

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

EXPERIMENTAL
(Nature of Service)

WE2XSO
(Call Sign)

XT FX MO
(Class of Station)

0418-EX-CR-2018
(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(d g) of the Commission's Rules

Station Locations

- (1) Renton (KING), WA - NL 47-29-35; WL 122-12-56; MOBILE: Renton Field, Renton, WA, centered around NL 47-29-35; WL 122-12-56
- (2) Seattle (KING), WA - NL 47-31-48; WL 122-18-07; MOBILE: Boeing Field, King County International Airport, Seattle, WA, centered around NL 47-31-48; WL 122-18-07
- (3) Everett (SNOHOMISH), WA - NL 47-54-22; WL 122-16-53; MOBILE: Everette, WA, centered around NL 47-54-22; WL 122-16-53

Frequency Information

Renton (KING), WA - NL 47-29-35; WL 122-12-56; MOBILE: Renton Field, Renton, WA, centered around NL 47-29-35; WL 12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1030 MHz	FX	14M0V1D 14M0K1D 6M00M1D	10 mW (ERP)	0.001 %
1090 MHz	FX	14M0V1D 14M0K1D 6M00M1D	10 mW (ERP)	0.001 %

This authorization effective November 01, 2018 and
will expire 3:00 A.M. EST November 01, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Seattle (KING), WA - NL 47-31-48; WL 122-18-07; MOBILE: Boeing Field, King County International Airport, Seattle, WA, cen

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1030 MHz	FX	14M0V1D 14M0K1D 6M00M1D	10 mW (ERP)	0.001 %
1090 MHz	FX	6M00M1D 14M0K1D 14M0V1D	10 mW (ERP)	0.001 %

Everett (SNOHOMISH), WA - NL 47-54-22; WL 122-16-53; MOBILE: Everett, WA, centered around NL 47-54-22; WL 122-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1030 MHz	FX	14M0V1D 14M0K1D 6M00M1D	10 mW (ERP)	0.001 %
1090 MHz	FX	6M00M1D 14M0K1D 14M0V1D	10 mW (ERP)	0.001 %

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) 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.
- (3) This frequency assign was coordinated prior to authorization with FAA Headquarters, 800 Independence Avenue, S.W., Washington, D. C. 20591. Phone: 202-267-8699.
- (4) The designated point-of-contact to terminate transmissions if interference occurs is Ronald Center at 866-248-1493.

Special Conditions:

- (5) Use test procedures that are consistent with the procedures in the FAA Advisory Circular 20-151B and the ICAO Aeronautical Surveillance Manual.
- (6) Prior to conducting tests using 1030 or 1090 MHz, the Boeing Company must contact the Seattle ARTCC and the local ATCT and provide them with test times, location, and direct phone number to stop transmission if any inadvertent interference is observed.
- (7) The aircraft transponder antennas must be shielded, covered with a hat, or the transponder must be connected to the test set via cable or connected into a dummy load.
- (8) As an alternative to requirement 7 above, and in accordance with the intent of FAA Advisory Circular 20-151B and the ICAO Aeronautical Surveillance Manual, radiated testing can be used provided:
 - a.If in Air Mode, the Mode C code, Mode S altitude reporting downlink formats, and ADS-B altitude reports all respond with an altitude that is at least 600 feet below ground level or an altitude above 90,000 feet;
 - b.If aircraft is in a normal pre-dispatch configuration (in On Ground Mode and transponder set to "TRANSPONDER" mode), the Mode C code, Mode S altitude reporting downlink formats, and ADS-B altitude reports all respond with an altitude at ground level;
 - c.The testing be conducted indoors whenever possible;
 - d.At any location (facility), up to three aircraft may be tested at a time;
 - e.In-between testing set the transponder mode to Standby (STBY).