

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

EXPERIMENTAL

(Nature of Service)

WR9XLS

(Call Sign)

XT MO

(Class of Station)

0044-EX-ST-2021

(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:

Test will involve over the air testing of DNW Ku band waveform to include air-to-air and air-to-ground links forming a high capacity mesh network.

Station Locations

- (1) MOBILE: Max flight level 10,000ft, Patuxent River, MD, within 248 km, centered around NL 38-16-22; WL 76-25-56

Frequency Information

MOBILE: Max flight level 10,000ft, Patuxent River, MD, within 248 km, centered around NL 38-16-22; WL 76-25-56

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.7145-15.1365 GHz	MO	320MG2W 160MG2W	2259 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) The Boeing Company must avoid transmissions into the National Radio Quiet Zone.

This authorization effective March 05, 2021 and
will expire 3:00 A.M. EST September 06, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (3) At least 5 working days prior to operations, The Boeing Company must coordinate with MIDLANTAFC, scott.hoschar@navy.mil, robert.n.goddard@navy.mil, shauntrea.landrum.ctr@navy.mil, or midlantaftc_paxriver@navy.mil, and refer to FCC STA 0044-EX-ST-2021 when providing the following:
- a.Primary POC for event.
 - b.STOP BUZZER POC with land line and cell phone STOP BUZZER telephone numbers.
 - c.RF Frequency requirements provided as either a center channel with a bandwidth, or a lower and upper MAX frequency of operation. (NOTE: Purely a recommendation, but suggest starting with a 160MHz BW request (160MG2W) and moving to a 320 MHz BW request (320MG2W) after demonstrating successful lower BW capability instead of Boeing proposal of starting with 320MG2W emission as the PRIMARY usage.
 - d.MAX EIRP radiated power.
 - e.Directivity and gain of transmit and receive antennas.
 - f.Planned operating location to include planned airspace of use (e.g. R4005, R4006, or W376/W387) and LAT/LONG of any ground stations.
 - g.Maximum altitude of flights.
- (4) The Boeing Company should be aware that the requested operations are subject to immediate shutdown if interference occurs.
- (5) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by US Navy, contract number N68335-20-F-0290. 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.