

**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)

0148-EX-ML-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	NON	1 W (ERP)	
2000-2690 MHz	FX	NON	1 W (ERP)	
3000-4000 MHz	FX	NON	1 W (ERP)	
8000-9000 MHz	FX	NON	1 W (ERP)	

This authorization effective September 03, 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

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Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4400-4999 MHz	FX	N0N	1 W (ERP)	
5251-5600 MHz	FX	N0N	1 W (ERP)	
5650-8000 MHz	FX	N0N	1 W (ERP)	
12-16 GHz	FX	N0N	1 W (ERP)	
30-31 GHz	FX	N0N	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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) 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.
- (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.