

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

XD FX MO

(Class of Station)

W12XQM

(Call Sign)

0194-EX-CM-2021

(File Number)

NAME _____ Insitu _____

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(j) of the Commission's Rules

Station Locations

- (1) Bingen, WA - NL 45-42-24; WL 121-27-30
- (2) Boardman, OR - NL 45-44-54; WL 119-47-38; MOBILE: Boardman, OR, within 1 km, centered around NL 45-44-54; WL 119-47-38
- (3) Pendleton, OR - NL 45-41-52; WL 118-50-12; MOBILE: Pendleton, OR, within 1 km, centered around NL 45-41-52; WL 118-50-12

Frequency Information

Bingen, WA - NL 45-42-24; WL 121-27-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
138 MHz	FX	N0N 5K00F3N	1 W (ERP)	
143.75 MHz	FX	N0N 5K00F3N	1 W (ERP)	
148.5 MHz	FX	N0N	1 W (ERP)	

This authorization effective October 25, 2021 and
will expire 3:00 A.M. EST February 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Bingen, WA - NL 45-42-24; WL 121-27-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
148.5 MHz	FX	5K00F3N	1 W (ERP)	
151.88 MHz	FX	N0N 5K00F3N	1 W (ERP)	
155.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
159 MHz	FX	N0N 5K00F3N	1 W (ERP)	
174 MHz	FX	N0N 5K00F3N	1 W (ERP)	
401.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
420.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
430.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
440.5 MHz	FX	N0N	1 W (ERP)	

Frequency Information

Bingen, WA - NL 45-42-24; WL 121-27-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
440.5 MHz	FX	5K00F3N	1 W (ERP)	
450.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
460.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
470.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
479.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
880-915 MHz	FX	N0N	1 W (ERP)	
925-960 MHz	FX	N0N	1 W (ERP)	
1710-1755 MHz	FX	N0N	1 W (ERP)	
1805-1880 MHz	FX	N0N	1 W (ERP)	

Frequency Information

Bingen, WA - NL 45-42-24; WL 121-27-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1920-1980 MHz	FX	N0N	1 W (ERP)	
2110-2170 MHz	FX	N0N	1 W (ERP)	
2400-2835 MHz	FX	N0N	1 W (ERP)	
5275-5875 MHz	FX	N0N	1 W (ERP)	

Boardman, OR - NL 45-44-54; WL 119-47-38; MOBILE: Boardman, OR, within 1 km, centered around NL 45-44-54; WL 119-4

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
138 MHz	FX	N0N 5K00F3N	1 W (ERP)	
143.75 MHz	FX	N0N 5K00F3N	1 W (ERP)	
148.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
151.88 MHz	FX	N0N 5K00F3N	1 W (ERP)	

Frequency Information

Boardman, OR - NL 45-44-54; WL 119-47-38; MOBILE: Boardman, OR, within 1 km, centered around NL 45-44-54; WL 119-4

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
155.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
159 MHz	FX	N0N 5K00F3N	1 W (ERP)	
174 MHz	FX	N0N 5K00F3N	1 W (ERP)	
401.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
420.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
430.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
440.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
450.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	

Frequency Information

Boardman, OR - NL 45-44-54; WL 119-47-38; MOBILE: Boardman, OR, within 1 km, centered around NL 45-44-54; WL 119-4

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
460.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
470.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
479.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
880-915 MHz	FX	N0N	1 W (ERP)	
925-960 MHz	FX	N0N	1 W (ERP)	
1710-1755 MHz	FX	N0N	1 W (ERP)	
1805-1880 MHz	FX	N0N	1 W (ERP)	
1920-1980 MHz	FX	N0N	1 W (ERP)	
2110-2170 MHz	FX	N0N	1 W (ERP)	

Frequency Information

Boardman, OR - NL 45-44-54; WL 119-47-38; MOBILE: Boardman, OR, within 1 km, centered around NL 45-44-54; WL 119-4

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2400-2835 MHz	FX	N0N	1 W (ERP)	
5275-5875 MHz	FX	N0N	1 W (ERP)	

Pendleton, OR - NL 45-41-52; WL 118-50-12; MOBILE: Pendleton, OR, within 1 km, centered around NL 45-41-52; WL 118-5

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
138 MHz	FX	N0N 5K00F3N	1 W (ERP)	
143.75 MHz	FX	N0N 5K00F3N	1 W (ERP)	
148.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
151.88 MHz	FX	N0N 5K00F3N	1 W (ERP)	
155.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
159 MHz	FX	N0N	1 W (ERP)	

Frequency Information

Pendleton, OR - NL 45-41-52; WL 118-50-12; MOBILE: Pendleton, OR, within 1 km, centered around NL 45-41-52; WL 118-50-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
159 MHz	FX	5K00F3N	1 W (ERP)	
174 MHz	FX	N0N 5K00F3N	1 W (ERP)	
401.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
420.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
430.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
440.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
450.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
460.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
470.5 MHz	FX	N0N	1 W (ERP)	

Frequency Information

Pendleton, OR - NL 45-41-52; WL 118-50-12; MOBILE: Pendleton, OR, within 1 km, centered around NL 45-41-52; WL 118-50-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
470.5 MHz	FX	5K00F3N	1 W (ERP)	
479.5 MHz	FX	N0N 5K00F3N	1 W (ERP)	
880-915 MHz	FX	N0N	1 W (ERP)	
925-960 MHz	FX	N0N	1 W (ERP)	
1710-1755 MHz	FX	N0N	1 W (ERP)	
1805-1880 MHz	FX	N0N	1 W (ERP)	
1920-1980 MHz	FX	N0N	1 W (ERP)	
2110-2170 MHz	FX	N0N	1 W (ERP)	
2400-2690 MHz	FX	N0N	1 W (ERP)	
2700-2835 MHz	FX	N0N	1 W (ERP)	

Frequency Information

Pendleton, OR - NL 45-41-52; WL 118-50-12; MOBILE: Pendleton, OR, within 1 km, centered around NL 45-41-52; WL 118-50-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5275-5875 MHz	FX	N0N	1 W (ERP)	

Special Conditions:

- (1) One or more frequency assignments were coordinated prior to authorization with FAA Headquarters, 800 Independence Avenue, S.W., Washington, DC 20591; Telephone: 202-267-8699.
- (2) Operation in the 1695-1780 MHz, 1915-1920 MHz, 1995-2020 MHz or 2110-2200 MHz band requires consent of local Advanced Wireless Service (AWS) licensee(s) to avoid interference.
- (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) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (6) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at <http://sbe.org/wp-content/uploads/freqcoor.pdf> to find the appropriate coordinator.
- (7) Stop buzzer for this operation is Insitu the Operations Action Center at (509) 637-4691.
- (8) Prior coordinate with the local SBE frequency coordinator prior to operation on 159 MHz, 174 MHz, 450.5 MHz, 470.5 MHz, 479.5 MHz, 925-960 MHz and 2400-2835 MHz bands.
- (9) Due to possibility of harmful interference to the federal operations the following frequencies are not permitted: 168.5 MHz and 410.5 MHz.
- (10) Obtain consents from the Educational Broadband Service and Broadband Radio Service licensees prior to accessing to 2496-2690 MHz band.
- (11) Prior to commencing any operations in the frequencies below, Insitu must obtain consent from the following within 50 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
 - Broadband PCS licensees (1850-1910 MHz/1930-1990 MHz)
- (12) Operation on 2690-2700 MHz band is not permitted in Pendleton, OR