

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

EXPERIMENTAL

(Nature of Service)

XD FX

(Class of Station)

KC2XAT

(Call Sign)

0156-EX-CR-2016

(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(g) of the Commission's Rules

Station Locations

(1) El Segundo (LOS ANGELES), CA - NL 33-55-42; WL 118-23-41

Frequency Information

El Segundo (LOS ANGELES), CA - NL 33-55-42; WL 118-23-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1535-1559 MHz	FX	N0N	700 W (Output Power)	
1610-1626.5 MHz	FX	N0N	700 W (Output Power)	
1670-1700 MHz	FX	N0N	700 W (Output Power)	
1850-1910 MHz	FX	N0N	700 W (Output Power)	

This authorization effective March 01, 2017 and
will expire 3:00 A.M. EST March 01, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

El Segundo (LOS ANGELES), CA - NL 33-55-42; WL 118-23-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1930-2000 MHz	FX	N0N	700 W (Output Power)	
2000-2210 MHz	FX	N0N	1400 W (Output Power)	
2220-2290 MHz	FX	N0N	1400 W (Output Power)	
2500-2690 MHz	FX	N0N	2000 W (Output Power)	
2655-2690 MHz	FX	N0N	2000 W (Output Power)	
3700-4200 MHz	FX	N0N	20 W (Output Power)	
4190 MHz	FX	N0N	4400 W (Output Power)	
5900-5925 MHz	FX	N0N	2800 W (Output Power)	
5900-6500 MHz	FX	N0N	8 W (Output Power)	
5930.4 MHz	FX	N0N	2800 W (Output Power)	

Frequency Information

El Segundo (LOS ANGELES), CA - NL 33-55-42; WL 118-23-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5960 MHz	FX	N0N	2800 W (Output Power)	
5989.7 MHz	FX	N0N	2800 W (Output Power)	
6019.3 MHz	FX	N0N	2800 W (Output Power)	
6049 MHz	FX	N0N	2800 W (Output Power)	
6078.6 MHz	FX	N0N	2800 W (Output Power)	
6108.3 MHz	FX	N0N	2800 W (Output Power)	
6137.9 MHz	FX	N0N	2800 W (Output Power)	
6167.6 MHz	FX	N0N	2800 W (Output Power)	
6182.4 MHz	FX	N0N	2800 W (Output Power)	
6212.1 MHz	FX	N0N	2800 W (Output Power)	

Frequency Information

El Segundo (LOS ANGELES), CA - NL 33-55-42; WL 118-23-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
6241.7 MHz	FX	N0N	2800 W (Output Power)	
6271.4 MHz	FX	N0N	2800 W (Output Power)	
6301 MHz	FX	N0N	2800 W (Output Power)	
6330.7 MHz	FX	N0N	2800 W (Output Power)	
6360.3 MHz	FX	N0N	2800 W (Output Power)	
6390 MHz	FX	N0N	2800 W (Output Power)	
6419.6 MHz	FX	N0N	2800 W (Output Power)	
6425-6500 MHz	FX	N0N	2800 W (Output Power)	
6600-7125 MHz	FX	N0N	2800 W (Output Power)	
10900-10915 MHz	FX	N0N	2800 W (Output Power)	

Frequency Information

El Segundo (LOS ANGELES), CA - NL 33-55-42; WL 118-23-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10955-11700 MHz	FX	N0N	2800 W (Output Power)	
11700-12200 MHz	FX	N0N	2800 W (Output Power)	
14000-14400 MHz	FX	N0N	2800 W (Output Power)	
17700-21200 MHz	FX	N0N	630000 W (Output Power)	
24050-24250 MHz	FX	N0N	630000 W (Output Power)	
24650-25050 MHz	FX	N0N	630000 W (Output Power)	
25250-27500 MHz	FX	N0N	630000 W (Output Power)	
30000-31200 MHz	FX	N0N	630000 W (Output Power)	
31800-36000 MHz	FX	N0N	630000 W (Output Power)	
36000-38600 MHz	FX	N0N	630000 W (Output Power)	

Frequency Information

El Segundo (LOS ANGELES), CA - NL 33-55-42; WL 118-23-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
39500-40500 MHz	FX	N0N	630000 W (Output Power)	
42500-47000 MHz	FX	N0N	630000 W (Output Power)	
48200-51400 MHz	FX	N0N	630000 W (Output Power)	
54250-58200 MHz	FX	N0N	630000 W (Output Power)	
59000-64000 MHz	FX	N0N	630000 W (Output Power)	
65000-75500 MHz	FX	N0N	630000 W (Output Power)	
76000-86000 MHz	FX	N0N	630000 W (Output Power)	

Special Conditions:

- (1) Operation in the 1850-1910 or 1930-1990 MHz band requires prior frequency coordination with 2 GHz microwave users and consent of PCS licensees to avoid interference.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) To avoid harmful interference to Gateway receive Earth stations in the Mobile-Satellite Service (MSS) using Non-Geostationary Satellite Orbits (NGSO) in the frequency range 19.3-19.7 GHz sufficient distance shall be maintained between the experimental transmitting station and NGSO MSS Gateway Earth Stations.

Special Conditions:

- (5) To avoid harmful interference to receiving space stations in the Mobile-Satellite Service (MSS) using Non-Geostationary Satellite Orbits (NGSO) in the frequency range 29.1-29.5 GHz, sufficient angular separation shall be maintained between the experimental transmitting station and NGSO MSS space stations.
- (6) Operation is NOT permitted on the frequency bands: 1559-1610 MHz, 1626.5-1670 MHz, 2210-2220 MHz, 21200-24050 MHz, 24250-24650 MHz, 25050-25250 MHz, 27500-30000 MHz, 31200-31800 MHz, 38600-39500 MHz, 40500-42500 MHz, 47000-48200 MHz, 51400-54250 MHz, 58200-59000 MHz, 64000-65000 MHz, and 75500-76000 MHz due to potential interference Federal Government operations.
- (7) Operation on this assignment is subject to immediate cessation, if it causes harmful interference to NASA assignment in Pasadena, CA.