

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

EXPERIMENTAL

(Nature of Service)

XT MO

(Class of Station)

WK2XHZ

(Call Sign)

0426-EX-CN-2019

(File Number)

NAME Georgia Institute of Technology

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(e & j) of the Commission's Rules

Station Locations

- (1) MOBILE: 7220 Richardson Rd, Smyrna, GA 30080, within 0.4 km, centered around NL 33-54-35; WL 84-31-38

Frequency Information

MOBILE: 7220 Richardson Rd, Smyrna, GA 30080, within 0.4 km, centered around NL 33-54-35; WL 84-31-38

| Frequency | Station Class | Emission Designator           | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|-------------------------------|------------------|---------------------------|
| 3.5 GHz   | MO            | 1G00W3N<br>1G00Q3N<br>1G00V8N | 100 kW (ERP)     | 0.0001 %                  |
| 10 GHz    | MO            | 1G00W3N<br>1G00Q3N<br>1G00V8N | 100 kW (ERP)     | 0.0001 %                  |
| 16.5 GHz  | MO            | 1G00W3N<br>1G00Q3N            | 100 kW (ERP)     | 0.0001 %                  |

This authorization effective August 01, 2019 and  
will expire 3:00 A.M. EST August 01, 2021

**FEDERAL  
COMMUNICATIONS  
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## Frequency Information

MOBILE: 7220 Richardson Rd, Smyrna, GA 30080, within 0.4 km, centered around NL 33-54-35; WL 84-31-38

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|---------------------|------------------|---------------------------|
| 16.5 GHz  | MO            | 1G00V8N             | 100 kW (ERP)     | 0.0001 %                  |

## 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) Georgia Institute of Technology must
  - a. Maintain operation separation from the grandfathered earth stations as defined in Part 90, Subpart Z, or coordinate an agreement with the grandfathered earth station licensees prior to operation in 3650-3700 MHz band.
  - b. Consult the ULS database to ensure that the operation will not cause harmful interference to any existing registered stations in the 3650-3700 MHz band, and notify the registered users in the proposed geographic area prior to operation in this band.
  - c. Coordinate with the Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d) prior to operation in 3700-4000 MHz band.
- (4) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (5) STOP BUZZER POC IS AARON JACKSON  
Phone: 404-407-7716  
Email: aaron.jackson@gtri.gatech