

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

EXPERIMENTAL

(Nature of Service)

W12XWD

(Call Sign)

XT      FX MO

(Class of Station)

0026-EX-CM-2019

(File Number)

NAME AT&T Services, 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(J) of the Commission's Rules

Station Locations

- (1) Austin (WILLIAMSON), TX - NL 30-28-46; WL 97-46-49; MOBILE: Within 3 km radius of base, within 3 km, centered around NL 30-28-46; WL 97-46-49
- (2) MOBILE: Within 5 km radius of base, within 5 km, centered around NL 30-28-46; WL 97-46-49
- (3) MOBILE: within 5 km of base, within 5 km, centered around NL 30-28-46; WL 97-46-49
- (4) Austin (WILLIAMSON), TX - NL 30-28-46; WL 97-46-49
- (5) MOBILE: within 5 km of base, within 5 km, centered around NL 30-28-46; WL 97-46-49
- (6) MOBILE: within 5 km of base, within 5 km, centered around NL 30-28-46; WL 97-46-49

Frequency Information

Austin (WILLIAMSON), TX - NL 30-28-46; WL 97-46-49; MOBILE: Within 3 km radius of base, within 3 km, centered around NL 30-28-46; WL 97-46-49

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 3400-3600 MHz | FX            | 100MD7W             | 200 W (ERP)      | 0.001 %                   |
| 3400-3600 MHz | MO            | 100MD7W             | 20 W (ERP)       | 0.001 %                   |

This authorization effective June 25, 2019 and  
will expire 3:00 A.M. EST July 01, 2019

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

Austin (WILLIAMSON), TX - NL 30-28-46; WL 97-46-49; MOBILE: Within 3 km radius of base, within 3 km, centered around N

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 3700-4200 MHz   | FX            | 400MD7W             | 200 W (ERP)      | 0.001 %                   |
| 3700-4200 MHz   | MO            | 400MD7W             | 20 W (ERP)       | 0.001 %                   |
| 27500-28350 MHz | MO            | 800MWXW             | 10 W (ERP)       | 0.001 %                   |
| 27500-28350 MHz | MO            | 800MWXW             | 150 W (ERP)      | 0.001 %                   |
| 27500-28350 MHz | FX            | 800MWXW             | 15 kW (ERP)      | 0.001 %                   |
| 37000-38600 MHz | MO            | 1G00WXW             | 10 W (ERP)       | 0.001 %                   |
| 37000-38600 MHz | MO            | 1G00W7W             | 150 W (ERP)      | 0.001 %                   |
| 37000-38600 MHz | FX            | 1G00WXW             | 15 kW (ERP)      | 0.001 %                   |
| 38600-40000 MHz | MO            | 1G00WXW             | 10 W (ERP)       | 0.001 %                   |
| 38600-40000 MHz | MO            | 1G00WXW             | 150 W (ERP)      | 0.001 %                   |

## Frequency Information

Austin (WILLIAMSON), TX - NL 30-28-46; WL 97-46-49; MOBILE: Within 3 km radius of base, within 3 km, centered around N

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 38600-40000 MHz | FX            | 1G00W7W             | 15 kW (ERP)      | 0.001 %                   |
| 64000-71000 MHz | FX            | 1G00WXW             | 10 W (ERP)       | 0.001 %                   |
| 64000-71000 MHz | MO            | 1G00W7W             | 10 W (ERP)       | 0.001 %                   |
| 71000-76000 MHz | FX            | 1G00WXW             | 150 kW (ERP)     | 0.001 %                   |
| 71000-76000 MHz | MO            | 1G00W7W             | 150 kW (ERP)     | 0.001 %                   |

MOBILE: Within 5 km radius of base, within 5 km, centered around NL 30-28-46; WL 97-46-49

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 24250-27500 MHz | MO            | 100MW7W             | 19 W (ERP)       | 0.001 %                   |

MOBILE: within 5 km of base, within 5 km, centered around NL 30-28-46; WL 97-46-49

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 24250-27500 MHz | MO            | 100MW7W             | 190 W (ERP)      | 0.001 %                   |

## Frequency Information

Austin (WILLIAMSON), TX - NL 30-28-46; WL 97-46-49

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|---------------------|------------------|---------------------------|
| 4700 MHz  | FX            | 600MW7W             | 30 kW (ERP)      | 0.001 %                   |

MOBILE: within 5 km of base, within 5 km, centered around NL 30-28-46; WL 97-46-49

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|---------------------|------------------|---------------------------|
| 4700 MHz  | MO            | 600MW7W             | 61 W (ERP)       | 0.001 %                   |

MOBILE: within 5 km of base, within 5 km, centered around NL 30-28-46; WL 97-46-49

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|---------------------|------------------|---------------------------|
| 4700 MHz  | MO            | 600MW7W             | 200 W (ERP)      | 0.001 %                   |

## 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 occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) AT&T must coordinate and obtain an agreement from KVUE Television, Inc. (FCC license call sign E060176).

**Special Conditions:**

- (4) Prior to operating, AT&T must notify licensees of FSS earth stations operating the 3700 - 4200 MHz within 25 kilometers' radius of the locations from which experimental operations will occur. Furthermore, AT&T Services., 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.
- (5) Licensee shall ensure that the transmitting main beam gain antenna boresight of the fixed station tilt downward (below the horizon).
- (6) Licensee shall avoid pointing the transmit main beam antenna gain boresight above the horizon to protect satellite operations.
- (7) Any renewal will be subject to review. No automatic renewal for this authorization.
- (8) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (9) AT&T Services, Inc. must prior coordinate with any incumbent fixed microwave in the 3700-4200 MHz, 27500-28350 MHz, 38600-40000 MHz, and 65000-71000 MHz bands in each corresponding proposed venue prior to conducting the testing.
- (10) Prior to operation in 71000-76000 MHz band, licensee must successfully coordinate with all the existing and future 71-76 GHz users.