

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

EXPERIMENTAL

(Nature of Service)

XT FX

(Class of Station)

WG9XNG

(Call Sign)

0317-EX-ST-2013

(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:

Perform ground EMC testing on Indian provided IFF system.

Station Locations

(1) Moses Lake (GRANT), WA - NL 47-12-04; WL 119-18-01

Frequency Information

Moses Lake (GRANT), WA - NL 47-12-04; WL 119-18-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
75.00000000 MHz	FX	6K00A2A	10.000000 uW (ERP)	
108.00000000 MHz	FX	20K9A9W	10.000000 uW (ERP)	
108.05000000 MHz	FX	20K9A9W	10.000000 uW (ERP)	

This authorization effective April 23, 2013 and
will expire 3:00 A.M. EST October 23, 2013

**FEDERAL
COMMUNICATIONS
COMMISSION**

Frequency Information

Moses Lake (GRANT), WA - NL 47-12-04; WL 119-18-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
108.10000000 MHz	FX	6K00A9W	10.000000 uW (ERP)	
108.15000000 MHz	FX	6K00A9W	10.000000 uW (ERP)	
138.25000000 MHz	FX	75K0F1B 75K0F3D 199KF1D 210KF3D 360KF9D	0.153160 W (ERP)	
155.50000000 MHz	FX	75K0F1B 75K0F3D 199KF1D 210KF3D 360KF9D	0.153160 W (ERP)	
162.25000000 MHz	FX	75K0F1B 75K0F3D 199KF1D 210KF3D 360KF9D	0.153160 W (ERP)	
166.75000000 MHz	FX	75K0F1B 75K0F3D 199KF1D 210KF3D 360KF9D	0.153160 W (ERP)	

Frequency Information

Moses Lake (GRANT), WA - NL 47-12-04; WL 119-18-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
172.75000000 MHz	FX	75K0F1B 75K0F3D 199KF1D 210KF3D 360KF9D	0.153160 W (ERP)	
334.55000000 MHz	FX	300HA1N	10.000000 uW (ERP)	
334.70000000 MHz	FX	300HA1N	10.000000 uW (ERP)	
978.00000000 MHz	FX	2M00M1D	10.000000 uW (ERP)	
979.00000000 MHz	FX	2M00M1D	10.000000 uW (ERP)	
1030.00000000 MHz	FX	8M00V1D 14M0V1D	0.500000 W (ERP)	
1030.00000000 MHz	FX	12M0M1D 14M0M1D 6M00M1D	10.000000 uW (ERP)	
1090.00000000 MHz	FX	14M0M1D 11M9M1D	861.000000 W (ERP)	

Frequency Information

Moses Lake (GRANT), WA - NL 47-12-04; WL 119-18-01

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1090.00000000 MHz	FX	8M00V1D 7M00V1D	0.500000 W (ERP)	
1090.00000000 MHz	FX	14M0K1D 14M0V1D 6M00M1D	10.000000 uW (ERP)	
1104.00000000 MHz	FX	12M0M1D	10.000000 uW (ERP)	

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 designated point-of-contact to terminate the systems if having interference occurs is Terry Bownman at (206) 551-7210 and Nate Horton at (206) 852-3121.
- (4) Licensee must coordinate with the local Society of Broadcast, Inc. Engineers frequency coordinator prior to accessing to the frequency ranges from 162.25 MHz to 172.75 MHz to protect the Broadcast Auxiliary Service operations.
- (5) Boeing shall advise the customer that the interrogator, transponder, and TCAS systems aboard the P-8i have not been certified for use by the United States and may not operate in U.S. airspace unless adequate technical assurance of the engineering integrity of the 1030/1090 MHz equipment on board the aircraft has been provided to the FAA through the United States Navy . The U.S. Navy can provide guidance about the what qualifies as adequate technical assurance. An alternative is to have the platform certified by the DoD AIMS program office. Of particular concern is compatibility between the onboard interrogator, transponder and TCAS unit. Any documentation provided as assurance about the technical integrity of the 1030/1090 MHz equipment must specifically address the electromagnetic compatibility of the interrogator on the transponder and TCAS unit. Additionally, frequency assignments to support this aircraft would need coordinated/authorized through the appropriate U.S. military channels and an airworthiness certification will need obtained prior to flying in U.S. airspace.

Special Conditions:

- (6) Ground Test can be performed under the following conditions.
 - A. APM-480 or TR-XXX can be used as ground test equipment for civilian modes.
 - B. Radiate Mode 2 only for interrogator. All other modes must utilized direct connect method.
 - C. Orient the tail of the aircraft toward the local radar positioned at N 47° 12' 20", W 119° 19' 29", so that all emissions are away from the SSR.
 - D. The antenna scan rate shall NOT be set tow 0(zero) RPM.
- (7) TCAS test can be performed under the following conditions:
 - A. The max altitude 100 ft. above ground with max 150 knot ground speed.
 - B. Pre-coordination with the local air traffic control facilities at least 24 hours prior to testing is required and STOP buzzer procedures shall be established.
- (8) A copy of the test report will be forwarded to the FAA that includes:
 - a. Results of testing of the functionality of the sector blanking capability.
 - b. Advise whether an Interlock switch exists between the TCAS and transponder.
 - c. Results of testing the EMC effects of the interrogator on the TCAS and transponder.
- (9) All testing must be done at Moses Lake, Washington and at ground level.
- (10) The frequencies 166 MHz and 163.75 MHz are not authorized to be used during this testing but all other government frequencies requested are approved.
- (11) This license is only to conduct EMC tests on an airframe designated solely for foreign sales prior to delivering the aircraft to a foreign country. All on board avionics must be replaced with TSO approved equipment before any flights can take place in U.S.Space.