

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

EXPERIMENTAL

(Nature of Service)

WH9XWD

(Call Sign)

XT MO

(Class of Station)

0774-EX-ST-2014

(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:

To provide command and control and video for UAS operations.

Station Locations

- (1) MOBILE: Ft Huachuca AZ Flight Level Surface to 19K Feet, within 100 km, centered around NL 31-38-26; WL 110-16-49

Frequency Information

MOBILE: Ft Huachuca AZ Flight Level Surface to 19K Feet, within 100 km, centered around NL 31-38-26; WL 110-16-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1090 MHz	MO	11M0M1D	175 W (ERP)	
1370-1388 MHz	MO	230KF1D	608 W (ERP)	
1370-1388 MHz	MO	230KF1D	1 W (ERP)	

This authorization effective September 30, 2014 and
will expire 3:00 A.M. EST March 01, 2015

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Ft Huachuca AZ Flight Level Surface to 19K Feet, within 100 km, centered around NL 31-38-26; WL 110-16-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1389-1390 MHz	MO	230KF1D	1 W (ERP)	
1389-1390 MHz	MO	230KF1D	608 W (ERP)	
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.

Special Conditions:

- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) 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.
- (4) Stop buzzer is operations center at (866) 637-4691.
- (5) Operation is subject to prior coordination with the local SBE frequency coordinator and the Fixed Microwave Service licensees prior to operation on 2453MHz, 2463MHz, 2473MHz and 2486MHz.
- (6) Subject to prior coordination with NASA's Columbia Scientific Balloon Facility (Robert Salter, Robert.Salter@csbf.nasa.gov, (903) 729-0271) prior to use.
- (7) Boeing initiates coordination, no less than 48 hours prior to intended use of these frequencies, with the Fort Huachuca ISM ((520) 538-6030) and the EPG SMO ((520) 538-4903)
- (8) The Army and the demonstration participants must know that the 1090 MHz transponder is not certified and unable to provide reliable aircraft separation. Therefore, the UAS transponder can only be used within restricted airspace until certification is obtained.
- (9) Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization Under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.