

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

EXPERIMENTAL

(Nature of Service)

XD FX

(Class of Station)

WI2XTZ

(Call Sign)

0016-EX-CM-2019

(File Number)

NAME Vertex Communications Corporation

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(e) of the Commission's Rules

Station Locations

- (1) Kilgore (GREGG), TX - NL 32-24-24; WL 94-51-17
- (2) Kilgore (GREGG), TX - NL 32-24-24; WL 94-51-17
- (3) Kilgore (GREGG), TX - NL 32-23-57; WL 94-51-22

Frequency Information

Kilgore (GREGG), TX - NL 32-24-24; WL 94-51-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3400-4200 MHz	FX	NON	173.8 kW (ERP)	
4500-4800 MHz	FX	NON	209 kW (ERP)	
5850-7707.5 MHz	FX	NON	381 kW (ERP)	
7900-8400 MHz	FX	NON	427 kW (ERP)	

This authorization effective March 01, 2019 and
will expire 3:00 A.M. EST July 01, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Kilgore (GREGG), TX - NL 32-24-24; WL 94-51-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10700-13250 MHz	FX	N0N	1.6 MW (ERP)	
14000-14800 MHz	FX	N0N	1.87 MW (ERP)	
17300-21200 MHz	FX	N0N	3.2 MW (ERP)	

Kilgore (GREGG), TX - NL 32-24-24; WL 94-51-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3400-4200 MHz	FX	N0N	87 W (ERP)	
4500-4800 MHz	FX	N0N	113 W (ERP)	
5850-7707.5 MHz	FX	N0N	292 W (ERP)	
7900-8400 MHz	FX	N0N	347 W (ERP)	
10700-13250 MHz	FX	N0N	863 W (ERP)	
14000-14800 MHz	FX	N0N	1076 W (ERP)	

Frequency Information

Kilgore (GREGG), TX - NL 32-24-24; WL 94-51-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
17300-21200 MHz	FX	N0N	2208 W (ERP)	
30000-31000 MHz	FX	N0N	4721 W (ERP)	
40000-41000 MHz	FX	N0N	8259 W (ERP)	
43500-45500 MHz	FX	N0N	10171 W (ERP)	

Kilgore (GREGG), TX - NL 32-23-57; WL 94-51-22

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3400-4200 MHz	FX	N0N	87 W (ERP)	
4500-4800 MHz	FX	N0N	113 W (ERP)	
5850-7707.5 MHz	FX	N0N	292 W (ERP)	
7900-8400 MHz	FX	N0N	347 W (ERP)	
10700-13250 MHz	FX	N0N	863 W (ERP)	

Frequency Information

Kilgore (GREGG), TX - NL 32-23-57; WL 94-51-22

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14000-14800 MHz	FX	N0N	1076 W (ERP)	
17300-21200 MHz	FX	N0N	2208 W (ERP)	
30000-31000 MHz	FX	N0N	4721 W (ERP)	
40000-41000 MHz	FX	N0N	8259 W (ERP)	
43500-45500 MHz	FX	N0N	10171 W (ERP)	

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 station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) The experimental transmitting antenna main beam gain must point 90 degrees up from the horizon towards the center of the "Fly Swatter" reflector and the reflector elevation angle must only operate between -1.8 to -15 degrees' elevation angles below the horizon.
- (5) The "Fly Swatter" reflector must point 82 degrees in azimuth.
- (6) Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (7) 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.
- (8) No automatic renewal for this authorization.
- (9) Stop buzzer, Test Range operator, Contact# 1-903-9984-6015.

Special Conditions:

- (10) Licensee must successfully coordinate with the local Society of Broadcast Engineers, Inc. prior to operation in 5850-7707.5 MHz, 10700-13250 MHz, and 17300-21200 MHz bands.
- (11) Licensee must successfully coordinate with the Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d) prior to operation in 3400-4200 MHz, 5850-7707.5 MHz, 10700-13250 MHz and 17300-21200 MHz bands
- (12) Licensee must maintain operation separation from the grandfathered earth stations as defined in Part 90, Sub-part Z, or successfully coordinate an agreement with the grandfathered earth station licensees prior to accessing to 3650-3700 MHz.
- (13) Licensee must 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.
- (14) Prior to operations in the 3700-4200 MHz, experimental licensee must coordinate with THE ASSOCIATED PRESS earth station licensee (Call sign E8282) and obtain written consent. Forward a copy of the consent to the FCC.
- (15) Prior to operations, experimental licensee, must notify licensees of FSS earth stations operating the 3700 - 4200 MHz, 10.7 - 12.2 GHz, 17.7 - 21.2 GHz within 30 kilometers' radius of the locations from which experimental operations will occur. Experimental licensee, must also provide such notification to the National Spectrum Managers Association frequency coordinators by email. (see http://wireless.fcc.gov/services/index.htm?job=licensing_1&id=microwave). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna pattern, antenna height(s), antenna orientation, eirp density) and day and times of each test. Consult the IBFS database to identify licensed earth station in the band 3700-4200 MHz, 10.7 – 12.2 GHz, 17.7 - 21.2 GHz bands.