

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

EXPERIMENTAL

(Nature of Service)

XC      FX

(Class of Station)

KA2XAJ

(Call Sign)

0052-EX-RR-2008

(File Number)

NAME Georgia Tech Research Institute

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(b) of the Commission's Rules

Station Locations

(1) Marietta (COBB), GA - NL 33-54-31; WL 84-31-44

Frequency Information

Marietta (COBB), GA - NL 33-54-31; WL 84-31-44

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 500-608 MHz   | FX            | NON                 | 1 W (ERP)        |                           |
| 614-960 MHz   | FX            | NON                 | 1 W (ERP)        |                           |
| 1215-1400 MHz | FX            | NON                 | 1 W (ERP)        |                           |
| 1427-1435 MHz | FX            | NON                 | 1 W (ERP)        |                           |

This authorization effective March 01, 2008 and  
will expire 3:00 A.M. EST March 01, 2013

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

Marietta (COBB), GA - NL 33-54-31; WL 84-31-44

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 1535-1660 MHz   | FX            | N0N                 | 1 W (ERP)        |                           |
| 1710-2690 MHz   | FX            | N0N                 | 1 W (ERP)        |                           |
| 2700-2780 MHz   | FX            | N0N                 | 1 W (ERP)        |                           |
| 2890-3700 MHz   | FX            | N0N                 | 1 W (ERP)        |                           |
| 4400-4990 MHz   | FX            | N0N                 | 10 W (ERP)       |                           |
| 5250-5600 MHz   | FX            | N0N                 | 10 W (ERP)       |                           |
| 5650-5925 MHz   | FX            | N0N                 | 10 W (ERP)       |                           |
| 6425-9000 MHz   | FX            | N0N                 | 10 W (ERP)       |                           |
| 9200-10550 MHz  | FX            | N0N                 | 10 W (ERP)       |                           |
| 10700-12400 MHz | FX            | N0N                 | 10 W (ERP)       |                           |

## Frequency Information

Marietta (COBB), GA - NL 33-54-31; WL 84-31-44

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 12400-15350 MHz | FX            | N0N                 | 100 W (ERP)      |                           |
| 15400-18600 MHz | FX            | N0N                 | 100 W (ERP)      |                           |
| 18800-23600 MHz | FX            | N0N                 | 100 W (ERP)      |                           |
| 24050-31300 MHz | FX            | N0N                 | 100 W (ERP)      |                           |
| 31800-47000 MHz | FX            | N0N                 | 100 W (ERP)      |                           |
| 47200-51400 MHz | FX            | N0N                 | 100 W (ERP)      |                           |
| 54250-58200 MHz | FX            | N0N                 | 100 W (ERP)      |                           |
| 59000-64000 MHz | FX            | N0N                 | 100 W (ERP)      |                           |
| 65000-75500 MHz | FX            | N0N                 | 100 W (ERP)      |                           |
| 76000-86000 MHz | FX            | N0N                 | 100 W (ERP)      |                           |

Frequency Information

Marietta (COBB), GA - NL 33-54-31; WL 84-31-44

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 92000-95000 MHz | FX            | NON                 | 100 W (ERP)      |                           |

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) Subject to prior coordination with FAA Southern Regional Office, PO Box 20636, ATTN: Frequency Management Office, Atlanta, Georgia 30320 (404) 763-7385.
- (3) No transmission in the band 1280-1305 MHz in the direction of 109-129 degrees true north azimuth.
- (4) The frequency assignment in one of the bands 1435-1525, 2310-2320 and 2345-2390 MHz was coordinated prior to authorization with the HQ USAF Frequency Coordinator, Alexandria, VA., who also coordinated it, as appropriate, with the Aerospace and Flight Test Radio Coordinating Council. Use of this frequency under the authority of this assignment is subject to such further coordination with the HQ USAF Frequency Coordinator, Alexandria, VA., as necessary to ensure compatibility with existing uses.
- (5) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by USAF contract no. F08635-86-C-01612. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.