

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

EXPERIMENTAL

(Nature of Service)

XT FX

(Class of Station)

WE2XSN

(Call Sign)

0452-EX-CR-2020

(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(k) of the Commission's Rules

Station Locations

(1) Marana (PINAL), AZ - NL 32-30-42; WL 111-19-11

Frequency Information

Marana (PINAL), AZ - NL 32-30-42; WL 111-19-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
30-74.6 MHz	FX	NON	20 W (ERP)	0.001 %
75.4-108 MHz	FX	NON	20 W (ERP)	0.001 %
137-225 MHz	FX	NON	20 W (ERP)	0.001 %
400-405 MHz	FX	NON	20 W (ERP)	0.001 %

This authorization effective November 01, 2020 and
will expire 3:00 A.M. EST September 01, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Marana (PINAL), AZ - NL 32-30-42; WL 111-19-11

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
407-412 MHz	FX	N0N	20 W (ERP)	0.001 %
417-932 MHz	FX	N0N	20 W (ERP)	0.001 %
935-941 MHz	FX	N0N	20 W (ERP)	0.001 %
944-959 MHz	FX	N0N	20 W (ERP)	0.001 %
1427-1435 MHz	FX	N0N	20 W (ERP)	0.001 %
1535-1545 MHz	FX	N0N	20 W (ERP)	0.001 %
1610-1645.5 MHz	FX	N0N	20 W (ERP)	0.001 %
1668.4-1710 MHz	FX	N0N	20 W (ERP)	0.001 %
1847-2700 MHz	FX	N0N	20 W (ERP)	0.001 %
3100-4200 MHz	FX	N0N	20 W (ERP)	0.001 %

Frequency Information

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4400-5000 MHz	FX	N0N	20 W (ERP)	0.001 %
5250-5600 MHz	FX	N0N	20 W (ERP)	0.001 %
5650-7125 MHz	FX	N0N	20 W (ERP)	0.001 %
8500-9000 MHz	FX	N0N	20 W (ERP)	0.001 %
9200-9300 MHz	FX	N0N	20 W (ERP)	0.001 %
9500-14510 MHz	FX	N0N	20 W (ERP)	0.001 %
15322-15700 MHz	FX	N0N	20 W (ERP)	0.001 %
16200-18000 MHz	FX	N0N	20 W (ERP)	0.001 %

Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (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) Licensee must notch out all frequencies per FAA prior coordination and is subject to immediate shut down in the event of any harmful interference.

Special Conditions:

- (4) Operation is NOT PERMITTED in the frequency band 73-74.6 MHz, 156.775-156.825MHz, 161.95-162.05 MHz, 2690-2700MHz, 3550-3700 MHz, 4940-5000 MHz, 10680-10700 MHz, 14510-14523 MHz and 15350-15400 MHz.
- (5) Operation is NOT PERMITTED using the frequency bands 756-775 MHz and 788-806 MHz.
- (6) The licensee shall not constrain or limit the present or future growth of non-Federal and Federal radio services in the area of operation. Furthermore, the licensee shall
 - a- Be responsible for remedying RF interference caused to non-Federal and Federal users including terminating transmissions if necessary to resolve interference.
 - b- Maintain a transmission log as a standard operating procedure.
 - c- Periodically check the FCC licensing databases to monitor the authorizations granted in the area of operation.
 - d- Notify appropriate the FCC Field Office(s) of the test locations and duration of operation.
 - e- The stop buzzer for this authorization is Farzad Keshvadian phone number 425-266-6847.
- (7) Operation is subject to coordination with the area frequency coordinator, State of Arizona, ATTN: SFIS FAC-SH, FT. HUACHUCA, AZ 85613-5000, and PHONE: (520) 538-6423; FAX (520) 538-8525; DSN 879-6423.
- (8) Licensee is NOT PERMITTED operation on any Public Safety frequencies listed under 47 CFR Rule 90.20.
- (9) Licensee must get consent from Advanced Wireless Service licensees in proposed area prior to operation on the requested frequency band 2110-2180 MHz.
- (10) Operation is subject to prior coordination with AFTRCC.
- (11) A notification email of intended use will be sent to the DoD area frequency coordinator for State of Arizona (MARK.K.ROSSOW.CIVMAIL.MIL and JAMES.E.ORTEGA.CIVMAIL.MIL) between 24 hours and 72 hours to that use. The email will state that Boeing will be conducting HIRF using frequencies authorized under NG 084537 thru NG 084558.
- (12) Prior to renewal of this license, the Boeing Company must provide an updated AFTRCC coordination.

Special Conditions:

- (13) Prior to commencing any operations in the frequencies below, the applicant must obtain consent from the following within 50 miles of the contours of the testing area:
- Paging Service licensees in 35 MHz
 - Paging Service licensees in 43 MHz
 - Paging Service licensees in 152 MHz
 - Paging Service licensees in 158 MHz
 - Paging Service licensees in 152 MHz/158 MHz
 - AMTS Licensee (217-218 MHz/219-220 MHz)
 - 218-219 MHz Service licensees
 - 220-222 MHz Service licensees
 - Paging Service licensees in 454 MHz/459 MHz
 - General Aviation Air-Ground Service in 454 MHz/459 MHz
 - 700 MHz Lower Band licensees (698-746 MHz)
 - 700 MHz Upper Band licensees (746-758 MHz and 775-788 MHz)
 - SMR licensees (809-824 MHz/854-869 MHz)
 - B/ILT licensees (809-824 MHz/854-869 MHz)
 - Cellular licensees (824-849 MHz/869-894 MHz)
 - Commercial Air-Ground licensee (849-851 MHz/894-896 MHz)
 - SMR licensees (896-901 MHz/935-940 MHz)
 - B/ILT licensees (896-901 MHz/935-940 MHz)
 - Narrowband PCS licensees (901-902/930-931/940-941 MHz)
 - Location & Monitoring Service licensees (902-928 MHz)
 - Paging Service licensees in 929 MHz and 931 MHz
 - Broadband PCS licensees (1850-1910 MHz/1930-1990 MHz)
 - WCS (2305-2320 MHz/2345-2360 MHz) licensee (AT&T)