

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

EXPERIMENTAL

(Nature of Service)

XC FX MO

(Class of Station)

WK2XTK

(Call Sign)

0861-EX-CN-2019

(File Number)

NAME Bell Textron Inc

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(h) of the Commission's Rules

Station Locations

- (1) Fort Worth (TARRANT), TX - NL 32-48-29; WL 97-09-23; MOBILE: Fort Worth, TX, within 8 km, centered around NL 32-48-29; WL 97-09-23
- (2) MOBILE: Fort Worth, TX, within 8 km, centered around NL 32-48-29; WL 97-09-23
- (3) Fort Worth (TARRANT), TX - NL 32-48-29; WL 97-09-23; MOBILE: , within 2 km, centered around NL 32-48-29; WL 97-09-23

Frequency Information

Fort Worth (TARRANT), TX - NL 32-48-29; WL 97-09-23; MOBILE: Fort Worth, TX, within 8 km, centered around NL 32-48-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2215.475 MHz	MO	5M64D7W 11M3D7W 22M6D7W	385 W (ERP)	0.0005 %
2271.225 MHz	MO	5M64D7W 11M3D7W 22M6D7W	385 W (ERP)	0.0005 %

This authorization effective April 23, 2020 and
will expire 3:00 A.M. EST May 01, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Fort Worth (TARRANT), TX - NL 32-48-29; WL 97-09-23; MOBILE: Fort Worth, TX, within 8 km, centered around NL 32-48-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5150-5250 MHz	MO	4M06D1D 8M70D1D 17M5D1D	2427.5 W (ERP)	0.0004 %

MOBILE: Fort Worth, TX, within 8 km, centered around NL 32-48-29; WL 97-09-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2215.475 MHz	MO	5M64D7W 11M3D7W 22M6D7W	2 W (ERP)	0.0005 %
2271.225 MHz	MO	5M64D7W 11M3D7W 22M6D7W	2 W (ERP)	0.0005 %
5150-5250 MHz	MO	8M70D1D 17M5D1D 4M06D1D	4 W (ERP)	0.0004 %

Fort Worth (TARRANT), TX - NL 32-48-29; WL 97-09-23; MOBILE: , within 2 km, centered around NL 32-48-29; WL 97-09-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2215.475 MHz	MO	5M64D7W 11M3D7W	2 W (ERP)	0.0005 %

Frequency Information

Fort Worth (TARRANT), TX - NL 32-48-29; WL 97-09-23; MOBILE: , within 2 km, centered around NL 32-48-29; WL 97-09-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2215.475 MHz	MO	22M6D7W	2 W (ERP)	0.0005 %
2271.225 MHz	MO	5M64D7W 22M6D7W 11M3D7W	2 W (ERP)	0.0005 %
5150-5250 MHz	MO	4M06D1D 8M70D1D 17M5D1D	4 W (ERP)	0.0004 %

Special Conditions:

- (1) 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.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) The frequency band 2200-2290 MHz is allocated for Federal mobile line-of-sight including aeronautical telemetry, but excluding flight testing of manned aircraft. Deconfliction with Federal users in this band is required. While the FAA concurs with the frequency band for proof-of-concept only, further development will require rulemaking to accommodate commercial usage, allow for beyond radio-line-of-sight operations, and establish frequency separation requirements to avoid harmful interference to and from other users.
- (4) The designated point-of-contact to terminate the system if interference occurs is Hai Nguyen at 251-635 -6607 and Maurice Griffin at 469-978 -4581.
- (5) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by NASA, contract 80AFRC19M0004. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.
- (6) The frequency assign was coordinated prior to authorization with FAA Headquarters, 800 Independence Avenue, S.W., Washington, D.C. 20591. Phone: 202-267-8699.
- (7) During transmission, aircraft shall not exceed the altitude 1000 FT AGL.

Special Conditions:

- (8) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (9) The frequency band 5150-5250 MH, FAA Spectrum coordination approved from the manned flight only due to flight altitude above 500 FT. Proposed unmaned flight will be handled via seperation coordination with retuning within 5030-5091 MHz and COA for future discussions with Boeing/INSITU and NASA planned. Risk due to cellular LTE, UNI-I 1 and other experimental operations.