

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

WL9XDM

(Call Sign)

XT FX MO

(Class of Station)

0489-EX-ST-2017

(File Number)

NAME The Boeing Company

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

This requirement supports the demonstration of Boeing antenna systems communicating with Inmarsat-5-F2.

Station Locations

- (1) Oklahoma City (OKLAHOMA), OK - NL 35-41-00; WL 97-41-00; MOBILE: Ground test, Oklahoma City, OK, within 9 km, centered around NL 35-41-00; WL 97-41-00

Frequency Information

Oklahoma City (OKLAHOMA), OK - NL 35-41-00; WL 97-41-00; MOBILE: Ground test, Oklahoma City, OK, within 9 km, centered around NL 35-41-00; WL 97-41-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
20.2-21.2 GHz	FX	9M83M1D 14M4M1D	8710 W (ERP)	
20.2-21.2 GHz	MO	7M20M1D 7M37M1D	58884 W (ERP)	

This authorization effective April 27, 2016 and
will expire 3:00 A.M. EST October 25, 2017

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Oklahoma City (OKLAHOMA), OK - NL 35-41-00; WL 97-41-00; MOBILE: Ground test, Oklahoma City, OK, within 9 km, cent

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
30-31 GHz	MO	14M4M1D 9M83M1D	11749 W (ERP)	
30-31 GHz	FX	7M37M1D 7M20M1D	79433 W (ERP)	

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) POINT-OF-COMMUNICATION: INMARSAT 5F2.
- (4) Authorization of this STA does not constitute U.S. Market access authorization for Inmarsat-5 F2 in the 20.2-21.2 GHz (space-to-Earth) or the 30.0-31.0 GHz (Earth-to-space) frequency bands.
- (5) The Stop Buzzer, point-of contact, Samir Patel, 310-227-7178 must be available during any testing or demonstration under this authorization.
- (6) DoD is not responsible for coordinating or obtaining INMARSAT access agreements required for any testing/ demonstration under this authorization
- (7) Operation is subject to prior coordination with Fixed Microwave licensees.
- (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.
- (9) Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future satellite applications.
- (10) All Boeing operations granted on an experimental basis (STA) shall be conducted on an unprotected, non-interference basis to authorized Department of Defense stations.
- (11) This STA is limited to 6 months and is subject to re-coordination with Air Force Spectrum Management Office and the Army Spectrum Management Office upon renewal
- (12) Use of Boeing Phased Array Antenna (PHAAST) limited to ground-based flat, paved area without significant body roll over the ground track.

Special Conditions:

- (13) As soon as possible, but no later than 3 business days prior to any planned Demo, Boeing is required to provide Jimmy Nguyen (Email: jimmy.nguyen@us.af.mil, AFSMO), Stephen Harris (Stephen.b.harris6.civ@mail.mil ASMO), and Travis J. Inghram (Email: travis.j.ingham.civ@mail.mil, ARSTRAT) with the planned testing dates/duration and the stop buzzer POC for the Demo. If planned Demo is in conflict with DoD operations, additional evaluations and/or restrictions will be required