

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

EXPERIMENTAL

(Nature of Service)

XT FX

(Class of Station)

WP9XOB

(Call Sign)

1917-EX-ST-2019

(File Number)

NAME University of Oklahoma

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:

Calibration and radar testing.

The purpose of operation is to calibrate and validate a prototype data collection system.

Station Locations

- (1) Lawton (COMANCHE), OK - NL 34-44-43; WL 98-31-55
- (2) Norman (CLEVELAND), OK - NL 35-12-38; WL 97-26-24
- (3) Lawton (COMANCHE), OK - NL 34-47-44; WL 98-26-50
- (4) Norman (CLEVELAND), OK - NL 35-10-54; WL 97-26-25

Frequency Information

Lawton (COMANCHE), OK - NL 34-44-43; WL 98-31-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8-8.025 GHz	FX	25M0Q3N	150 kW (ERP)	
8.4-8.6 GHz	FX	200MQ3N	150 kW (ERP)	

This authorization effective November 01, 2019 and
will expire 3:00 A.M. EST May 01, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Lawton (COMANCHE), OK - NL 34-44-43; WL 98-31-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8.6-8.8 GHz	FX	200MQ3N	150 kW (ERP)	
8.8-9 GHz	FX	200MQ3N	150 kW (ERP)	
9.2-9.4 GHz	FX	200MQ3N	150 kW (ERP)	
9.4-9.6 GHz	FX	200MQ3N	150 kW (ERP)	
9.6-9.8 GHz	FX	200MQ3N	150 kW (ERP)	
9.8-10 GHz	FX	200MQ3N	150 kW (ERP)	
10-10.2 GHz	FX	200MQ3N	150 kW (ERP)	
10.2-10.4 GHz	FX	200MQ3N	150 kW (ERP)	
10.4-10.6 GHz	FX	200MQ3N	150 kW (ERP)	
10.6-10.68 GHz	FX	80MQ3N	150 kW (ERP)	

Frequency Information

Lawton (COMANCHE), OK - NL 34-44-43; WL 98-31-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10.7-10.8 GHz	FX	100MQ3N	150 kW (ERP)	
10.8-11 GHz	FX	200MQ3N	150 kW (ERP)	
11-11.2 GHz	FX	200MQ3N	150 kW (ERP)	
11.2-11.4 GHz	FX	200MQ3N	150 kW (ERP)	
11.4-11.6 GHz	FX	200MQ3N	150 kW (ERP)	
11.6-11.8 GHz	FX	200MQ3N	150 kW (ERP)	
11.8-12 GHz	FX	200MQ3N	150 kW (ERP)	
12-12.2 GHz	FX	200MQ3N	150 kW (ERP)	
12.8-13 GHz	FX	200MQ3N	150 kW (ERP)	
13-13.2 GHz	FX	200MQ3N	150 kW (ERP)	

Frequency Information

Lawton (COMANCHE), OK - NL 34-44-43; WL 98-31-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
13.2-13.4 GHz	FX	200MQ3N	150 kW (ERP)	
13.4-13.6 GHz	FX	200MQ3N	150 kW (ERP)	
13.6-13.8 GHz	FX	200MQ3N	150 kW (ERP)	
13.8-14 GHz	FX	200MQ3N	150 kW (ERP)	

Norman (CLEVELAND), OK - NL 35-12-38; WL 97-26-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8-8.025 GHz	FX	25M0Q3N	150 kW (ERP)	
8.4-8.6 GHz	FX	200MQ3N	150 kW (ERP)	
8.6-8.8 GHz	FX	200MQ3N	150 kW (ERP)	
8.8-9 GHz	FX	200MQ3N	150 kW (ERP)	
9.2-9.4 GHz	FX	200MQ3N	150 kW (ERP)	

Frequency Information

Norman (CLEVELAND), OK - NL 35-12-38; WL 97-26-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.4-9.6 GHz	FX	200MQ3N	150 kW (ERP)	
9.6-9.8 GHz	FX	200MQ3N	150 kW (ERP)	
9.8-10 GHz	FX	200MQ3N	150 kW (ERP)	
10-10.2 GHz	FX	200MQ3N	150 kW (ERP)	
10.2-10.4 GHz	FX	200MQ3N	150 kW (ERP)	
10.4-10.6 GHz	FX	200MQ3N	150 kW (ERP)	
10.6-10.68 GHz	FX	80MQ3N	150 kW (ERP)	
10.7-10.8 GHz	FX	100MQ3N	150 kW (ERP)	
10.8-11 GHz	FX	200MQ3N	150 kW (ERP)	
11-11.2 GHz	FX	200MQ3N	150 kW (ERP)	

Frequency Information

Norman (CLEVELAND), OK - NL 35-12-38; WL 97-26-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
11.2-11.4 GHz	FX	200MQ3N	150 kW (ERP)	
11.4-11.6 GHz	FX	200MQ3N	150 kW (ERP)	
11.6-11.8 GHz	FX	200MQ3N	150 kW (ERP)	
11.8-12 GHz	FX	200MQ3N	150 kW (ERP)	
12-12.2 GHz	FX	200MQ3N	150 kW (ERP)	
12.8-13 GHz	FX	200MQ3N	150 kW (ERP)	
13-13.2 GHz	FX	200MQ3N	150 kW (ERP)	
13.2-13.4 GHz	FX	200MQ3N	150 kW (ERP)	
13.4-13.6 GHz	FX	200MQ3N	150 kW (ERP)	
13.6-13.8 GHz	FX	200MQ3N	150 kW (ERP)	

Frequency Information

Norman (CLEVELAND), OK - NL 35-12-38; WL 97-26-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
13.8-14 GHz	FX	200MQ3N	150 kW (ERP)	

Lawton (COMANCHE), OK - NL 34-47-44; WL 98-26-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8-8.025 GHz	FX	25M0Q3N	150 kW (ERP)	
8.4-8.6 GHz	FX	200MQ3N	150 kW (ERP)	
8.6-8.8 GHz	FX	200MQ3N	150 kW (ERP)	
8.8-9 GHz	FX	200MQ3N	150 kW (ERP)	
9.2-9.4 GHz	FX	200MQ3N	150 kW (ERP)	
9.4-9.6 GHz	FX	200MQ3N	150 kW (ERP)	
9.6-9.8 GHz	FX	200MQ3N	150 kW (ERP)	
9.8-10 GHz	FX	200MQ3N	150 kW (ERP)	

Frequency Information

Lawton (COMANCHE), OK - NL 34-47-44; WL 98-26-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10-10.2 GHz	FX	200MQ3N	150 kW (ERP)	
10.2-10.4 GHz	FX	200MQ3N	150 kW (ERP)	
10.4-10.6 GHz	FX	200MQ3N	150 kW (ERP)	
10.6-10.68 GHz	FX	80M0Q3N	150 kW (ERP)	
10.7-10.8 GHz	FX	100MQ3N	150 kW (ERP)	
10.8-11 GHz	FX	200MQ3N	150 kW (ERP)	
11-11.2 GHz	FX	200MQ3N	150 kW (ERP)	
11.2-11.4 GHz	FX	200MQ3N	150 kW (ERP)	
11.4-11.6 GHz	FX	200MQ3N	150 kW (ERP)	
11.6-11.8 GHz	FX	200MQ3N	150 kW (ERP)	

Frequency Information

Lawton (COMANCHE), OK - NL 34-47-44; WL 98-26-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
11.8-12 GHz	FX	200MQ3N	150 kW (ERP)	
12-12.2 GHz	FX	200MQ3N	150 kW (ERP)	
12.8-13 GHz	FX	200MQ3N	150 kW (ERP)	
13-13.2 GHz	FX	200MQ3N	150 kW (ERP)	
13.2-13.4 GHz	FX	200MQ3N	150 kW (ERP)	
13.4-13.6 GHz	FX	200MQ3N	150 kW (ERP)	
13.6-13.8 GHz	FX	200MQ3N	150 kW (ERP)	
13.8-14 GHz	FX	200MQ3N	150 kW (ERP)	

Norman (CLEVELAND), OK - NL 35-10-54; WL 97-26-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8-8.025 GHz	FX	25M0Q3N	150 kW (ERP)	

Frequency Information

Norman (CLEVELAND), OK - NL 35-10-54; WL 97-26-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8.4-8.6 GHz	FX	200MQ3N	150 kW (ERP)	
8.6-8.8 GHz	FX	200MQ3N	150 kW (ERP)	
8.8-9 GHz	FX	200MQ3N	150 kW (ERP)	
9.2-9.4 GHz	FX	200MQ3N	150 kW (ERP)	
9.4-9.6 GHz	FX	200MQ3N	150 kW (ERP)	
9.6-9.8 GHz	FX	200MQ3N	150 kW (ERP)	
9.8-10 GHz	FX	200MQ3N	150 kW (ERP)	
10-10.2 GHz	FX	200MQ3N	150 kW (ERP)	
10.2-10.4 GHz	FX	200MQ3N	150 kW (ERP)	
10.4-10.6 GHz	FX	200MQ3N	150 kW (ERP)	

Frequency Information

Norman (CLEVELAND), OK - NL 35-10-54; WL 97-26-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10.6-10.68 GHz	FX	80MQ3N	150 kW (ERP)	
10.7-10.8 GHz	FX	100MQ3N	150 kW (ERP)	
10.8-11 GHz	FX	200MQ3N	150 kW (ERP)	
11-11.2 GHz	FX	200MQ3N	150 kW (ERP)	
11.2-11.4 GHz	FX	200MQ3N	150 kW (ERP)	
11.4-11.6 GHz	FX	200MQ3N	150 kW (ERP)	
11.6-11.8 GHz	FX	200MQ3N	150 kW (ERP)	
11.8-12 GHz	FX	200MQ3N	150 kW (ERP)	
12-12.2 GHz	FX	200MQ3N	150 kW (ERP)	
12.8-13 GHz	FX	200MQ3N	150 kW (ERP)	

Frequency Information

Norman (CLEVELAND), OK - NL 35-10-54; WL 97-26-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
13-13.2 GHz	FX	200MQ3N	150 kW (ERP)	
13.2-13.4 GHz	FX	200MQ3N	150 kW (ERP)	
13.4-13.6 GHz	FX	200MQ3N	150 kW (ERP)	
13.6-13.8 GHz	FX	200MQ3N	150 kW (ERP)	
13.8-14 GHz	FX	200MQ3N	150 kW (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) 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.
- (3) University of Oklahoma must notch out 9336 MHz (+/- 2 MHz) at both Norman, OK locations.
- (4) University of Oklahoma should be aware that the 8400-8500 MHz band is for Space Research and that long term and/or multiple location use of this band is not likely to be supported. Also, NTIA's concurrence of this STA is based on it being used for testing purposes only. Future requests for operational use are unlikely to be able to be supported.
- (5) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (6) Licensee must successfully coordinate with the local Society of Broadcast Engineers frequency coordinator in each proposed venue prior to operation in 12.8-13 GHz and 13-13.2 GHz and 13.2-13.4 GHz bands.
- (7) Licensee must successfully coordinate with the Fixed Microwave Service licensees in each proposed location in accordance with 47 CFR, Part 101.103(d) prior to operation in 10.4-10.68 GHz, 10.7-11.8 GHz, 12.8-13.4 GHz bands.

Special Conditions:

- (8) The stop buzzer contact for this project is Nathan Goodman
Phone: 405 325 0404
Email: goodman@ou.edu