

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

EXPERIMENTAL

(Nature of Service)

XT FX

(Class of Station)

WJ2XRJ

(Call Sign)

0518-EX-CR-2019

(File Number)

NAME The Boeing Company

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) Herndon (FAIRFAX), VA - NL 38-57-31; WL 77-22-33

Frequency Information

Herndon (FAIRFAX), VA - NL 38-57-31; WL 77-22-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
20.2-21.2 GHz	FX	45M0M1D	275422.871 W (ERP)	
30-31 GHz	FX	15M0M1D	346736.850453 W (ERP)	
30-31 GHz	FX	7M70M1D	25703.957828 W (ERP)	
30-31 GHz	FX	15M0M1D 45M0M1D	2511886.43151 W (ERP)	

This authorization effective January 01, 2020 and
will expire 3:00 A.M. EST August 01, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Herndon (FAIRFAX), VA - NL 38-57-31; WL 77-22-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
30-31 GHz	FX	45M0M1D	2089296.13085 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 potential for severe harmful interference to the Fixed Microwave Service operations in the adjacent bands is very high. The Boeing Company must successfully coordinate with the Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d) prior to operation in 20.2-21.2 GHz and 30-31 GHz bands.
- (4) Stop Buzzers, Boeing 24 hour NOC hotline: (855) 556-1001.
- (5) All Boeing operations granted on an experimental basis shall be conducted on an unprotected, non-interference basis to authorized DoD stations.
- (6) As soon as possible, but no later than 2 business days prior to any planned testing, Boeing is required to provide Jimmy Nguyen (Email: jimmy.nguyen@us.af.mil, AFSMO) and Travis J. Inghram (Email: travis.j.ingram.civ@mail.mil, ARSTRAT) with the planned testing dates/duration and the stop buzzer POC for the testing.
- (7) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (8) The authorized station must be in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules.
- (9) The authorized station must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.
- (10) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (11) 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.
- (12) The Boeing Company shall ensure that all testing shall be conducted IAW the configuration and parameters that the Boeing Company coordinated with Air Force Jimmy Nguyen.
- (13) The Boeing Company should be aware that only the emissions designators listed in this grant are approved for the stated occupied bandwidth only. Occupied bandwidths that are less than the above emissions are not authorized.