

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

EXPERIMENTAL

(Nature of Service)

WF2XFD

(Call Sign)

XT MO

(Class of Station)

0371-EX-PL-2009

(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(i) of the Commission's Rules

Station Locations

- (1) MOBILE: Pacific Beach, WA, within 10 km, centered around NL 47-13-07; WL 124-12-12
- (2) MOBILE: Quillayute Airfield, Forks, WA, within 10 km, centered around NL 47-56-11; WL 124-33-45
- (3) MOBILE: Boeing Field, King County, WA, within 4 km, centered around NL 47-32-21; WL 122-18-44

Frequency Information

MOBILE: Pacific Beach, WA, within 10 km, centered around NL 47-13-07; WL 124-12-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
29.7-34.5165 MHz	MO	N0N	50 W (ERP)	
34.5425-36.1675 MHz	MO	N0N	50 W (ERP)	
36.1925-45.1875 MHz	MO	N0N	50 W (ERP)	

This authorization effective January 06, 2010 and
will expire 3:00 A.M. EST December 31, 2011

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Pacific Beach, WA, within 10 km, centered around NL 47-13-07; WL 124-12-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
45.2125-45.3475 MHz	MO	N0N	50 W (ERP)	
45.3725-45.4675 MHz	MO	N0N	50 W (ERP)	
45.4925-45.9875 MHz	MO	N0N	50 W (ERP)	
46.0125-72.0875 MHz	MO	N0N	50 W (ERP)	
72.1125-74 MHz	MO	N0N	50 W (ERP)	
76-88 MHz	MO	N0N	50 W (ERP)	
99.9 MHz	MO	N0N	50 W (ERP)	
100.1 MHz	MO	N0N	50 W (ERP)	
144.0125-147.9875 MHz	MO	N0N	50 W (ERP)	
150.8125-153.7575 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Pacific Beach, WA, within 10 km, centered around NL 47-13-07; WL 124-12-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
153.7825-153.8025 MHz	MO	N0N	50 W (ERP)	
153.8275-154.1325 MHz	MO	N0N	50 W (ERP)	
154.1575-154.1775 MHz	MO	N0N	50 W (ERP)	
154.2025-154.3575 MHz	MO	N0N	50 W (ERP)	
154.3825-154.9675 MHz	MO	N0N	50 W (ERP)	
154.9925-155.3576 MHz	MO	N0N	50 W (ERP)	
155.3825-155.7625 MHz	MO	N0N	50 W (ERP)	
155.7875-155.8525 MHz	MO	N0N	50 W (ERP)	
155.9075-156.1125 MHz	MO	N0N	50 W (ERP)	
156.1475-156.2375 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Pacific Beach, WA, within 10 km, centered around NL 47-13-07; WL 124-12-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
156.2625-156.2875 MHz		N0N	50 W (ERP)	
156.3125-156.3375 MHz	MO	N0N	50 W (ERP)	
156.5125-156.5625 MHz	MO	N0N	50 W (ERP)	
156.6125-156.6375 MHz	MO	N0N	50 W (ERP)	
156.6625-156.6875 MHz	MO	N0N	50 W (ERP)	
156.7125-156.7875 MHz	MO	N0N	50 W (ERP)	
156.8125-156.8625 MHz	MO	N0N	50 W (ERP)	
156.9125-156.9875 MHz	MO	N0N	50 W (ERP)	
157.0375-157.0875 MHz	MO	N0N	50 W (ERP)	
157.1125-157.1375 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Pacific Beach, WA, within 10 km, centered around NL 47-13-07; WL 124-12-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
157.1625-157.2875 MHz	MO	N0N	50 W (ERP)	
157.3375-157.4125 MHz	MO	N0N	50 W (ERP)	
157.4375-161.9875 MHz	MO	N0N	50 W (ERP)	
173.1875-173.4125 MHz	MO	N0N	50 W (ERP)	
174.0125-224.9875 MHz	MO	N0N	50 W (ERP)	
399.9125-400.9875 MHz	MO	N0N	50 W (ERP)	
402.5125-406.0875 MHz	MO	N0N	50 W (ERP)	
420.0125-984 MHz	MO	N0N	50 W (ERP)	
986-1001 MHz	MO	N0N	50 W (ERP)	
1004-1004.3 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Quillayute Airfield, Forks, WA, within 10 km, centered around NL 47-56-11; WL 124-33-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
29.7-34.5175 MHz	MO	NON	50 W (ERP)	
34.5425-36.1675 MHz	MO	NON	50 W (ERP)	
36.1925-45.1875 MHz	MO	NON	50 W (ERP)	
45.215-45.3475 MHz	MO	NON	50 W (ERP)	
45.3725-45.4675 MHz	MO	NON	50 W (ERP)	
45.4925-45.9875 MHz	MO	NON	50 W (ERP)	
46.0125-72.0875 MHz	MO	NON	50 W (ERP)	
72.1125-74 MHz	MO	NON	50 W (ERP)	
76-88 MHz	MO	NON	50 W (ERP)	
92.1-95.1 MHz	MO	NON	50 W (ERP)	

Frequency Information

MOBILE: Quillayute Airfield, Forks, WA, within 10 km, centered around NL 47-56-11; WL 124-33-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
97.1-103.5 MHz	MO	N0N	50 W (ERP)	
104.3-107.9 MHz	MO	N0N	50 W (ERP)	
144.0125-147.9875 MHz	MO	N0N	50 W (ERP)	
150.8125-153.7575 MHz	MO	N0N	50 W (ERP)	
153.7825-153.8025 MHz	MO	N0N	50 W (ERP)	
153.8275-154.1325 MHz	MO	N0N	50 W (ERP)	
154.1575-154.1775 MHz	MO	N0N	50 W (ERP)	
154.2025-154.3573 MHz	MO	N0N	50 W (ERP)	
154.3825-154.9675 MHz	MO	N0N	50 W (ERP)	
154.9925-155.3575 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Quillayute Airfield, Forks, WA, within 10 km, centered around NL 47-56-11; WL 124-33-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
155.3825-155.7625 MHz	MO	N0N	50 W (ERP)	
155.7875-155.8525 MHz	MO	N0N	50 W (ERP)	
155.9075-156.1125 MHz	MO	N0N	50 W (ERP)	
156.1475-156.2375 MHz	MO	N0N	50 W (ERP)	
156.2625-156.2875 MHz	MO	N0N	50 W (ERP)	
156.3125-156.3375 MHz	MO	N0N	50 W (ERP)	
156.5125-156.5625 MHz	MO	N0N	50 W (ERP)	
156.6125-156.6375 MHz	MO	N0N	50 W (ERP)	
156.6625-156.6875 MHz	MO	N0N	50 W (ERP)	
156.7125-156.7875 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Quillayute Airfield, Forks, WA, within 10 km, centered around NL 47-56-11; WL 124-33-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
156.8125-156.8625 MHz	MO	N0N	50 W (ERP)	
156.9125-156.9875 MHz	MO	N0N	50 W (ERP)	
157.0375-157.0875 MHz	MO	N0N	50 W (ERP)	
157.1125-157.1375 MHz	MO	N0N	50 W (ERP)	
157.1625-157.2875 MHz	MO	N0N	50 W (ERP)	
157.3375-157.4125 MHz	MO	N0N	50 W (ERP)	
157.4375-161.9875 MHz	MO	N0N	50 W (ERP)	
173.1875-173.4125 MHz	MO	N0N	50 W (ERP)	
174.0125-224.9875 MHz	MO	N0N	50 W (ERP)	
399.9125-400.9875 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Quillayute Airfield, Forks, WA, within 10 km, centered around NL 47-56-11; WL 124-33-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
402.5125-406.0875 MHz	MO	N0N	50 W (ERP)	
420.0125-984 MHz	MO	N0N	50 W (ERP)	
986-1001 MHz	MO	N0N	50 W (ERP)	
1004-1004.3 MHz	MO	N0N	50 W (ERP)	

MOBILE: Boeing Field, King County, WA, within 4 km, centered around NL 47-32-21; WL 122-18-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
29.7-34.5175 MHz	MO	N0N	50 W (ERP)	
34.5425-36.1675 MHz	MO	N0N	50 W (ERP)	
36.1925-45.1875 MHz	MO	N0N	50 W (ERP)	
45.2125-45.3475 MHz	MO	N0N N0N	50 W (ERP)	
45.3725-45.4675 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Boeing Field, King County, WA, within 4 km, centered around NL 47-32-21; WL 122-18-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
45.4925-45.9875 MHz	MO	N0N	50 W (ERP)	
46.0125-72.0875 MHz	MO	N0N	50 W (ERP)	
72.1125-74 MHz	MO	N0N	50 W (ERP)	
76-88 MHz	MO	N0N	50 W (ERP)	
96.9 MHz	MO	N0N	50 W (ERP)	
98.5 MHz	MO	N0N	50 W (ERP)	
100.3 MHz	MO	N0N	50 W (ERP)	
101.1 MHz	MO	N0N	50 W (ERP)	
102.1 MHz	MO	N0N	50 W (ERP)	
105.7 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Boeing Field, King County, WA, within 4 km, centered around NL 47-32-21; WL 122-18-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
106.5 MHz	MO	N0N	50 W (ERP)	
107.3 MHz	MO	N0N	50 W (ERP)	
144.0125-147.9875 MHz	MO	N0N	50 W (ERP)	
150.8125-153.7575 MHz	MO	N0N	50 W (ERP)	
153.7825-153.8025 MHz	MO	N0N	50 W (ERP)	
153.8275-154.1325 MHz	MO	N0N	50 W (ERP)	
154.1575-154.1775 MHz	MO	N0N	50 W (ERP)	
154.2025-154.355 MHz	MO	N0N	50 W (ERP)	
154.3825-154.9675 MHz	MO	N0N	50 W (ERP)	
154.9925-155.3575 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Boeing Field, King County, WA, within 4 km, centered around NL 47-32-21; WL 122-18-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
155.3825-155.7625 MHz	MO	N0N	50 W (ERP)	
155.7875-155.8525 MHz	MO	N0N	50 W (ERP)	
155.9075-156.1125 MHz	MO	N0N	50 W (ERP)	
156.1475-156.2375 MHz	MO	N0N	50 W (ERP)	
156.2625-156.2875 MHz	MO	N0N	50 W (ERP)	
156.3125-156.3375 MHz	MO	N0N	50 W (ERP)	
156.5125-156.5625 MHz	MO	N0N	50 W (ERP)	
156.6125-156.6375 MHz	MO	N0N	50 W (ERP)	
156.6625-156.6875 MHz	MO	N0N	50 W (ERP)	
156.7125-156.7875 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Boeing Field, King County, WA, within 4 km, centered around NL 47-32-21; WL 122-18-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
156.8125-156.8625 MHz	MO	N0N	50 W (ERP)	
156.9125-156.9875 MHz	MO	N0N	50 W (ERP)	
157.0375-157.0875 MHz	MO	N0N	50 W (ERP)	
157.1125-157.1375 MHz	MO	N0N	50 W (ERP)	
157.1625-157.2875 MHz	MO	N0N	50 W (ERP)	
157.3375-157.4125 MHz	MO	N0N	50 W (ERP)	
157.4375-161.9875 MHz	MO	N0N	50 W (ERP)	
173.1875-173.4125 MHz	MO	N0N	50 W (ERP)	
174.0125-224.9875 MHz	MO	N0N	50 W (ERP)	
399.9125-400.9875 MHz	MO	N0N	50 W (ERP)	

Frequency Information

MOBILE: Boeing Field, King County, WA, within 4 km, centered around NL 47-32-21; WL 122-18-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
402.5125-406.0875 MHz	MO	N0N	50 W (ERP)	
420.0125-984 MHz	MO	N0N	50 W (ERP)	
986-992.9 MHz	MO	N0N	50 W (ERP)	
995.1-999 MHz	MO	N0N	50 W (ERP)	

Special Conditions:

- (1) Operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9247 North Meridian Street, Suite 305; Indianapolis, IN 46260; telephone, (866) 632-4222; FAX, (317) 846-9120; e-mail, executivedir @ sbe.org; information, www.sbe.org.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) 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.
- (4) Operation is subject to prior coordination with Fixed Point to Point and Multiple Address System licensees.
- (5) Operation is subject to prior coordination with FAA Northwest Regional Office, 1601 Lind Avenue, Washington, 98055; phone: 206-227-2464.
- (6) The transmitter will be swept on specific frequencies with duration of 35 ms per frequency with a dwell time of 15 ms between frequencies.
- (7) Operation is NOT permitted on the frequency band 993 MHz - 995 MHz and 1004 MHz - 1004.3 MHz in King County, Washington.
- (8) Licensee is NOT PERMITTED to operate on the following frequencies band, 74-76 MHz, 108-137 MHz, and 984-986 MHz.
- (9) Licensee is NOT PERMITTED using the frequency band 88-108 MHz except the following frequencies/bands:
 - Pacific Beach: 99.9 MHz and 100.1 MHz
 - Forks: 92.1- 95.1 MHz, 97.1-103.5 MHz, and 104.3-107.9 MHz.
 - King County: 96.9 MHz, 98.5 MHz, 100.3 MHz, 101.1 MHz, 102.1 MHz, 105.7 MHz, 106.5 MHz and 107.3 MHz.

Special Conditions:

- (10) The stop buzzer person, Peter Kried cell phone: 206-701-4919, is available during all testing. Alternate contact is Western Area Defense Sector; phone 253-982-4672.
- (11) Operation is subject to prior coordination with Fixed Microwave licensees.
- (12) Licensee must NOTCH OUT +/- 12.5 kHz for the following bands/frequencies: 34.53 MHz, 36.18 MHz, 45.2 MHz, 45.36 MHz, 45.48 MHz, 46 MHz, 72.1 MHz, 73 -76 MHz, 108- 144 MHz, 148-150.8 MHz, 153.77 MHz, 153.815 MHz, 154.145 MHz, 154.19 MHz, 154.37 MHz, 154.98 MHz, 155.37 MHz, 155.775 MHz, 155.895 MHz, 156.135 MHz, 156.25 MHz, 156.3 MHz, 156.35 MHz, 156.375 MHz, 156.4 MHz, 156.425 MHz, 156.45 MHz, 156.475 MHz, 156.5 MHz, 156.575 MHz, 156.6 MHz, 156.65 MHz, 156.7 MHz, 156.8 MHz, 156.875 MHz, 156.9 MHz, 157 MHz, 157.025 MHz, 157.1 MHz, 157.15 MHz, 157.3 MHz, 157.325 MHz, 157.425 MHz, 162-174 MHz (excluding subband 173.2-173.4 MHz) , 225-399.9 MHz, 401-402.5 MHz, 406.1-420 MHz, 984-986 MHz.