

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

EXPERIMENTAL

(Nature of Service)

WJ2XYI

(Call Sign)

XT      FX MO

(Class of Station)

0012-EX-CM-2020

(File Number)

NAME Tarana Wireless Inc.

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(h) of the Commission's Rules

Station Locations

- (1) Santa Clara, CA - NL 37-24-22; WL 121-58-48
- (2) San Jose, CA - NL 37-21-01; WL 121-53-26
- (3) MOBILE: Santa Clara, CA, within 5 km, centered around NL 37-24-22; WL 121-58-48
- (4) MOBILE: San Jose, CA, within 5 km, centered around NL 37-21-01; WL 121-53-26
- (5) San Jose, CA - NL 37-20-54; WL 121-54-00
- (6) San Jose, CA - NL 37-20-14; WL 121-53-39
- (7) MOBILE: San Jose, CA, within 5 km, centered around NL 37-20-54; WL 121-54-00
- (8) MOBILE: San Jose, CA, within 5 km, centered around NL 37-20-14; WL 121-53-39

Frequency Information

Santa Clara, CA - NL 37-24-22; WL 121-58-48

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 3300-3550 MHz | FX            | 80M0D7D<br>40M0D7D  | 191 W (ERP)      |                           |
| 3650-3800 MHz | FX            | 40M0D7D<br>80M0D7D  | 191 W (ERP)      |                           |

This authorization effective February 04, 2020 and  
will expire 3:00 A.M. EST March 01, 2020

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

San Jose, CA - NL 37-21-01; WL 121-53-26

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 3300-3550 MHz | FX            | 80M0D7D<br>40M0D7D  | 191 W (ERP)      |                           |
| 3650-3800 MHz | FX            | 40M0D7D<br>80M0D7D  | 191 W (ERP)      |                           |

MOBILE: Santa Clara, CA, within 5 km, centered around NL 37-24-22; WL 121-58-48

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 3300-3550 MHz | MO            | 40M0D7D             | 27 W (ERP)       |                           |
| 3650-3800 MHz | MO            | 40M0D7D             | 27 W (ERP)       |                           |

MOBILE: San Jose, CA, within 5 km, centered around NL 37-21-01; WL 121-53-26

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 3300-3550 MHz | MO            | 40M0D7D             | 27 W (ERP)       |                           |
| 3650-3800 MHz | MO            | 40M0D7D             | 27 W (ERP)       |                           |

## Frequency Information

San Jose, CA - NL 37-20-54; WL 121-54-00

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 3300-3550 MHz | FX            | 80M0D7D<br>40M0D7D  | 191 W (ERP)      |                           |
| 3650-3800 MHz | FX            | 40M0D7D<br>80M0D7D  | 191 W (ERP)      |                           |

San Jose, CA - NL 37-20-14; WL 121-53-39

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 3300-3550 MHz | FX            | 80M0D7D<br>40M0D7D  | 191 W (ERP)      |                           |
| 3650-3800 MHz | FX            | 40M0D7D<br>80M0D7D  | 191 W (ERP)      |                           |

MOBILE: San Jose, CA, within 5 km, centered around NL 37-20-54; WL 121-54-00

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 3300-3550 MHz | MO            | 40M0D7D             | 27 W (ERP)       |                           |
| 3650-3800 MHz | MO            | 40M0D7D             | 27 W (ERP)       |                           |

## Frequency Information

MOBILE: San Jose, CA, within 5 km, centered around NL 37-20-14; WL 121-53-39

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 3300-3550 MHz | MO            | 40M0D7D             | 27 W (ERP)       |                           |
| 3650-3800 MHz | MO            | 40M0D7D             | 27 W (ERP)       |                           |

## Special Conditions:

- (1) Licensee is required to ensure that trial devices are either rendered inoperable or retrieved by them from trial participants at the conclusion of the trial. Licensee is required to notify trial participants in advance that operation of the trial device is subject to this condition.
- (2) All customers participating in the experiment shall be informed that this operation is for experimental purposes only and can be cancelled at any time.
- (3) 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.
- (4) All transmitting and/or receiving equipment used in the study shall be owned by the licensee.
- (5) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (6) Licensee must maintain separation from the grandfathered earth stations as defined in Part 90 subpart Z, or coordinate an agreement with the grandfathered earth station licensees in the area prior to operation in 3650-3670 MHz.
- (7) Operations will not cause harmful interference to any existing registered stations in 3650-3700 MHz, and notify the registered users in the area prior to accessing to 3650-3670 MHz.
- (8) The designated point-of-contact to terminate the systems if interference occurs is Rakesh Tiwari, 408-888-9071.
- (9) Licensee be aware that FSS earth stations are licensed above 3700 MHz and if any interference occurs, the experimental licensee of this authorization will be subject to immediate shut down.

**Special Conditions:**

- (10) Prior to operating, Tarana Wireless, Inc., must notify licensees of FSS earth stations operating the 3700-4200 MHz within 10 kilometers' radius of the locations from which experimental operations will occur. Furthermore, Tarana Wireless, Inc., must notify the National Spectrum Managers Association frequency coordinators by email. (see [http://wireless.fcc.gov/services/index.htm?job=licensing\\_1&id=microwave](http://wireless.fcc.gov/services/index.htm?job=licensing_1&id=microwave)). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna height(s), antenna orientation, antenna patterns, eirp density) and day and times of each test. Consult the IBFS database to identify licensed earth station in the band 3700-4200 MHz band.
- (11) Licensee shall ensure that the transmitting main beam gain antenna boresight of the fixed station tilt downward (below the horizon).
- (12) Licensee shall avoid pointing the transmit main beam antenna gain boresight above the horizon to protect satellite operations.
- (13) Any renewal will be subject to review. No automatic renewal for this authorization.
- (14) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (15) Non-approved equipment must be retrieved.
- (16) Non-approved equipment must be labeled.