

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

EXPERIMENTAL

(Nature of Service)

WJ2XOG

(Call Sign)

XT FX MO

(Class of Station)

0214-EX-CN-2018

(File Number)

NAME NIAR

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) Wichita (SEDGWICK), KS - NL 37-41-15; WL 97-13-15; MOBILE: , within 2 km

Frequency Information

Wichita (SEDGWICK), KS - NL 37-41-15; WL 97-13-15; MOBILE: , within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
540-2173 kHz	FX	N0N	15.2 W (ERP)	
2191-2495 kHz	FX	N0N	15.2 W (ERP)	
2505-2850 kHz	FX	N0N	15.2 W (ERP)	
3025-3400 kHz	FX	N0N	15.2 W (ERP)	

This authorization effective August 30, 2018 and
will expire 3:00 A.M. EST September 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Wichita (SEDGWICK), KS - NL 37-41-15; WL 97-13-15; MOBILE: , within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3500-4650 kHz	FX	N0N	15.2 W (ERP)	
4700-4995 kHz	FX	N0N	15.2 W (ERP)	
5005-5450 kHz	FX	N0N	15.2 W (ERP)	
5680-6525 kHz	FX	N0N	15.2 W (ERP)	
6685-8815 kHz	FX	N0N	15.2 W (ERP)	
8965-9995 kHz	FX	N0N	15.2 W (ERP)	
10100-11275 kHz	FX	N0N	15.2 W (ERP)	
11400-13360 kHz	FX	N0N	15.2 W (ERP)	
25670-29999.99 kHz	FX	N0N	15.2 W (ERP)	
30-38 MHz	FX	N0N	15.2 W (ERP)	

Frequency Information

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
38.25-73 MHz	FX	N0N	15.2 W (ERP)	
76-87.9 MHz	FX	N0N	15.2 W (ERP)	
102.9 MHz	FX	N0N	15.2 W (ERP)	
103.1 MHz	FX	N0N	15.2 W (ERP)	
411-412.5375 MHz	FX	N0N	15.2 W (ERP)	
414.0125-500 MHz	FX	N0N	15.2 W (ERP)	
500-608 MHz	FX	N0N	1.2 W (ERP)	
614-960 MHz	FX	N0N	1.2 W (ERP)	
1427-1434 MHz	FX	N0N	1.2 W (ERP)	
1526-1550 MHz	FX	N0N	1.2 W (ERP)	

Frequency Information

Wichita (SEDGWICK), KS - NL 37-41-15; WL 97-13-15; MOBILE: , within 2 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1610-1660.5 MHz	FX	N0N	1.2 W (ERP)	
1670-2309 MHz	FX	N0N	1.2 W (ERP)	
2400-2690 MHz	FX	N0N	1.2 W (ERP)	
3010-4990 MHz	FX	N0N	1.2 W (ERP)	
5600-8090 MHz	FX	N0N	1.2 W (ERP)	
9225-10680 MHz	FX	N0N	1.2 W (ERP)	
10700-15350 MHz	FX	N0N	1.2 W (ERP)	
15400-18000 MHz	FX	N0N	1.2 W (ERP)	

Special Conditions:

- (1) Operation requires consent of affected Educational Broadband Service/Broadband Radio Service (EBS/BRS) licensees.
- (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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.

Special Conditions:

- (5) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at http://freq.sbe.org/pdf_files/coordinators.pdf to find the appropriate coordinator.
- (6) Experimental use is secondary to, and must not interfere with, Flight Test operations.
SPECIAL CONDITION: LICENSEE MUST COORDINATE WITH OTHER USERS AS NECESSARY TO MINIMIZE INTERFERENCE.
Renewal of this License is subject to prior coordination with AFTRCC Frequency Advisory Committee, www.aftrcc.org
- (7) NIAR must obtain the consent of the following within 80 km of the test area:
 - o All 700 MHz licensees (698-758 MHz; 775-788 MHz)
 - o All Cellular licensees (824-849 MHz/869-894 MHz)
 - o Commercial Air-Ground licensee (849-851 MHz/894-896 MHz)
 - o SMR licensees (809-824 MHz/854-869 MHz)
 - o SMR licensees (896-901 MHz/935-940 MHz)
 - o All Broadband PCS licensee (1850-1910 MHz/1930-1990 MHz)
 - o All WCS licensees (2305-2320 MHz/2345-2360 MHz)
- (8) NIAR must notify the following within 80 km of the test area:
 - o Narrowband PCS licensees (901-902 MHz)
 - o Location & Monitoring Service licensees (902-928 MHz)
 - o Paging Service licensees in 35 MHz, 43 MHz, and 454 MHz/459 MHz
 - o Paging Service licensees in 929 MHz and 931 MHz
 - o General Aviation Air-Ground Service in 454 MHz/459 MHz
 - o 1392-1395 MHz/1432-1435 MHz Band licensees
 - o 1670-1675 MHz Band licensee (Crown Castle International,) and the lessee (Ligado Networks)
- (9) NIAR must Maintain operation separation from the grandfathered earth stations as defined in Part 90, Sub-part Z, or coordinate an agreement with the grandfathered earth station licensees prior to accessing to 3650-3700 MHz.
- (10) NIAR shall ensure that the operation will not cause harmful interference to any existing registered stations in the 3650-3700 MHz band, and notify the registered users in the proposed geographic area.
- (11) NIAR must coordinate with public safety licensees within a 32 km radius who are operating in the bands 38-73 MHz and 451-500 MHz.
- (12) NIAR shall not operate on the following frequencies:
 - 2850-3025 kHz
 - 3400-3500 kHz
 - 4650-4700 kHz
 - 5450-5680 kHz
 - 6525-6685 kHz
 - 8815-8965 kHz
 - 11275-11400 kHz
 - 412.5375-414.0125 MHz
- (13) Transmissions in 411-500 MHz are on a noninterference basis to NASA space operations.