

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

EXPERIMENTAL
(Nature of Service)

WJ9XSQ
(Call Sign)

XT FX
(Class of Station)

1482-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:

The purpose of this license is to support system development, testing and demonstrations.

Station Locations

- (1) Oahu, HI - NL 21-42-18; WL 157-59-55
- (2) Koolauloa Hauula, HI - NL 21-39-47; WL 157-59-07

Frequency Information

Oahu, HI - NL 21-42-18; WL 157-59-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
37.5-42.5 GHz	FX	N0N 5G00D7W	24275 W (ERP)	
47-50.1 GHz	FX	N0N 3G10D7W	24275 W (ERP)	

This authorization effective January 01, 2018 and
will expire 3:00 A.M. EST July 01, 2018

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Oahu, HI - NL 21-42-18; WL 157-59-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
50.5-52.6 GHz	FX	N0N 2G10D7W	24275 W (ERP)	

Koolauloa Hauula, HI - NL 21-39-47; WL 157-59-07

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
37.5-42.5 GHz	FX	N0N 5G00D7W	24275 W (ERP)	
47-50.1 GHz	FX	N0N 3G10D7W	24275 W (ERP)	
50.5-52.6 GHz	FX	N0N 2G10D7W	24275 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) The Boeing Company must coordinate with the Fixed Microwave Service licensees prior to operation in 37.5-42.5 GHz band in accordance with 47 CFR, Part 101.103(d).
- (4) The band 40-40.5 GHz is designated for satellite operations and must be notched.

Special Conditions:

- (5) In accordance with ITU Regulation para. 5.340 and US246, no transmissions are allowed in the following bands:
 - a. 50.2 - 50.4 GHz
 - b. 52.6 - 54.25 GHz
- (6) NTIA does not support the development of non- satellite equipment that utilize the 40-40.5 GHz Band.
- (7) Licensee must avoid pointing the transmitting antenna within 10 degrees of any point on the geostationary orbit arc while transmitting the narrow emission (NON) signals in the 47-50.2 GHz and 50.4-51.4 GHz band.
- (8) Operations must be a Non Interference Basis (NIB)/Non Protected Basis (NPB)/Not Prejudice to future decisions (NPFD).
- (9) The following bands must not be utilized to protect Radio Astronomy operations in the area:
 - a) 42.5 to 43.5 GHz
 - b) 48.94 to 49.05 GHz.
- (10) No automatic renewal for operations in the 37.5 - 43.5 GHz and 47.2- 52.6 GHz bands. All renewal requests will need to be re-evaluated to ensure new satellite networks are protected.
- (11) Licensee experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (12) Stop Buzzer: Joel Thorsheim, Phone Number: 206-544-6066
- (13) The authorized station must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.