

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

EXPERIMENTAL

(Nature of Service)

XD MO

(Class of Station)

KI2XGC

(Call Sign)

0023-EX-CR-2017

(File Number)

NAME Raytheon IDS

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) MOBILE: SUDBURY, MA, within 40 km, centered around NL 42-21-37; WL 71-25-56

Frequency Information

MOBILE: SUDBURY, MA, within 40 km, centered around NL 42-21-37; WL 71-25-56

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
420-450 MHz	MO	N0N	34 W (ERP)	
512-608 MHz	MO	N0N	34 W (ERP)	
614-806 MHz	MO	N0N	34 W (ERP)	
902-928 MHz	MO	N0N	34 W (ERP)	

This authorization effective February 01, 2017 and
will expire 3:00 A.M. EST February 01, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: SUDBURY, MA, within 40 km, centered around NL 42-21-37; WL 71-25-56

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1427-1435 MHz	MO	N0N	34 W (ERP)	
1545-1559 MHz	MO	N0N	436.5 W (ERP)	
1610-1626.5 MHz	MO	N0N	436.5 W (ERP)	
1646.5-1660.5 MHz	MO	N0N	436.5 W (ERP)	
2900-3700 MHz	MO	N0N	436.5 W (ERP)	
4400-4990 MHz	MO	N0N	436.5 W (ERP)	
5250-5600 MHz	MO	N0N	316.2 W (ERP)	
5650-5925 MHz	MO	N0N	316.2 W (ERP)	
8500-9000 MHz	MO	N0N	316.2 W (ERP)	
9200-10000 MHz	MO	N0N	316.2 W (ERP)	

Frequency Information

MOBILE: SUDBURY, MA, within 40 km, centered around NL 42-21-37; WL 71-25-56

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10000-10500 MHz	MO	N0N	8 kW (ERP)	
10550-10680 MHz	MO	N0N	8 kW (ERP)	
10700-11000 MHz	MO	N0N	8 kW (ERP)	
13250-14000 MHz	MO	N0N	316.2 W (ERP)	
14714.5-15136.5 MHz	MO	N0N	316.2 W (ERP)	
15400-17700 MHz	MO	N0N	316.2 W (ERP)	
20200-21200 MHz	MO	N0N	316.2 W (ERP)	
24075-24175 MHz	MO	N0N	10 W (ERP)	
24250-31300 MHz	MO	N0N	316.2 W (ERP)	
31800-50200 MHz	MO	N0N	316.2 W (ERP)	

Frequency Information

MOBILE: SUDBURY, MA, within 40 km, centered around NL 42-21-37; WL 71-25-56

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
50400-51400 MHz	MO	N0N	316.2 W (ERP)	
54250-58200 MHz	MO	N0N	316.2 W (ERP)	
59000-64000 MHz	MO	N0N	316.2 W (ERP)	
65000-86000 MHz	MO	N0N	316.2 W (ERP)	
92000-100000 MHz	MO	N0N	316.2 W (ERP)	

Special Conditions:

- (1) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at http://freq.sbe.org/pdf_files/coordinators.pdf to find the appropriate coordinator.
- (2) 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.
- (3) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) No transmissions are permitted within frequency band 15300-15350 MHz.
- (6) Licensee is authorized to up 50 units per test.
- (7) Operation is subject to prior coordination with affected existing Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d).
- (8) Maintain separation from grandfathered earth stations as defined in Part 90 subpart Z, or coordinate an agreement with grandfathered earth station licensees, and notify registered users in the 3650-3700MHz band prior to operation in 3650-3700MHz (2900-3700MHz).
- (9) Licensee shall comply with the coordination requirements of Part 101.1523 of the Commission's Rules.

Special Conditions:

- (10) Operation is subject to notification of the following within 50 miles of the test area:
Location & Monitoring Service licensees (902-928 MHz)

- (11) Operation is subject to consent of All 700 MHz licensees (698-758 MHz; 775-788 MHz) within 50 miles of the test area.