

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

EXPERIMENTAL

(Nature of Service)

WD9XPH

(Call Sign)

XC FX

(Class of Station)

0175-EX-ST-2009

(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:

To analyze various frequency bands and configurations in order to develop efficient ground penetrating radar technology.

Station Locations

(1) Huntsville, AL - NL 34-37-43; WL 86-46-34

Frequency Information

Huntsville, AL - NL 34-37-43; WL 86-46-34

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
100-3000 MHz	FX	4M00P0N	100 W (ERP)	

Special Conditions:

- (1) Operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9247 North Meridian Street, Suite 305; Indianapolis, IN 46260; telephone, (866) 632-4222; FAX, (317) 846-9120; e-mail, executivedir@sbe.org; information, www.sbe.org.
- (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.

This authorization effective May 11, 2009 and
will expire 3:00 A.M. EST December 12, 2009

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (3) Operation is NOT permitted using the frequency band 88-108 MHz except the Channel 280 (103.9 MHz).
- (4) Licensee must get consent from Educational Broadband Services (EBS), Broadband Radio Services (BRS), and Advanced Wireless Services (AWS) licensees in the geographic area where the tests are being conducted.
- (5) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the US Navy contract number N00014-07-C-0295. 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.
- (6) Operation is subject to prior coordination with Fixed Point-to-Point and Multiple Address System licensees.
- (7) The Stop Buzzer contact Mr. Alan Barr, cell phone number 256-617-0112 needs to be available at all testing in order to shut off the equipment if interference is caused to federal operations in the area.
- (8) The frequency band needs to be restricted to 174-2690 MHz.
- (9) The following frequency bands need to be NOTCHED OUT: 608-614MHz, 1400-1427 MHz, and 1660.5-1668.4 MHz.
- (10) The following frequencies need to NOTCHED OUT +/- 12 kHz: M239, M243, M254.375, M269.525, M329.45, M329.9, M331.1, M332.45, M350.35, M354.1, M408.825, M409.8 and M410.3.
- (11) The following frequencies need to NOTCHED as indicated: M1030 +/- 5MHz, M1090 +/- 5MHz, M1119 +/- 400 kHz, M1129 +/- 400 kHz, M1162 +/- 400 kHz and M1575.42 +/- 15 MHz.
- (12) The power used needs to be the minimum amount required to perform the testing.
- (13) Future use of this equipment will require antennas that have low or no sidelobe/backlobe radiation and in addition the high power will be a problem if this equipment is every used since many FCC/NTIA systems use this band.
- (14) If this testing is to continue beyond 11 December 2009 and this STA is already an extension, Boeing must apply for a long term experimental FAA license.