

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

EXPERIMENTAL

(Nature of Service)

WK2XQO

(Call Sign)

XC FX MO

(Class of Station)

0074-EX-CM-2020

(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) Redden (ATOKA), OK - NL 34-31-17; WL 95-50-14; MOBILE: , within 2 km, centered around NL 34-31-17; WL 95-50-14
- (2) Redden (ATOKA), OK - NL 34-31-17; WL 95-50-14; MOBILE: , within 18 km, centered around NL 34-31-17; WL 95-50-14
- (3) Redden (ATOKA), OK - NL 34-31-17; WL 95-50-14; MOBILE: , within 2 km, centered around NL 34-31-17; WL 95-50-14

Frequency Information

Redden (ATOKA), OK - NL 34-31-17; WL 95-50-14; MOBILE: , within 2 km, centered around NL 34-31-17; WL 95-50-14

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 September 09, 2020 and
will expire 3:00 A.M. EST April 11, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Redden (ATOKA), OK - NL 34-31-17; WL 95-50-14; MOBILE: , within 2 km, centered around NL 34-31-17; WL 95-50-14

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

Redden (ATOKA), OK - NL 34-31-17; WL 95-50-14; MOBILE: , within 18 km, centered around NL 34-31-17; WL 95-50-14

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	4M06D1D 8M70D1D 17M5D1D	4 W (ERP)	0.0004 %

Redden (ATOKA), OK - NL 34-31-17; WL 95-50-14; MOBILE: , within 2 km, centered around NL 34-31-17; WL 95-50-14

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

Frequency Information

Redden (ATOKA), OK - NL 34-31-17; WL 95-50-14; MOBILE: , within 2 km, centered around NL 34-31-17; WL 95-50-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2215.475 MHz	MO	22M6D7W	2 W (ERP)	0.0005 %
2271.225 MHz	MO	5M64D7W 11M3D7W 22M6D7W	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) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (4) Stop Buzzer: Hai Nguyen at 251-635-6607 and Maurice Griffin at 469-978-4581.
- (5) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (6) Operations are on a non-interference basis (NIB) and shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference and notify the FCC in writing.
- (7) This frequency assign was coordinated prior to authorization with FAA headquarter, 800 Independent Avenue, S.W., Washington, DC 20591. Phone: 202-267-8699.
- (8) During transmission, aircraft shall not exceed the altitude 1200 ft.
- (9) 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.

Special Conditions:

- (10) 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.
- (11) The FAA conditionally concurs with the use of 5150-5250 MHz for a UAS C2 backup, provided that
- The UAS stays under 1200 ft above ground level per Part 107.
 - Autonomous control will be the primary means of navigation.
 - The proponent will use this band for experimental purposes only and seek a properly allocated frequency band for final commercial development and marketing.
 - Expansion or transfer of operations beyond the Redden, OK area shall not be permitted.
- (12) This authorization SUPERSEDES the previous issued authorization with the same call sign and file number: amended the conditions.