

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

EXPERIMENTAL

(Nature of Service)

WH2XYX

(Call Sign)

XD      FX MO

(Class of Station)

0221-EX-CR-2020

(File Number)

NAME Raytheon Company

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(j) of the Commission's Rules

Station Locations

- (1) MOBILE: Satellite will be orbiting above US
- (2) Aurora (ARAPAHOE), CO - NL 39-43-05; WL 104-47-53
- (3) Tucson (PIMA), AZ - NL 32-05-47; WL 110-56-48
- (4) Tucson (PIMA), AZ - NL 32-06-08; WL 110-56-26
- (5) Sterling, VA - NL 39-00-03; WL 77-26-46
- (6) St Petersburg (PINELLAS), FL - NL 27-52-31; WL 82-38-55
- (7) Virginia Beach, VA - NL 36-46-17; WL 75-57-53
- (8) Waimea (KAUAI), HI - NL 21-57-29; WL 159-40-20

Frequency Information

MOBILE: Satellite will be orbiting above US

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 437.425 MHz | MO            | 25K0G1D             | 17.18 W (ERP)    |                           |
| 437.45 MHz  | MO            | 25K0G1D             | 17.18 W (ERP)    |                           |

This authorization effective May 01, 2020 and  
will expire 3:00 A.M. EST May 01, 2022

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

MOBILE: Satellite will be orbiting above US

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|---------------------|------------------|---------------------------|
| 2425 MHz  | MO            | 1K60G1D             | 9.7 W (ERP)      |                           |

Aurora (ARAPAHOE), CO - NL 39-43-05; WL 104-47-53

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 437.425 MHz | FX            | 25K0G1D             | 520 W (ERP)      |                           |
| 437.45 MHz  | FX            | 25K0G1D             | 520 W (ERP)      |                           |

Tucson (PIMA), AZ - NL 32-05-47; WL 110-56-48

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 437.425 MHz | FX            | 25K0G1D             | 520 W (ERP)      |                           |
| 437.45 MHz  | FX            | 25K0G1D             | 520 W (ERP)      |                           |

Tucson (PIMA), AZ - NL 32-06-08; WL 110-56-26

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 437.425 MHz | FX            | 25K0G1D             | 520 W (ERP)      |                           |

## Frequency Information

Tucson (PIMA), AZ - NL 32-06-08; WL 110-56-26

| Frequency  | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|------------|---------------|---------------------|------------------|---------------------------|
| 437.45 MHz | FX            | 25K0G1D             | 520 W (ERP)      |                           |

Sterling, VA - NL 39-00-03; WL 77-26-46

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 437.425 MHz | FX            | 25K0G1D             | 520 W (ERP)      |                           |
| 437.45 MHz  | FX            | 25K0G1D             | 520 W (ERP)      |                           |

St Petersburg (PINELLAS), FL - NL 27-52-31; WL 82-38-55

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 437.425 MHz | FX            | 25K0G1D             | 520 W (ERP)      |                           |
| 437.45 MHz  | FX            | 25K0G1D             | 520 W (ERP)      |                           |

Virginia Beach, VA - NL 36-46-17; WL 75-57-53

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 437.425 MHz | FX            | 25K0G1D             | 520 W (ERP)      |                           |

## Frequency Information

Virginia Beach, VA - NL 36-46-17; WL 75-57-53

| Frequency  | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|------------|---------------|---------------------|------------------|---------------------------|
| 437.45 MHz | FX            | 25K0G1D             | 520 W (ERP)      |                           |

Waimea (KAUAI), HI - NL 21-57-29; WL 159-40-20

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 437.425 MHz | FX            | 25K0G1D             | 520 W (ERP)      |                           |
| 437.45 MHz  | FX            | 25K0G1D             | 520 W (ERP)      |                           |

## Special Conditions:

- (1) 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.
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) Following launch of the satellite, the licensee must notify the FCC through electronic submission to the license file, of the status of the satellite (transmissions commenced, etc.), not later than 7 days after commencement or expected commencement of transmissions, and of termination of transmissions, not later than three months after such termination.
- (5) Upon receipt of a conjunction warning from the Joint Space Operations Center (JSpOC) or other source, the licensee must review the warning and take all possible steps to assess and, if necessary, to mitigate collision risk, including, but not limited to: contacting the operator of any active spacecraft involved in such warning; sharing ephemeris data and other appropriate operational information with any such operator; modifying spacecraft attitude and/or operations. The licensee is specifically requested to provide a point of contact for such matters to Orbcomm, prior to commencing operations.
- (6) POINT OF COMMUNICATION: SeeMe satellite.