

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

EXPERIMENTAL

(Nature of Service)

WK9XRG

(Call Sign)

XT      FX MO

(Class of Station)

0649-EX-ST-2017

(File Number)

NAME Verizon Wireless

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:**

The purpose of the proposed operations is to conduct a market trial of new communications equipment pursuant to Sections 5.3(k) and 5.602 of the FCCs rules.

**Station Locations**

- (1) MOBILE: Ann Arbor, MI, within 5 km, centered around NL 42-16-36; WL 83-44-37
- (2) Ann Arbor (WASHTENAW), MI - NL 42-16-36; WL 83-44-37
- (3) Ann Arbor (WASHTENAW), MI - NL 42-17-01; WL 83-44-16
- (4) MOBILE: Ann Arbor, MI, within 5 km, centered around NL 42-17-01; WL 83-44-16
- (5) Ann Arbor (WASHTENAW), MI - NL 42-16-27; WL 83-44-09
- (6) MOBILE: Ann Arbor, MI, within 5 km, centered around NL 42-16-27; WL 83-44-09

**Frequency Information**

MOBILE: Ann Arbor, MI, within 5 km, centered around NL 42-16-36; WL 83-44-37

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 27.525-28.325 GHz | MO            |                     | 19.95 W (ERP)    |                           |
|                   |               | 800MG7W             |                  |                           |
|                   |               | 800MW7W             |                  |                           |
|                   |               | 800MW7W             |                  |                           |
|                   |               | 800MK1W             |                  |                           |

This authorization effective June 13, 2017 and  
will expire 3:00 A.M. EST December 14, 2017

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

Ann Arbor (WASHTENAW), MI - NL 42-16-36; WL 83-44-37

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 27.525-28.325 GHz | FX            | 800MG7W             | 630.95 W (ERP)   |                           |
|                   |               | 800MW7W             |                  |                           |
|                   |               | 800MW7W             |                  |                           |
|                   |               | 800MK1W             |                  |                           |

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|                   |               | 800MW7W             |                  |                           |
|                   |               | 800MW7W             |                  |                           |
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MOBILE: Ann Arbor, MI, within 5 km, centered around NL 42-17-01; WL 83-44-16

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 27.525-28.325 GHz | MO            | 800MG7W             | 19.95 W (ERP)    |                           |
|                   |               | 800MW7W             |                  |                           |
|                   |               | 800MW7W             |                  |                           |
|                   |               | 800MK1W             |                  |                           |

Ann Arbor (WASHTENAW), MI - NL 42-16-27; WL 83-44-09

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 27.525-28.325 GHz | FX            | 800MG7W             | 630.95 W (ERP)   |                           |

## Frequency Information

Ann Arbor (WASHTENAW), MI - NL 42-16-27; WL 83-44-09

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 27.525-28.325 GHz | FX            | 800MW7W             | 630.95 W (ERP)   |                           |
|                   |               | 800MW7W             |                  |                           |
|                   |               | 800MK1W             |                  |                           |

MOBILE: Ann Arbor, MI, within 5 km, centered around NL 42-16-27; WL 83-44-09

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 27.525-28.325 GHz | MO            | 800MG7N             | 19.95 W (ERP)    |                           |
|                   |               | 800MW7W             |                  |                           |
|                   |               | 800MW7W             |                  |                           |
|                   |               | 800MK1W             |                  |                           |

## Special Conditions:

- (1) All transmitting and/or receiving equipment used in the study shall be owned by the licensee.
- (2) 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.
- (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) Prior to the start of any operations in the 27.535 - 28.325 GHz band, experimental licensee must notify the National Spectrum Managers Association (NSMA) frequency coordinator by e-mail. This notice must include the name and contact information of the stop buzzer personnel. It must also include the testing parameters, day and times of each testing.

NSMA contact information can be found in the website:

[http://wireless.fcc.gov/services/index.htm?job=licensing\\_1&id=microwave](http://wireless.fcc.gov/services/index.htm?job=licensing_1&id=microwave).

## Special Conditions:

- (6) Experimental station shall use the minimum power level necessary to close the communications link to minimize potential interference to geostationary satellite networks.
- (7) The applicant must coordinate with the Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d).
- (8) Licensee must avoid pointing the main beam gain antenna within 15 degrees of any point on the geostationary orbital arc while transmitting signals in the 27.525-28.325 GHz band.
- (9) Licensee shall ensure that the transmitting fixed station antenna(s) tip down when possible and avoid pointing above the horizon to protect all the satellite stations.
- (10) No automatic renewal for operations in the 27.525-28.325 GHz band.
- (11) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (12) Operations are on a non-interference basis (NIB) and shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference and notify the FCC in writing.