45-44-54; WL 119-47-38

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2395-2483 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

Wasco, OR - NL 45-31-19; WL 120-46-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	FX	5M00D1D 10M0D1D	12.3 kW (ERP)	

Frequency Information

Wasco, OR - NL 45-31-19; WL 120-46-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2310 MHz	FX	20M0D1D	12.3 kW (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2395-2483 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

The Dalles, OR - NL 45-36-26; WL 121-19-53

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

Frequency Information

The Dalles, OR - NL 45-36-26; WL 121-19-53

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2395-2483 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

Bald Peter, OR - NL 45-39-23; WL 121-41-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2395-2483 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

Frequency Information

Dee, OR - NL 45-34-31; WL 121-46-13

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2395-2483 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

Opal City, OR - NL 45-25-04; WL 121-05-51

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	FX	5M00D1D 10M0D1D	12.3 kW (ERP)	

Frequency Information

Opal City, OR - NL 45-25-04; WL 121-05-51

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2310 MHz	FX	20M0D1D	12.3 kW (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2395-2483 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

Arlington, WA - NL 45-43-13; WL 120-10-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

Frequency Information

Arlington, WA - NL 45-43-13; WL 120-10-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2395-2483 MHz	FX	5M00D1D 10M0D1D 20M0D1D	12.3 kW (ERP)	

MOBILE: Boardman, OR. UAS Restricted Airspace Max Flight Level 10K Ft, within 50 km, centered around NL 45-44-54; WL 119-47-38

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	MO	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2310 MHz	MO	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2395-2483 MHz	MO	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	

Frequency Information

MOBILE: Bingen, WA. Manned Aircraft Flight Level 10K Ft, within 200 km, centered around NL 45-42-23; WL 121-27-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2267 MHz	MO	5M00D1D	15 W (ERP)	
2310 MHz	MO	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2377 MHz	FX	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	
2395-2483 MHz	MO	5M00D1D 10M0D1D 20M0D1D	15 W (ERP)	

Special Conditions:

- (1) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (2) This frequency assignment in one of the bands 1435-1525, 2310-2320 and 2345-2390 MHz was coordinated prior to its authorization with AFMO CONUS, Ft. Sam Houston, TX, who also coordinated it, as appropriate, with the Aerospace and Flight Test Radio Coordinating Council. Use of this frequency under the authority of this assignment is subject to such further coordination with AFMO CONUS, Ft. Sam Houston, TX, as necessary to ensure compatibility with existing uses.
- (3) 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.
- (4) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at https://www.sbe.org/sections/freq_local.php to find the appropriate coordinator.
- (6) Prior to commencing any operations in WCS (2305-2320 MHz/2345-2360 MHz) frequencies, the applicant must obtain consent from the WCS licensee (AT&T).

Special Conditions:

- (7) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (8) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (9) Stop buzzer for this operation is a 24-7 staffed number at 509-637-4691.
- (10) Operations using a frequency of 2267 MHz shall be limited to the 5M00D1D at the Bingen, WA. Manned Aircraft Flight Level 10K Ft, within 200 km , centered around NL 45-42-23; WL 121-27-23 location.
- (11) Operations using a frequency of 2267 MHz shall be limited to a transmit ERP no greater than 15W at all locations.
- (12) The authorized station must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.