

**United States of America  
FEDERAL COMMUNICATIONS COMMISSION  
EXPERIMENTAL  
RADIO STATION CONSTRUCTION PERMIT  
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

XC MO

(Class of Station)

WL2XCX

(Call Sign)

0505-EX-CN-2020

(File Number)

NAME Raytheon Missile Systems

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(c) of the Commission's Rules

Station Locations

- (1) MOBILE: Avon Park, FL, within 10 km, centered around NL 27-35-30; WL 81-31-48
- (2) MOBILE: Wellton, AZ, within 10 km, centered around NL 32-39-45; WL 113-28-39
- (3) MOBILE: China Lake, CA, within 10 km, centered around NL 35-39-36; WL 117-49-40
- (4) MOBILE: Dugway, UT, within 10 km, centered around NL 40-12-49; WL 112-45-24
- (5) MOBILE: Edwards AFB, CA, within 10 km, centered around NL 34-55-21; WL 117-51-20
- (6) MOBILE: Eglin, FL, within 10 km, centered around NL 30-28-07; WL 86-30-54
- (7) MOBILE: El Centro, CA, within 10 km, centered around NL 32-50-03; WL 115-34-44
- (8) MOBILE: Fallon, NV, within 10 km, centered around NL 39-29-52; WL 118-44-49
- (9) MOBILE: Florence, AZ, within 10 km, centered around NL 33-04-29; WL 111-22-12
- (10) MOBILE: Nellis AFB, NV, within 10 km, centered around NL 36-14-52; WL 115-01-16
- (11) MOBILE: Patuxent River, MD, within 10 km, centered around NL 38-17-51; WL 76-23-27
- (12) MOBILE: Point Mugu, CA, within 10 km, centered around NL 34-05-51; WL 119-04-50
- (13) MOBILE: Quantico, VA, within 10 km, centered around NL 38-30-33; WL 77-18-11
- (14) MOBILE: Redstone Arsenal, AL, within 10 km, centered around NL 34-40-04; WL 86-40-57
- (15) MOBILE: San Clemente Island, CA, within 10 km, centered around NL 32-54-10; WL 118-29-54
- (16) MOBILE: San Nicolas Island, CA, within 10 km, centered around NL 33-14-57; WL 119-29-58
- (17) MOBILE: 29 Palms, CA, within 10 km, centered around NL 34-22-26; WL 115-56-04
- (18) MOBILE: HOLLoman AFB, NM, within 100 km, centered around NL 32-52-03; WL 106-06-30
- (19) MOBILE: Yuma Proving Ground, AZ, within 10 km, centered around NL 32-51-23; WL 114-24-22

This authorization effective March 26, 2021 and  
will expire 3:00 A.M. EST February 01, 2022

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



Station Locations

- (20) MOBILE: around Charleston airspace complex, within 10 km, centered around NL 32-53-50; WL 80-02-27
- (21) MOBILE: 10 km around center point, within 10 km, centered around NL 34-54-10; WL 76-52-34
- (22) MOBILE: Dam Neck, VA, within 10 km, centered around NL 36-46-11; WL 75-57-14

## Frequency Information

MOBILE: Avon Park, FL, within 10 km, centered around NL 27-35-30; WL 81-31-48

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1N                       | 48.4 W (ERP)     |                           |
| 1370 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            | 16M4D1D<br>4M06D1D<br>8M22D1D | 8.2 W (ERP)      |                           |

## Frequency Information

MOBILE: Avon Park, FL, within 10 km, centered around NL 27-35-30; WL 81-31-48

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 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: Wellton, AZ, within 10 km, centered around NL 32-39-45; WL 113-28-39

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 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            | 8.2 W (ERP)      |                           |

## Frequency Information

MOBILE: Wellton, AZ, within 10 km, centered around NL 32-39-45; WL 113-28-39

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 2382 MHz      | MO            | 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)     |                           |

## Frequency Information

MOBILE: China Lake, CA, within 10 km, centered around NL 35-39-36; WL 117-49-40

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1N                       | 48.4 W (ERP)     |                           |
| 1370 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<br>16M4D1D | 8.2 W (ERP)      |                           |
| 4435-4940 MHz  | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 20 W (ERP)       |                           |

## Frequency Information

MOBILE: China Lake, CA, within 10 km, centered around NL 35-39-36; WL 117-49-40

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

MOBILE: Dugway, UT, within 10 km, centered around NL 40-12-49; WL 112-45-24

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1N                       | 48.4 W (ERP)     |                           |
| 1370 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            | 8.2 W (ERP)      |                           |

## Frequency Information

MOBILE: Dugway, UT, within 10 km, centered around NL 40-12-49; WL 112-45-24

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 2387 MHz      | MO            | 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)     |                           |

MOBILE: Edwards AFB, CA, within 10 km, centered around NL 34-55-21; WL 117-51-20

| Frequency      | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|---------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1N             | 48.4 W (ERP)     |                           |
| 1370 MHz       | MO            | 4M06D1D<br>8M22D1D  | 10.6 W (ERP)     |                           |

## Frequency Information

MOBILE: Edwards AFB, CA, within 10 km, centered around NL 34-55-21; WL 117-51-20

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 1370 MHz      | MO            | 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<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)       |                           |

## Frequency Information

MOBILE: Edwards AFB, CA, within 10 km, centered around NL 34-55-21; WL 117-51-20

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

MOBILE: Eglin, FL, within 10 km, centered around NL 30-28-07; WL 86-30-54

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1N                       | 48.4 W (ERP)     |                           |
| 1370 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: Eglin, FL, within 10 km, centered around NL 30-28-07; WL 86-30-54

| 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            | 16M4D1D<br>4M06D1D<br>8M22D1D | 20 W (ERP)       |                           |
| 6750-8000 MHz | MO            | 600MF3N                       | 76.4 W (ERP)     |                           |

MOBILE: El Centro, CA, within 10 km, centered around NL 32-50-03; WL 115-34-44

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1N                       | 48.4 W (ERP)     |                           |
| 1370 MHz       | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 10.6 W (ERP)     |                           |
| 2377 MHz       | MO            | 4M06D1D<br>8M22D1D            | 8.2 W (ERP)      |                           |

## Frequency Information

MOBILE: El Centro, CA, within 10 km, centered around NL 32-50-03; WL 115-34-44

| 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)     |                           |

## Frequency Information

MOBILE: Fallon, NV, within 10 km, centered around NL 39-29-52; WL 118-44-49

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 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<br>16M4D1D | 8.2 W (ERP)      |                           |
| 4435-4940 MHz  | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 20 W (ERP)       |                           |

## Frequency Information

MOBILE: Fallon, NV, within 10 km, centered around NL 39-29-52; WL 118-44-49

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

MOBILE: Florence, AZ, within 10 km, centered around NL 33-04-29; WL 111-22-12

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 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            | 8.2 W (ERP)      |                           |

## Frequency Information

MOBILE: Florence, AZ, within 10 km, centered around NL 33-04-29; WL 111-22-12

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 2387 MHz      | MO            | 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)     |                           |

MOBILE: Nellis AFB, NV, within 10 km, centered around NL 36-14-52; WL 115-01-16

| Frequency      | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|---------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D             | 48.4 W (ERP)     |                           |
| 1370 MHz       | MO            | 4M06D1D<br>8M22D1D  | 10.6 W (ERP)     |                           |

## Frequency Information

MOBILE: Nellis AFB, NV, within 10 km, centered around NL 36-14-52; WL 115-01-16

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 1370 MHz      | MO            | 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<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)       |                           |

## Frequency Information

MOBILE: Nellis AFB, NV, within 10 km, centered around NL 36-14-52; WL 115-01-16

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

MOBILE: Patuxent River, MD, within 10 km, centered around NL 38-17-51; WL 76-23-27

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 MHz       | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 10.6 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)     |                           |

## Frequency Information

MOBILE: Point Mugu, CA, within 10 km, centered around NL 34-05-51; WL 119-04-50

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 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<br>16M4D1D | 8.2 W (ERP)      |                           |
| 4435-4940 MHz  | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 20 W (ERP)       |                           |

## Frequency Information

MOBILE: Point Mugu, CA, within 10 km, centered around NL 34-05-51; WL 119-04-50

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 4950-4990 MHz | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 20 W (ERP)       |                           |
| 6750-8000 MHz | MO            | 600MF3D                       | 76.4 W (ERP)     |                           |

MOBILE: Quantico, VA, within 10 km, centered around NL 38-30-33; WL 77-18-11

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 MHz       | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 10.6 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)       |                           |

## Frequency Information

MOBILE: Quantico, VA, within 10 km, centered around NL 38-30-33; WL 77-18-11

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 6750-8000 MHz | MO            | 600MF3D             | 76.4 W (ERP)     |                           |

MOBILE: Redstone Arsenal, AL, within 10 km, centered around NL 34-40-04; WL 86-40-57

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 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: Redstone Arsenal, AL, within 10 km, centered around NL 34-40-04; WL 86-40-57

| 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: San Clemente Island, CA, within 10 km, centered around NL 32-54-10; WL 118-29-54

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 MHz       | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 10.6 W (ERP)     |                           |
| 2377 MHz       | MO            | 4M06D1D<br>8M22D1D            | 8.2 W (ERP)      |                           |

## Frequency Information

MOBILE: San Clemente Island, CA, within 10 km, centered around NL 32-54-10; WL 118-29-54

| 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)     |                           |

## Frequency Information

MOBILE: San Nicolas Island, CA, within 10 km, centered around NL 33-14-57; WL 119-29-58

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 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<br>16M4D1D | 8.2 W (ERP)      |                           |
| 4435-4940 MHz  | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 20 W (ERP)       |                           |

## Frequency Information

MOBILE: San Nicolas Island, CA, within 10 km, centered around NL 33-14-57; WL 119-29-58

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

MOBILE: 29 Palms, CA, within 10 km, centered around NL 34-22-26; WL 115-56-04

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1E                       | 48.4 W (ERP)     |                           |
| 1370 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            | 8.2 W (ERP)      |                           |

## Frequency Information

MOBILE: 29 Palms, CA, within 10 km, centered around NL 34-22-26; WL 115-56-04

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 2387 MHz      | MO            | 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)     |                           |

MOBILE: HOLLOMAN AFB, NM, within 100 km, centered around NL 32-52-03; WL 106-06-30

| Frequency      | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|---------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D             | 48.4 W (ERP)     |                           |
| 1370 MHz       | MO            | 4M06D1D<br>8M22D1D  | 10.6 W (ERP)     |                           |

## Frequency Information

MOBILE: HOLLoman AFB, NM, within 100 km, centered around NL 32-52-03; WL 106-06-30

| Frequency     | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|-------------------------------|------------------|---------------------------|
| 1370 MHz      | MO            | 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<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)       |                           |

## Frequency Information

MOBILE: HOLLOMAN AFB, NM, within 100 km, centered around NL 32-52-03; WL 106-06-30

| Frequency  | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|------------|---------------|---------------------|------------------|---------------------------|
| 6937.5 MHz | MO            | 375MF3N             | 76.4 W (ERP)     |                           |

MOBILE: Yuma Proving Ground, AZ, within 10 km, centered around NL 32-51-23; WL 114-24-22

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 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: Yuma Proving Ground, AZ, within 10 km, centered around NL 32-51-23; WL 114-24-22

| 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: around Charleston airspace complex, within 10 km, centered around NL 32-53-50; WL 80-02-27

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 MHz       | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 6 W (ERP)        |                           |
| 4435-4940 MHz  | MO            | 4M06D1D                       | 20 W (ERP)       |                           |

## Frequency Information

MOBILE: around Charleston airspace complex, within 10 km, centered around NL 32-53-50; WL 80-02-27

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

MOBILE: 10 km around center point, within 10 km, centered around NL 34-54-10; WL 76-52-34

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 MHz       | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 6 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)       |                           |

## Frequency Information

MOBILE: Dam Neck, VA, within 10 km, centered around NL 36-46-11; WL 75-57-14

| Frequency      | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|-------------------------------|------------------|---------------------------|
| 430-449.75 MHz | MO            | 40K0F1D                       | 48.4 W (ERP)     |                           |
| 1370 MHz       | MO            | 4M06D1D<br>8M22D1D<br>16M4D1D | 6 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)       |                           |

## Special Conditions:

- (1) Subject to coordination with the Area Frequency Coordinator located at White Sands Missile Range, New Mexico, prior to use in the State of New Mexico or other U. S. Territory within a 150 mile radius of WSMR plus the area of Utah and Colorado that lies South of 41 degrees North and between 108 degrees and 111 degrees West. Phone: 505-678-5417 or 3702.
- (2) One or more frequency assignments were coordinated prior to authorization with FAA Headquarters, 800 Independence Avenue, S.W., Washington, DC 20591; Telephone: 202-267-8699.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (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) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (6) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at <http://sbe.org/wp-content/uploads/freqcoor.pdf> to find the appropriate coordinator.

**Special Conditions:**

- (7) This frequency assignment in one of the bands 1435-1525, 2310-2320 and 2345-2395 MHz was coordinated prior to authorization with the Area Frequency Coordinators, 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, as necessary to ensure compatibility with the existing uses.
- (8) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the U.S. Government; contract number HQ 0727-18-F-1632. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.
- (9) Coordinate with the Fixed Microwave Service licensees in each proposed area in accordance with 47 C.F.R, Part 101.103(d) prior to operation in the frequency range from 6750 MHz to 6875 MHz.
- (10) The stop buzzer point of contact is Jim Ortega at (520) 794-0227.
- (11) Prior to commencing any operations in the 6875-7055 MHz frequency band, Raytheon Missile Systems must notify the licensees listed below of its test dates and provide a stop buzzer in case of interference:  
Name: Globalstar Licensee LLC  
Phone Number: 985-335-1503  
Fax Number: 985-335-1703  
E-Mail: Barbee.Ponder@globalstar.com  
Attention: L . Barbee Ponder IV  
Name: Stephen J. Berman  
Phone Number: 202-777-7700  
Company: Lawler, Metzger, Keeney & Logan, LLC  
E-Mail: sberman@lawlermetzger.com  
Relationship: Legal Counsel
- (12) Subject to coordination with the DOD Area Frequency Coordinator located at Ft. Huachuca, AZ, prior to activation within the State of Arizona, Attn: SFIS-FAC-SH, Ft. Huachuca, AZ 85613-5000; Telephone 520-538-6423; FAX 520-538-8525; DSN 879-6423.
- (13) Operation is not permitted in 449.75-450 MHz band.