

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

EXPERIMENTAL

(Nature of Service)

WP9XDA

(Call Sign)

XT MO

(Class of Station)

0919-EX-ST-2019

(File Number)

NAME Raytheon Missile Systems

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 radio systems in the UAV.

Station Locations

- (1) MOBILE: Tucson, AZ, within 1 km, centered around NL 32-08-13; WL 110-55-20
- (2) MOBILE: Tucson, AZ, within 1 km, centered around NL 32-06-15; WL 110-57-45
- (3) MOBILE: Tucson, AZ, within 10 km, centered around NL 32-05-39; WL 110-48-27

Frequency Information

MOBILE: Tucson, AZ, within 1 km, centered around NL 32-08-13; WL 110-55-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
430-450 MHz	MO	40K0F1D	48.4 W (ERP)	
1370-1387.5 MHz	MO	4M06D1D 8M22D1D 16M4D1D	10.6 W (ERP)	

This authorization effective August 28, 2019 and
will expire 3:00 A.M. EST December 21, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Tucson, AZ, within 1 km, centered around NL 32-08-13; WL 110-55-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2300-2320 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
2345-2472 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
4435-4640 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
4900-4940 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
4950-4990 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
6750-8000 MHz	MO	600MF3N	76.4 W (ERP)	

Frequency Information

MOBILE: Tucson, AZ, within 1 km, centered around NL 32-06-15; WL 110-57-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
430-450 MHz	MO	40K0F1D	48.4 W (ERP)	
1370-1387.5 MHz	MO	4M06D1D 8M22D1D 16M4D1D	10.6 W (ERP)	
2300-2320 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
2345-2472 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
4435-4640 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
4900-4940 MHz	MO	16M4D1D 8M22D1D 4M06D1D	20 W (ERP)	
4950-4990 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	

Frequency Information

MOBILE: Tucson, AZ, within 1 km, centered around NL 32-06-15; WL 110-57-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
6750-8000 MHz	MO	600MF3N	76.4 W (ERP)	

MOBILE: Tucson, AZ, within 10 km, centered around NL 32-05-39; WL 110-48-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
430-450 MHz	MO	40K0F1D	48.4 W (ERP)	
1370-1387.5 MHz	MO	4M06D1D 8M22D1D 16M4D1D	10.6 W (ERP)	
2300-2320 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
2345-2472 MHz	MO	4M06D1D 8M22D1D 16M4D1D	8.2 W (ERP)	
4435-4640 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
4900-4940 MHz	MO	4M06D1D 8M22D1D	20 W (ERP)	

Frequency Information

MOBILE: Tucson, AZ, within 10 km, centered around NL 32-05-39; WL 110-48-27

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4900-4940 MHz	MO	16M4D1D	20 W (ERP)	
4950-4990 MHz	MO	4M06D1D 8M22D1D 16M4D1D	20 W (ERP)	
6750-8000 MHz	MO	600MF3N	76.4 W (ERP)	

Special Conditions:

- (1) This frequency assignment in one of the bands 1435-1525, 2310-2320 and 2345-2390 MHz was coordinated prior to authorization with the Area Frequency Coordinator, Ft. Huachuca, AZ, who also coordinated it, as appropriate, with the Aerospace and Flight Test Radio Coordinating Council. Use of this frequency under the authority of this assignment is subject to such further coordination with the AFC, Ft. Huachuca, as necessary to ensure compatibility with existing uses.
- (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.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at https://www.sbe.org/sections/freq_local.php to find the appropriate coordinator.
- (5) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (6) Raytheon Missile Systems must notch out the following (+/- 15 MHz) 7165 MHz, 7195 MHz, 7345 MHz, 7375 MHz, 7465 MHz, 7495 MHz, 7645 MHz, and 7675 MHz in order to protect ongoing operations in the requested area.
- (7) Raytheon Missile Systems may not operate in the 2200-2300 MHz and the 4640-4900 MHz bands due to ongoing operations in the requested area.
- (8) Stop Buzzer Point of Contact is Jim Ortega at (520) 794-0227.
- (9) Operations in the WCS bands (2305-2320 MHz and 2345-2360 MHz) must comply with the emission limits applicable to those bands. See 47 C.F.R. § 27.53(a).
- (10) Prior to commencing any operations in the frequencies below, the applicant must obtain consent from the following within 78 miles of the contours of the testing area:
 - WCS (2305-2320 MHz/2345-2360 MHz) licensee (AT&T)

Special Conditions:

- (11) Airborne operation in 2305-2310 MHz band is prohibited.
- (12) This authorization SUPERSEDES the previously issued authorization with the same call sign and file number: adding Special Conditions (10) and (11).