

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

EXPERIMENTAL
(Nature of Service)

WK2XMA
(Call Sign)

XC FX MO
(Class of Station)

0046-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(b) of the Commission's Rules

Station Locations

- (1) MOBILE: CONUS and Possessions, centered around NL 0-00-00; WL 0-00-00
- (2) Salt Lake City (SALT LAKE), UT - NL 40-46-31; WL 111-53-05

Frequency Information

MOBILE: CONUS and Possessions, centered around NL 0-00-00; WL 0-00-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
20.2-21.2 GHz	MO	24M5M1D 44M5M1D 60M0M1D	602560 W (ERP)	
30-31 GHz	MO	7M60M1D 6M30M1D 12M3M1D 10M8M1D 4M80M1D 20M2M1D	27542 W (ERP)	

This authorization effective March 31, 2020 and
will expire 3:00 A.M. EST March 30, 2021

**FEDERAL
COMMUNICATIONS
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		10M8M1D		
		12M3M1D		
		20M2M1D		
		4M80M1D		
		6M30M1D		
		7M60M1D		

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 Boeing Company must successfully coordinate with the local Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d) prior to operation in adjacent bands 20.2-21.2 GHz and 30-31 GHz bands.
- (4) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (5) 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.
- (6) The authorized station must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.
- (7) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (8) 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.
- (9) Operation is subject to prior coordination with US Air Force.
- (10) Point-of-Communication: INMARSAT I5 Satellite.

Special Conditions:

- (11) Stop Buzzer for Operation: Boeing 24-hour NOC hotline: (855) 556-1001 email: bcssnoc@boeing.com or Samir Patel cell (310) 227-7178
- (12) All Boeing testing granted shall be conducted IAW the configuration and RF parameters (e.g., orbital slot/s, specific frequencies, emission designators, etc.) that Boeing coordinated with Air Force (Jimmy Nguyen) and ARSTRAT (Travis Inghram) for this specific testing.
- (13) 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.
- (14) As soon as possible but no later than 3 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 date/duration and the stop buzzer POC for the testing. If planned testing conflicts with DoD operations, additional evaluations and/or restrictions will be required.
- (15) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by USAF, FA8106-16-D-0002. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.