

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

EXPERIMENTAL

(Nature of Service)

XC MO

(Class of Station)

WM2XFG

(Call Sign)

0851-EX-CN-2021

(File Number)

NAME Southwest Research Institute

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(a, e, f, j) of the Commission's Rules

Station Locations

- (1) MOBILE: Sanderson, TX, within 2 km, centered around NL 30-21-58; WL 102-40-49
- (2) MOBILE: Sanderson, TX, within 2 km, centered around NL 30-21-58; WL 102-40-49
- (3) MOBILE: Sanderson, TX, within 2 km, centered around NL 30-21-58; WL 102-40-49

Frequency Information

MOBILE: Sanderson, TX, within 2 km, centered around NL 30-21-58; WL 102-40-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-449.75 MHz	MO	25K0FXN	10 W (ERP)	
450.25-460 MHz	MO	25K0FXN	10 W (ERP)	
902-928 MHz	MO	300KFXN	10 W (ERP)	
2400-2485 MHz	MO	10M0WXN	10 W (ERP)	

This authorization effective January 04, 2022 and
will expire 3:00 A.M. EST January 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Sanderson, TX, within 2 km, centered around NL 30-21-58; WL 102-40-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5725-5850 MHz	MO	20M0WXN	10 W (ERP)	

MOBILE: Sanderson, TX, within 2 km, centered around NL 30-21-58; WL 102-40-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4400-4940 MHz	MO	5M64D7W 11M3D7W 22M6D7W	4 W (ERP)	

MOBILE: Sanderson, TX, within 2 km, centered around NL 30-21-58; WL 102-40-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3300-3400 MHz	MO	43M0M1N 21M5M1N 5M50M1N 4M40M1N 4M40M1N 3M70M1N 3M70M1N 17M6M1N 17M6M1N 14M7M1N 14M7M1N 11M0M1N 11M0M1N 8M80M1N 8M80M1N	328 W (ERP)	

Frequency Information

MOBILE: Sanderson, TX, within 2 km, centered around NL 30-21-58; WL 102-40-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3300-3400 MHz	MO	7M30M1N	328 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) 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) Prior to commencing any operations in the frequencies below, the applicant must obtain consent from the following within 50 miles of the contours of the testing area:
Mobile Service licensees in 454 MHz/459 MHz
General Aviation Air-Ground Service in 454 MHz/459 MHz
Location & Monitoring Service licensees (902-928 MHz)
- (4) Stop Buzzer: Dr. Cris Lewis at (210) 522-3471, Cris.Lewis@swri.org
- (5) Southwest Research Institute cannot operate on any public safety frequencies listed under rule 90.20 in the frequency range 450.25-460 MHz.

Frequency	Station Class	Emission Designator	Authorized Power
450.25-460 MHz	MO	25K0FXN	10W (ERP)

- (6) Southwest Research Institute shall coordinate with the local Society of Broadcast Engineers frequency coordinator prior to operation in the 450-460 MHz and 2400-2485 MHz bands
- (7) Southwest Research Institute shall coordinate with Fixed Microwave Service licensees in the proposed areas in accordance with 47 C.F.R, Part 101.103(d) prior to operation in 2400-2485 MHz band.