

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

EXPERIMENTAL

(Nature of Service)

WG9XRZ

(Call Sign)

XT MO

(Class of Station)

0570-EX-ST-2013

(File Number)

NAME Insitu

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 Special Temporary Authority is to operate UAV (Unmanned Aerial Vehicle) systems in the Northern Arctic Area for research purposes.

Station Locations

- (1) MOBILE: Chukchi Sea Waters off Alaska Coast, within 178 km, centered around NL 71-23-51; WL 164-36-43

Frequency Information

MOBILE: Chukchi Sea Waters off Alaska Coast, within 178 km, centered around NL 71-23-51; WL 164-36-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1090 MHz	MO	11M0M1D	107 W (ERP)	
1370-1390 MHz	MO	230KF1D	1 W (ERP)	
1370-1390 MHz	MO	230KF1D	608 W (ERP)	

This authorization effective July 15, 2013 and
will expire 3:00 A.M. EST January 01, 2014

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Chukchi Sea Waters off Alaska Coast, within 178 km, centered around NL 71-23-51; WL 164-36-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2411 MHz	MO	18M0F9W 16M0F3F	2 W (ERP)	
2434 MHz	MO	18M0F9W 16M0F3F	2 W (ERP)	
2453 MHz	MO	18M0F9W 16M0F3F	2 W (ERP)	
2463 MHz	MO	18M0F9W 16M0F3F	2 W (ERP)	
2473 MHz	MO	18M0F9W 16M0F3F	2 W (ERP)	
2486 MHz	MO	18M0F9W 16M0F3F	2 W (ERP)	

Special Conditions:

- (1) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) Operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9102 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.

Special Conditions:

- (4) 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.
- (5) Boeing needs to provide an onsite stop buzzer contact and procedures to Jack Phillips or Byron Ipock at FAA Alaskan office.
- (6) If there is an impact/RFI, to the FAA radar site they will have to determine if they are willing or want to disable those frequencies above 1371 MHz to accommodate the UAV and if not the UAV will have to operate without the frequencies 1371-1390 MHz.
- (7) Boeing will need to file for a Certificate of Waiver Authorization (COA) with the FAA Airspace and Rules office and detail the area they will be flying in any frequency assignment.
- (8) Boeing is required to provide the FAA Spectrum office proof that the transponder is either FAA or AIMS certified.