

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

EXPERIMENTAL

(Nature of Service)

XD      FX

(Class of Station)

KA2XYK

(Call Sign)

0058-EX-TC-2013

(File Number)

NAME Radant Technologies, 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(g) of the Commission's Rules

Station Locations

- (1) STOW (MIDDLESEX), MA - NL 42-25-17; WL 71-33-10
- (2) STOW (MIDDLESEX), MA - NL 42-25-17; WL 71-33-10

Frequency Information

STOW (MIDDLESEX), MA - NL 42-25-17; WL 71-33-10

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 902-960 MHz   | FX            | N0N                 | 1 W (ERP)        |                           |
| 2000-2690 MHz | FX            | N0N                 | 1 W (ERP)        |                           |
| 3000-4000 MHz | FX            | N0N                 | 1 W (ERP)        |                           |
| 8000-9000 MHz | FX            | N0N                 | 1 W (ERP)        |                           |

This authorization effective September 24, 2013 and  
will expire 3:00 A.M. EST March 01, 2015

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

STOW (MIDDLESEX), MA - NL 42-25-17; WL 71-33-10

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 9200-10500 MHz  | FX            | N0N                 | 1 W (ERP)        |                           |
| 10700-12000 MHz | FX            | N0N                 | 1 W (ERP)        |                           |
| 16000-17000 MHz | FX            | N0N                 | 1 W (ERP)        |                           |
| 20200-21200 MHz | FX            | N0N                 | 1 W (ERP)        |                           |
| 31800-33400 MHz | FX            | N0N                 | 1 W (ERP)        |                           |
| 43500-45500 MHz | FX            | N0N                 | 1 W (ERP)        |                           |
| 17.7-20.2 GHz   | FX            | N0N                 | 1 W (ERP)        |                           |
| 27.5-30 GHz     | FX            | N0N                 | 1 W (ERP)        |                           |

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| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 138-144 MHz | FX            | N0N                 | 1 W (ERP)        |                           |

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| Frequency            | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------------|---------------|---------------------|------------------|---------------------------|
| 152.855-156.2475 MHz | FX            | N0N                 | 1 W (ERP)        |                           |
| 216-224 MHz          | FX            | N0N                 | 1 W (ERP)        |                           |
| 400-470 MHz          | FX            | N0N                 | 1 W (ERP)        |                           |
| 512-608 MHz          | FX            | N0N                 | 1 W (ERP)        |                           |
| 806-902 MHz          | FX            | N0N                 | 1 W (ERP)        |                           |
| 1391-1435 MHz        | FX            | N0N                 | 1 W (ERP)        |                           |
| 1610-1754 MHz        | FX            | N0N                 | 1 W (ERP)        |                           |
| 1851-2000 MHz        | FX            | N0N                 | 1 W (ERP)        |                           |
| 4000-4200 MHz        | FX            | N0N                 | 1 W (ERP)        |                           |
| 4000-4999 MHz        | FX            | N0N                 | 1 W (ERP)        |                           |

## Frequency Information

STOW (MIDDLESEX), MA - NL 42-25-17; WL 71-33-10

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4400-4999 MHz | FX            | NON                 | 1 W (ERP)        |                           |
| 5251-5600 MHz | FX            | NON                 | 1 W (ERP)        |                           |
| 5650-8000 MHz | FX            | NON                 | 1 W (ERP)        |                           |
| 12-16 GHz     | FX            | NON                 | 1 W (ERP)        |                           |
| 30-31 GHz     | FX            | NON                 | 1 W (ERP)        |                           |

## Special Conditions:

- (1) Assignment in frequency bands 960-1400, 2700-2900, or 9000-9200 MHz was coordinated prior to authorization with the FAA New England Coordinator, Burlington, MA. Use of frequencies under the authority of this assignment is subject to such further coordination with the FAA New England Coordinator, Burlington, MA, as necessary to ensure compatibility with existing uses.
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (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) Operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9102 North Meridian Street, Suite 305; Indianapolis, IN 46260; telephone, (866) 632-4222; FAX, (317) 846-9120; e-mail, executivedir @ sbe.org; information, www.sbe.org.
- (5) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (6) Licensee should get secure consent from the Advanced Wireless Services licensees in the immediate geographic area prior to operating on the 1610-1754 MHz and 1851-2000 MHz bands.

**Special Conditions:**

- (7) Licensee should coordinate with the Fixed Microwave licenses prior to operating on the 4000-4999 MHz, 5650-8000 MHz and 12-16 GHz bands.
- (8) The designated point-of-contact to terminate transmissions if interference occurs is Mr. John Maciel at (978) 799-1782.
- (9) Operation in the band 2000-2690 MHz requires to further coordination with HQ USAF Frequency Coordinator in Alexandria, VA., to ensure compatibility with existing uses.
- (10) Operation is NOT permitted on the frequency band; 608-614 MHz due to cause harmful interference to Medical Telemetry.