

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

EXPERIMENTAL

(Nature of Service)

XD MO

(Class of Station)

WF2XGF

(Call Sign)

0469-EX-PL-2009

(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(i) of the Commission's Rules

Station Locations

- (1) MOBILE: CALIFORNIA, within 16 km, centered around NL 35-40-21; WL 117-41-22
- (2) MOBILE: ARIZONA, within 16 km, centered around NL 31-34-51; WL 110-17-45
- (3) MOBILE: CALIFORNIA, within 16 km, centered around NL 34-55-14; WL 117-53-19
- (4) MOBILE: FLORIDA, within 16 km, centered around NL 30-28-59; WL 86-33-19
- (5) MOBILE: NEW MEXICO, within 16 km, centered around NL 32-22-38; WL 106-28-45
- (6) MOBILE: CALIFORNIA, within 16 km, centered around NL 34-06-40; WL 119-06-31
- (7) MOBILE: ARIZONA, within 16 km, centered around NL 32-39-40; WL 114-35-07
- (8) MOBILE: UTAH, within 16 km, centered around NL 41-06-41; WL 111-58-25
- (9) MOBILE: ARIZONA, within 16 km, centered around NL 32-08-14; WL 110-55-13

Frequency Information

MOBILE: CALIFORNIA, within 16 km, centered around NL 35-40-21; WL 117-41-22

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 1227.6 MHz  | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |
| 1575.42 MHz | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |

This authorization effective June 09, 2010 and  
will expire 3:00 A.M. EST April 12, 2012

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

MOBILE: ARIZONA, within 16 km, centered around NL 31-34-51; WL 110-17-45

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 1227.6 MHz  | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |
| 1575.42 MHz | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |

MOBILE: CALIFORNIA, within 16 km, centered around NL 34-55-14; WL 117-53-19

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 1227.6 MHz  | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |
| 1575.42 MHz | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |

MOBILE: FLORIDA, within 16 km, centered around NL 30-28-59; WL 86-33-19

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 1227.6 MHz  | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |
| 1575.42 MHz | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |

## Frequency Information

MOBILE: NEW MEXICO, within 16 km, centered around NL 32-22-38; WL 106-28-45

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 1227.6 MHz  | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |
| 1575.42 MHz | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |

MOBILE: CALIFORNIA, within 16 km, centered around NL 34-06-40; WL 119-06-31

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 1227.6 MHz  | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |
| 1575.42 MHz | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |

MOBILE: ARIZONA, within 16 km, centered around NL 32-39-40; WL 114-35-07

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 1227.6 MHz  | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |
| 1575.42 MHz | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |

## Frequency Information

MOBILE: UTAH, within 16 km, centered around NL 41-06-41; WL 111-58-25

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 1227.6 MHz  | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |
| 1575.42 MHz | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |

MOBILE: ARIZONA, within 16 km, centered around NL 32-08-14; WL 110-55-13

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 1227.6 MHz  | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |
| 1575.42 MHz | MO            | 24M0G1D             | 0.019 pW (ERP)   |                           |

## Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (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) The designated point-of-contact to terminate transmissions if interference occurs is Mr. Thomas J. Fagan, at 520-794-0227,
- (5) Operation is limited to activity for the purpose of testing radionavigation satellite service (RNSS) equipment and systems.
- (6) The test equipment shall only be used indoors and shall be under the control of the Raytheon Missile Systems.
- (7) The Raytheon Missile Systems shall post signs on doors to the test area notifying that, "GPS re-radiator is in use and the GPS information you receive may be in error."
- (8) GPS users in the area of potential interference to GPS reception must be notified that GPS information may be impacted for periods of time.
- (9) EIRP is no greater than -140 dbm/24 MHz at 100 feet.

**Special Conditions:**

- (10) Operation is subject to coordination prior to activation and, as appropriate, possible scheduling with the WAFC at (760) 939-6948 when used within interference range of such activity (ies) or station(s).