

**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)

0375-EX-CR-2021

(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 (+/-)
3400-3549 MHz	FX	NON NON	87 W (ERP)	
4200-4500 MHz	FX	NON NON	87 W (ERP)	
4500-4800 MHz	FX	NON NON	113 W (ERP)	

This authorization effective July 01, 2021 and
will expire 3:00 A.M. EST July 01, 2023

**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 (+/-)
5700-6875 MHz	FX	N0N N0N	292 W (ERP)	
7055-7750 MHz	FX	N0N N0N	292 W (ERP)	
7900-8025 MHz	FX	N0N N0N	347 W (ERP)	
12700-13250 MHz	FX	N0N N0N	863 W (ERP)	
12750-14800 MHz	FX	N0N N0N	1076 W (ERP)	
17000-17800 MHz	FX	N0N N0N	2208 W (ERP)	
18600-18800 MHz	FX	N0N N0N	2208 W (ERP)	
20200-22200 MHz	FX	N0N N0N	2208 W (ERP)	

Frequency Information

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

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27500-31000 MHz	FX	N0N	4721 W (ERP)	
42000-42500 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 (+/-)
3400-3549 MHz	FX	N0N	87 W (ERP)	
4200-4500 MHz	FX	N0N	87 W (ERP)	
4500-4800 MHz	FX	N0N	113 W (ERP)	
5700-6875 MHz	FX	N0N	292 W (ERP)	
7055-7750 MHz	FX	N0N	292 W (ERP)	
7900-8025 MHz	FX	N0N	347 W (ERP)	

Frequency Information

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

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
12700-12750 MHz	FX	N0N	863 W (ERP)	
12750-14800 MHz	FX	N0N	1076 W (ERP)	
17000-17800 MHz	FX	N0N	2208 W (ERP)	
18600-18800 MHz	FX	N0N	2208 W (ERP)	
20200-22200 MHz	FX	N0N	2208 W (ERP)	
27500-31000 MHz	FX	N0N	4721 W (ERP)	
42000-42500 MHz	FX	N0N	8259 W (ERP)	
43500-45500 MHz	FX	N0N	10171 W (ERP)	

Special Conditions:

- (1) Prior to equipment authorization or a determination of compliance, the device must be accompanied by a conspicuous notice worded as follows: "This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained."
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

Special Conditions:

- (4) 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.
- (5) 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.
- (6) The "Fly Swatter" reflector must point 82 degrees in azimuth.
- (7) Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (8) 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.
- (9) No automatic renewal for this authorization.
- (10) Stop buzzer, Test Range operator, Contact# 1-903-9984-6015.
- (11) Prior to operations, experimental licensee, must notify licensees of FSS earth stations operating the frequency band 17.7 - 22.2 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.
- (12) Licensee must successfully coordinate with the local Society of Broadcast Engineers frequency coordinator prior to operation in 5700-7750 MHz, 10700-13250 MHz, 12750-14800 MHz, 17000-22000 MHz bands.
- (13) Licensee must coordination with the Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d) prior to operation in 5700-7750 MHz, 10700-13250 MHz, 12750-14800 MHz, 17000-22000 MHz, 27500-31000 MHz, 37500-42500 MHz bands.
- (14) Operation is NOT PERMITTED using the following frequency bands:
 - 3550-4200 MHz
 - 6875-7055 MHz
 - 8025-8400 MHz
 - 10.7-12.7 GHz
 - 17.8-18.6 GHz
 - 18.8-20.2 GHz
 - 37.5-42 GHz
 - 47.2-51.4 GHz

Special Conditions:

- (15) Prior to commencing any in the 17.3-17.7 GHz band, experimental licensee must notify licensees of DIRECTV Enterprises, LLC (Mr. Navid Motamed. Phone Number: 310-964-3589 E-Mail: nm704u@att.com and DirecTV/AT&T. Mr. Raquel Noriega Email: raquel.noriega@att.com), and NOVAVISION GROUP, INC. (Mr NORM LEVENTHAL. Phone Number: 202-955-3000 E-Mail: NORM.LEVENTHAL@HKLAW.COM. 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.
- (16) Prior to commencing any in the 17.3-17.7 GHz band, experimental licensee must notify licensees of DISH Operating L.L.C. (Blanket Earth Stations call sign: E140100. Phone Number: 202-463-3709 E-Mail: Alison.Minea@dish.com Attention: Alison Minea). 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, EIRP density) and day and times of each test.

Special Conditions:

- (17) Prior to commencing any operations in the 18.3-20.2 GHz frequency band, experimental licensee must notify licensees of C-band earth stations. 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 height(s), antenna orientation, EIRP, EIRP density) and day and times of each test. Please notify the following licensees:

KA BES Call Sign: E120227, E120071, E170088, E190201, E100143, E120026, E050033,

TFE Call Sign: E120092, E150097

Frequency band: 18.3-19.3 GHz, 19.7-20.2 GHz

Licensee: ViaSat, Inc.

Attention: Mr Daryl T Hunter

Phone Number: 760-476-2583 E-Mail: daryl.hunter@viasat.com

Fax Number: 760-929-3941

NGSO KA BES Call Sign: E140101

TFE Call Sign: E040415, E040416, E040417

Frequency band: 18.8 – 19.3 GHz

Licensee: SES S.A.

Name: O3B LIMITED

Phone Number: 202-478-7143

E-Mail: petra.vorwig@ses.com

Attention: Ms. Petra Vorwig

KA BES Call Sign: E140114

MES Call Sign: E140029

TFE Call Sign: E150097

Frequency band: 19.3-20.2 GHz

Licensee: ISAT US Inc. Phone Number: 202-248-5150

E-Mail: brennan.price@inmarsat.com

Attention: Brennan Price

KA BES Call Sign: E060445, E110149

Frequency band: 18.3 – 19.3GHz, 19.7-20.2 GHz

Licensee: HNS License Sub, LLC

Phone Number: 301-428-5893

Fax Number: 301-428-2818

E-Mail: jennifer.manner@echostar.com

Attention: Jennifer A. Manner

TFE Call Sign: E040285

Frequency band: 18.3-18.8 GHz, 19.7-20.2 GHz

Licensee: Telesat

Phone Number: 613-748-8700

E-Mail: eneasmith@telesat.com

Attention: Ms Elisabeth Neasmith