

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

EXPERIMENTAL

(Nature of Service)

WN9XDQ

(Call Sign)

XT FX MO

(Class of Station)

1367-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:

Support temporary Unmanned Aircraft System (UAS) system payload integration testing.

Station Locations

- (1) Bingen, WA - NL 45-42-24; WL 121-27-30; MOBILE: Indoor Ground Testing, within 1 km, centered around NL 45-42-24; WL 121-27-30
- (2) Boardman, OR - NL 45-44-54; WL 119-47-38
- (3) MOBILE: Maximum Flight Level is 4000 feet, Boardman, OR, within 20 km, centered around NL 45-44-54; WL 119-47-38

Frequency Information

Bingen, WA - NL 45-42-24; WL 121-27-30; MOBILE: Indoor Ground Testing, within 1 km, centered around NL 45-42-24; WL 1

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
869.2-893.8 MHz	FX	290KGXW 4M08D7W	16 W (ERP)	
871.4-891.6 MHz	FX	290KGXW	70 W (ERP)	

This authorization effective September 04, 2018 and
will expire 3:00 A.M. EST January 31, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Bingen, WA - NL 45-42-24; WL 121-27-30; MOBILE: Indoor Ground Testing, within 1 km, centered around NL 45-42-24; WL 1

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
871.4-891.6 MHz	FX	4M08D7W	70 W (ERP)	
925.2-959.8 MHz	FX	290KGXW 4M08D7W	16 W (ERP)	
927.4-957.6 MHz	FX	290KGXW 4M08D7W	70 W (ERP)	
2412-2462 MHz	FX	22M0G1D 22M0W7D	6 W (ERP)	
5275-5850 MHz	FX	22M0G1D 22M0W7D	1.25 W (ERP)	

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

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
869.2-893.8 MHz	FX	290KGXW 4M08D7W	16 W (ERP)	
871.4-891.6 MHz	FX	290KGXW 4M08D7W	70 W (ERP)	

Frequency Information

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

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
925.2-959.8 MHz	FX	290KGXW 4M08D7W	16 W (ERP)	
927.4-957.6 MHz	FX	290KGXW 4M08D7W	70 W (ERP)	
2412-2462 MHz	FX	22M0G1D 22M0W7D	6 W (ERP)	
5275-5850 MHz	FX	22M0G1D 22M0W7D	1.25 W (ERP)	

MOBILE: Maximum Flight Level is 4000 feet, Boardman, OR, within 20 km, centered around NL 45-44-54; WL 119-47-38

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
869.2-893.8 MHz	FX	290KGXW 4M08D7W	16 W (ERP)	
871.4-891.6 MHz	FX	290KGXW 4M08D7W	70 W (ERP)	
925.2-959.8 MHz	FX	290KGXW 4M08D7W	16 W (ERP)	

Frequency Information

MOBILE: Maximum Flight Level is 4000 feet, Boardman, OR, within 20 km, centered around NL 45-44-54; WL 119-47-38

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
927.4-957.6 MHz	FX	290KGXW 4M08D7W	70 W (ERP)	
2412-2462 MHz	MO	22M0G1D 22M0W7D	6 W (ERP)	
5275-5850 MHz	FX	22M0G1D 22M0W7D	1.25 W (ERP)	

Special Conditions:

- (1) 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.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) Insitu must not operate in the 1525 - 1559 MHz band based on the results of the GPS Adjacent Band Compatibility Assessment.
- (4) Insitu must coordinate with the local Society of Broadcast Engineers frequency coordinator and Fixed Microwave Service licensees in each proposed area prior to operation in 925.2-959.8 MHz, 927.4-957.6 MHz and 2412-2462 MHz bands
- (5) Prior to commencing any operations, the licensee must obtain consent from the following within 90 miles of the contours of the testing area:
 Cellular licensees (824-849 MHz/869-894 MHz)
 Commercial Air-Ground licensee (849-851 MHz/894-896 MHz)
 SMR licensees (896-901 MHz/935-940 MHz)
 B/ILT licensees (896-901 MHz/935-940 MHz)
 Narrowband PCS licensees (901-902/930-931/940-941 MHz)
 Location & Monitoring Service licensees (902-928 MHz)
 Paging Service licensees in 929 MHz and 931 MHz
- (6) Insitu must not operate in the 5850 - 5875 MHz band. The Dedicated Short-Range communications (DSRC) technology has a co-primary allocation in this band and is used for collision avoidance in surface transportation.