

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

EXPERIMENTAL

(Nature of Service)

WQ9XIS

(Call Sign)

XT      FX MO

(Class of Station)

0385-EX-ST-2020

(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:**

Testing of UAV data links and tracking systems

**Station Locations**

- (1) Tucson (PIMA), AZ - NL 32-06-16; WL 110-57-11
- (2) MOBILE: Tucson, AZ. area in triangle in exhibit coordinates at center, centered around NL 32-05-41; WL 110-56-55
- (3) MOBILE: Tucson, AZ, within 0.6 km, centered around NL 32-05-44; WL 110-55-58

**Frequency Information**

Tucson (PIMA), AZ - NL 32-06-16; WL 110-57-11

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 430-449 MHz   | FX            | 40K0F1D             | 48.4 W (ERP)     |                           |
| 1370-1390 MHz | FX            | 4M06D1D<br>8M22D1D  | 10.6 W (ERP)     |                           |

This authorization effective April 01, 2020 and  
will expire 3:00 A.M. EST October 01, 2020

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

Tucson (PIMA), AZ - NL 32-06-16; WL 110-57-11

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 1370-1390 MHz | FX            | 16M4D1D                       | 10.6 W (ERP)     |                           |
| 2377 MHz      | FX            | 4M06D1D<br>8M22D1D<br>16M4D1D | 8.2 W (ERP)      |                           |
| 2382 MHz      | FX            | 4M06D1D<br>8M22D1D<br>16M4D1D | 8.2 W (ERP)      |                           |
| 2387 MHz      | FX            | 4M06D1D<br>8M22D1D<br>16M4D1D | 8.2 W (ERP)      |                           |
| 2392 MHz      | FX            | 4M06D1D<br>8M22D1D<br>16M4D1D | 8.2 W (ERP)      |                           |
| 4435-4940 MHz | FX            | 4M06D1D<br>8M22D1D<br>16M4D1D | 20 W (ERP)       |                           |
| 4950-4990 MHz | FX            | 4M06D1D<br>8M22D1D<br>16M4D1D | 20 W (ERP)       |                           |

## Frequency Information

Tucson (PIMA), AZ - NL 32-06-16; WL 110-57-11

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

MOBILE: Tucson, AZ. area in triangle in exhibit coordinates at center, centered around NL 32-05-41; WL 110-56-55

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449 MHz   | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370-1390 MHz | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 10.6 W (ERP)     |                           |
| 2377 MHz      | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 8.2 W (ERP)      |                           |
| 2382 MHz      | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 8.2 W (ERP)      |                           |
| 2387 MHz      | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 8.2 W (ERP)      |                           |
| 2392 MHz      | MO            | 4M06D1D<br>8M22D1D            | 8.2 W (ERP)      |                           |

## Frequency Information

MOBILE: Tucson, AZ. area in triangle in exhibit coordinates at center, centered around NL 32-05-41; WL 110-56-55

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 2392 MHz      | MO            | 16M4D1D                       | 8.2 W (ERP)      |                           |
| 4435-4940 MHz | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 20 W (ERP)       |                           |
| 4950-4990 MHz | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 20 W (ERP)       |                           |
| 6750-8000 MHz | MO            | 600MF3N                       | 76.4 W (ERP)     |                           |

MOBILE: Tucson, AZ, within 0.6 km, centered around NL 32-05-44; WL 110-55-58

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449 MHz   | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370-1390 MHz | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 10.6 W (ERP)     |                           |
| 2377 MHz      | MO            | 4M06D1D<br>8M22D1D            | 8.2 W (ERP)      |                           |

## Frequency Information

MOBILE: Tucson, AZ, within 0.6 km, centered around NL 32-05-44; WL 110-55-58

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 2377 MHz      | MO            | 16M4D1D                       | 8.2 W (ERP)      |                           |
| 2382 MHz      | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 8.2 W (ERP)      |                           |
| 2387 MHz      | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 8.2 W (ERP)      |                           |
| 2392 MHz      | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 8.2 W (ERP)      |                           |
| 4435-4940 MHz | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 20 W (ERP)       |                           |
| 4950-4990 MHz | MO            | 4M06D1D<br>8M22D1D<br>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) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (5) The licensee coordinate with the local Society of Broadcast Engineers frequency coordinator AND the affected Fixed Microwave Service licensees prior to operation in 6750-8000 MHz band.
- (6) Raytheon Missile Systems may not operate in the 449 – 450 MHz band in order to protect ongoing Space operations.
- (7) Raytheon Missile Systems must notch out the following (+/- 15 MHz): 7195 MHz, 7345 MHz, 7375 MHz, 7465 MHz, and 7495 MHz in order to protect ongoing operations in the requested area.
- (8) The stop buzzer is Jim Ortega at (520) 794-0227.
- (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.