

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

EXPERIMENTAL

(Nature of Service)

WO9XCZ

(Call Sign)

XT MO

(Class of Station)

0353-EX-ST-2019

(File Number)

NAME Robert Bosch LLC

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:**

Deployment of sensors in orchards to collect information about the health of the trees. Data transmitted to gateway via Bluetooth for upload via LTE to the Cloud.

**Station Locations**

- (1) MOBILE: Almond field near Firebaugh, CA, within 4 km, centered around NL 36-51-31; WL 120-24-54
- (2) MOBILE: Pistachio field near Firebaugh, CA, within 4 km, centered around NL 36-49-24; WL 120-30-25
- (3) MOBILE: Citrus Orchard near Reyo, CA, within 4 km, centered around NL 36-26-59; WL 119-11-17
- (4) MOBILE: Sunnyvale, CA, within 2 km, centered around NL 37-22-55; WL 121-59-59
- (5) MOBILE: San Jose, CA, within 4 km, centered around NL 37-23-54; WL 121-51-26

**Frequency Information**

MOBILE: Almond field near Firebaugh, CA, within 4 km, centered around NL 36-51-31; WL 120-24-54

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 777-787 MHz | MO            | 1M40F9W             | 195 mW (ERP)     |                           |

This authorization effective April 03, 2019 and  
will expire 3:00 A.M. EST October 04, 2019

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

MOBILE: Almond field near Firebaugh, CA, within 4 km, centered around NL 36-51-31; WL 120-24-54

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 1710-1755 MHz   | MO            | 1M40F9W             | 195 mW (ERP)     |                           |
| 2400-2483.5 MHz | MO            | 1M00F1D             | 10 mW (ERP)      |                           |

MOBILE: Pistachio field near Firebaugh, CA, within 4 km, centered around NL 36-49-24; WL 120-30-25

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 777-787 MHz     | MO            | 1M40F9W             | 195 mW (ERP)     |                           |
| 1710-1755 MHz   | MO            | 1M40F9W             | 195 mW (ERP)     |                           |
| 2400-2483.5 MHz | MO            | 1M00F1D             | 10 mW (ERP)      |                           |

MOBILE: Citrus Orchard near Rey, CA, within 4 km, centered around NL 36-26-59; WL 119-11-17

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 777-787 MHz   | MO            | 1M40F9W             | 195 mW (ERP)     |                           |
| 1710-1755 MHz | MO            | 1M40F9W             | 195 mW (ERP)     |                           |

## Frequency Information

MOBILE: Citrus Orchard near Reyo, CA, within 4 km, centered around NL 36-26-59; WL 119-11-17

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 2400-2483.5 MHz | MO            | 1M00F1D             | 10 mW (ERP)      |                           |

MOBILE: Sunnyvale, CA, within 2 km, centered around NL 37-22-55; WL 121-59-59

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 777-787 MHz     | MO            | 1M40F9W             | 195 mW (ERP)     |                           |
| 1710-1755 MHz   | MO            | 1M40F9W             | 195 mW (ERP)     |                           |
| 2400-2483.5 MHz | MO            | 1M00F1D             | 10 mW (ERP)      |                           |

MOBILE: San Jose, CA, within 4 km, centered around NL 37-23-54; WL 121-51-26

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 777-787 MHz     | MO            | 1M40F9W             | 195 mW (ERP)     |                           |
| 1710-1755 MHz   | MO            | 1M40F9W             | 195 mW (ERP)     |                           |
| 2400-2483.5 MHz | MO            | 1M00F1D             | 10 mW (ERP)      |                           |

## Special Conditions:

- (1) Operation in the 1695-1780 MHz, 1915-1920 MHz, 1995-2020 MHz or 2110-2200 MHz band requires consent of local Advanced Wireless Service (AWS) licensee(s) to avoid interference.
- (2) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at [https://www.sbe.org/sections/freq\\_local.php](https://www.sbe.org/sections/freq_local.php) to find the appropriate coordinator.
- (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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (6) 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.
- (7) Operation is subject to consent from the following within 50 miles of the contours of the testing area:
  - 700 MHz Upper Band licensees (746-758 MHz and 775-788 MHz).