

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

EXPERIMENTAL

(Nature of Service)

WK2XUM

(Call Sign)

XD FX MO

(Class of Station)

0171-EX-CN-2020

(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) MOBILE: Bingen, WA, within 1.5 km, centered around NL 45-42-23; WL 121-27-23
- (2) Boardman (MORROW), OR - NL 45-44-54; WL 119-47-38; MOBILE: Boardman, OR. 5,000 Foot Flight Level, within 25 km, centered around NL 45-44-54; WL 119-47-38
- (3) Arlington, OR - NL 45-43-13; WL 120-10-45; MOBILE: Arlington, OR. 1,200 Foot Flight Level, within 25 km, centered around NL 45-43-13; WL 120-10-45
- (4) Morenci, AZ - NL 33-07-09; WL 109-19-51; MOBILE: Morenci, AZ. 1,200 Foot Flight Level, within 25 km, centered around NL 33-07-09; WL 109-19-51
- (5) Sierrita, AZ - NL 31-52-56; WL 111-08-43; MOBILE: Sierrita, AZ. 1,200 Foot Flight Level, within 25 km, centered around NL 31-52-56; WL 111-08-43
- (6) Safford, AZ - NL 32-56-54; WL 109-38-44; MOBILE: Safford, AZ. 1,200 Foot Flight Level, within 25 km, centered around NL 32-56-54; WL 109-38-44
- (7) Bagdad, AZ - NL 34-35-09; WL 113-14-12; MOBILE: Bagdad, AZ. 1,200 Foot Flight Level, within 25 km, centered around NL 34-35-09; WL 113-14-12

Frequency Information

MOBILE: Bingen, WA, within 1.5 km, centered around NL 45-42-23; WL 121-27-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-928 MHz	MO	350KF1D	4 W (ERP)	

This authorization effective June 01, 2020 and
will expire 3:00 A.M. EST June 01, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Bingen, WA, within 1.5 km, centered around NL 45-42-23; WL 121-27-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-928 MHz	MO	350KF1D	1 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	772 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	4 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	25 W (ERP)	

Boardman (MORROW), OR - NL 45-44-54; WL 119-47-38; MOBILE: Boardman, OR. 5,000 Foot Flight Level, within 25 km, c

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-928 MHz	MO	350KF1D	4 W (ERP)	
902-928 MHz	MO	350KF1D	1 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D	772 W (ERP)	

Frequency Information

Boardman (MORROW), OR - NL 45-44-54; WL 119-47-38; MOBILE: Boardman, OR. 5,000 Foot Flight Level, within 25 km, c

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2400-2500 MHz	MO	20M0G1D	772 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	4 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	25 W (ERP)	

Arlington, OR - NL 45-43-13; WL 120-10-45; MOBILE: Arlington, OR. 1,200 Foot Flight Level, within 25 km, centered around I

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-928 MHz	MO	350KF1D	4 W (ERP)	
902-928 MHz	MO	350KF1D	1 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	4 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D	25 W (ERP)	

Frequency Information

Arlington, OR - NL 45-43-13; WL 120-10-45; MOBILE: Arlington, OR. 1,200 Foot Flight Level, within 25 km, centered around I

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2400-2500 MHz	MO	20M0G1D	25 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	772 W (ERP)	

Morenci, AZ - NL 33-07-09; WL 109-19-51; MOBILE: Morenci, AZ. 1,200 Foot Flight Level, within 25 km, centered around NL

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-928 MHz	MO	350KF1D	1 W (ERP)	
902-928 MHz	MO	350KF1D	4 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	4 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	25 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D	772 W (ERP)	

Frequency Information

Morenci, AZ - NL 33-07-09; WL 109-19-51; MOBILE: Morenci, AZ. 1,200 Foot Flight Level, within 25 km, centered around NL

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2400-2500 MHz	MO	20M0G1D	772 W (ERP)	

Sierrita, AZ - NL 31-52-56; WL 111-08-43; MOBILE: Sierrita, AZ. 1,200 Foot Flight Level, within 25 km, centered around NL 31

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-928 MHz	MO	350KF1D	1 W (ERP)	
902-928 MHz	MO	350KF1D	4 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	4 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	25 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	772 W (ERP)	

Frequency Information

Safford, AZ - NL 32-56-54; WL 109-38-44; MOBILE: Safford, AZ. 1,200 Foot Flight Level, within 25 km, centered around NL 3.

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-928 MHz	MO	350KF1D	4 W (ERP)	
902-928 MHz	MO	350KF1D	1 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	772 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	4 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	25 W (ERP)	

Bagdad, AZ - NL 34-35-09; WL 113-14-12; MOBILE: Bagdad, AZ. 1,200 Foot Flight Level, within 25 km, centered around NL 3.

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-928 MHz	MO	350KF1D	4 W (ERP)	
902-928 MHz	MO	350KF1D	1 W (ERP)	
2400-2500 MHz	MO	5M00G1D	772 W (ERP)	

Frequency Information

Bagdad, AZ - NL 34-35-09; WL 113-14-12; MOBILE: Bagdad, AZ. 1,200 Foot Flight Level, within 25 km, centered around NL 3

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2400-2500 MHz	MO	10M0G1D 20M0G1D	772 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	4 W (ERP)	
2400-2500 MHz	MO	5M00G1D 10M0G1D 20M0G1D	25 W (ERP)	

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) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (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) Prior to commencing any operations in the frequencies below, the licensee must obtain consent from the following within 100 miles of the contours of the testing area: Location & Monitoring Service licensees (902-928 MHz)
- (5) The licensee shall coordinate with the local Society of Broadcast Engineers coordinator prior to operation to protect the Low Power Broadcast Auxiliary operations on 2400-2500 MHz and BRS/ EBS in 2496-2500 MHz.
- (6) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (7) Insitu must notch out 2410 and 2453 MHz (+/- 20 MHz) at all Arizona locations.
- (8) Insitu must coordinate the Washington state operations with Mr. Dan Mertley, nrao-rfi@nrao.edu, 575-835-7128, prior to operating.