

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

EXPERIMENTAL

(Nature of Service)

XD MO

(Class of Station)

WE2XVR

(Call Sign)

0024-EX-CM-2019

(File Number)

NAME ImSAR LLC

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: Boardman, OR, within 16 km, centered around NL 45-44-52; WL 119-46-52
- (2) MOBILE: Springville, UT, within 100 km, centered around NL 40-09-12; WL 111-38-58
- (3) MOBILE: China Lake, CA, within 64 km, centered around NL 35-38-17; WL 117-40-12
- (4) MOBILE: Whidbey Island, WA, within 32 km, centered around NL 48-19-17; WL 122-38-12
- (5) MOBILE: Arlington, OR, within 32 km, centered around NL 45-42-56; WL 120-11-39
- (6) MOBILE: McDonough, GA, within 30 km, centered around NL 33-24-02; WL 84-09-43
- (7) MOBILE: Avon Park, FL, within 16.1 km, centered around NL 27-38-37; WL 81-16-25
- (8) MOBILE: Camp Atterbury, IN, within 16.1 km, centered around NL 39-20-18; WL 86-01-46
- (9) MOBILE: Eglin AFB, FL, within 16.1 km, centered around NL 30-32-48; WL 86-43-52
- (10) MOBILE: Dugway, UT, within 16.1 km, centered around NL 40-12-01; WL 112-56-51
- (11) MOBILE: Utah
- (12) MOBILE: Fairbanks, AK, within 80 km, centered around NL 64-50-16; WL 147-42-58
- (13) MOBILE: Barrow, AK, within 80 km, centered around NL 71-17-25; WL 156-47-19
- (14) MOBILE: Wallops Island, VA, within 50 km, centered around NL 37-52-53; WL 75-26-15
- (15) MOBILE: Patuxent River, MD, within 50 km, centered around NL 38-16-41; WL 76-25-23
- (16) MOBILE: Hood River, OR, within 10 km, centered around NL 45-40-18; WL 121-32-29
- (17) MOBILE: North Slope Borough, AK, including 12 nmi offshore, within 130 km, centered around NL 70-11-52; WL 148-27-38
- (18) MOBILE: Anchorage, AK, within 80 km, centered around NL 61-13-00; WL 149-54-02

This authorization effective March 20, 2019 and
will expire 3:00 A.M. EST January 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Boardman, OR, within 16 km, centered around NL 45-44-52; WL 119-46-52

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
604 MHz	MO	308MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	

MOBILE: Springville, UT, within 100 km, centered around NL 40-09-12; WL 111-38-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	121 W (ERP)	
769-788 MHz	MO	19M0Q0N	121 W (ERP)	
879.5 MHz	MO	161MQ0N	121 W (ERP)	
1625-1850 MHz	MO	28M7G1D	2 W (ERP)	
1805 MHz	MO	390MQ0N	15 W (ERP)	

Frequency Information

MOBILE: Springville, UT, within 100 km, centered around NL 40-09-12; WL 111-38-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2400-2500 MHz	MO	20M0D7W	97 W (ERP)	
8750 MHz	MO	500MF0N	193 W (ERP)	
9875 MHz	MO	1G35F0N	193 W (ERP)	
16.4 GHz	MO	2G00F0N	484 W (ERP)	
16.4 GHz	MO	2G00F0N	153 W (ERP)	

MOBILE: China Lake, CA, within 64 km, centered around NL 35-38-17; WL 117-40-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
604 MHz	MO	308MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
1805 MHz	MO	390MQ0N	15 W (ERP)	

Frequency Information

MOBILE: China Lake, CA, within 64 km, centered around NL 35-38-17; WL 117-40-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10.25 GHz	MO	500MF0N	193 W (ERP)	

MOBILE: Whidbey Island, WA, within 32 km, centered around NL 48-19-17; WL 122-38-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
604 MHz	MO	308MQ0N	15 W (ERP)	
769-788 MHz	MO	19MQ0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	

MOBILE: Arlington, OR, within 32 km, centered around NL 45-42-56; WL 120-11-39

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
604 MHz	MO	308MQ0N	15 W (ERP)	
769-788 MHz	MO	19MQ0N	15 W (ERP)	

Frequency Information

MOBILE: Arlington, OR, within 32 km, centered around NL 45-42-56; WL 120-11-39

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	
15.4-17.4 GHz	MO	2G00F0N	153 W (ERP)	
16.4 GHz	MO	2G00F0N	484 W (ERP)	

MOBILE: McDonough, GA, within 30 km, centered around NL 33-24-02; WL 84-09-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
604 MHz	MO	308MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	
16.4 GHz	MO	2G00F0N	484 W (ERP)	

Frequency Information

MOBILE: McDonough, GA, within 30 km, centered around NL 33-24-02; WL 84-09-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.4 GHz	MO	2G00F0N	153 W (ERP)	

MOBILE: Avon Park, FL, within 16.1 km, centered around NL 27-38-37; WL 81-16-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	15 W (ERP)	
769-788 MHz	MO	19MQ0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	
17.2 GHz	MO	2G00F0N	484 W (ERP)	
17.2 GHz	MO	2G00F0N	153 W (ERP)	

Frequency Information

MOBILE: Camp Atterbury, IN, within 16.1 km, centered around NL 39-20-18; WL 86-01-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	

MOBILE: Eglin AFB, FL, within 16.1 km, centered around NL 30-32-48; WL 86-43-52

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	
15.4-17.4 GHz	MO	2G00F0N	153 W (ERP)	
16.4 GHz	MO	2G00F0N	484 W (ERP)	

Frequency Information

MOBILE: Dugway, UT, within 16.1 km, centered around NL 40-12-01; WL 112-56-51

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
1805 MHz	MO	390MQ0N	15 W (ERP)	
8750 MHz	MO	500MF0N	193 W (ERP)	
9875 MHz	MO	1G35F0N	193 W (ERP)	
17.2 GHz	MO	2G00F0N	484 W (ERP)	
17.2 GHz	MO	2G00F0N	153 W (ERP)	

MOBILE: Utah

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
2400-2500 MHz	MO	20M0D7W	97 W (ERP)	

Frequency Information

MOBILE: Utah

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1.625-1.85 GHz	MO	28M7G1D	2 W (ERP)	
10.25 GHz	MO	500MF0N	1531.1 W (ERP)	
15.4-17.4 GHz	MO	2G00F0N	153 W (ERP)	
16.4 GHz	MO	2G00F0N	484 W (ERP)	

MOBILE: Fairbanks, AK, within 80 km, centered around NL 64-50-16; WL 147-42-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	
15.4-17.4 GHz	MO	2G00F0N	153 W (ERP)	

Frequency Information

MOBILE: Fairbanks, AK, within 80 km, centered around NL 64-50-16; WL 147-42-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.4 GHz	MO	2G00F0N	484 W (ERP)	

MOBILE: Barrow, AK, within 80 km, centered around NL 71-17-25; WL 156-47-19

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	
15.4-17.4 GHz	MO	2G00F0N	153 W (ERP)	
16.4 GHz	MO	2G00F0N	484 W (ERP)	

Frequency Information

MOBILE: Wallops Island, VA, within 50 km, centered around NL 37-52-53; WL 75-26-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	
16.4 GHz	MO	2G00F0N	484 W (ERP)	
16.4 GHz	MO	2G00F0N	153 W (ERP)	

MOBILE: Patuxent River, MD, within 50 km, centered around NL 38-16-41; WL 76-25-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	

Frequency Information

MOBILE: Patuxent River, MD, within 50 km, centered around NL 38-16-41; WL 76-25-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10.25 GHz	MO	500MF0N	193 W (ERP)	
16.4 GHz	MO	2G00F0N	484 W (ERP)	
16.4 GHz	MO	2G00F0N	153 W (ERP)	

MOBILE: Hood River, OR, within 10 km, centered around NL 45-40-18; WL 121-32-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	
16.4 GHz	MO	2G00F0N	484 W (ERP)	
16.4 GHz	MO	2G00F0N	153 W (ERP)	

Frequency Information

MOBILE: North Slope Borough, AK, including 12 nmi offshore, within 130 km, centered around NL 70-11-52; WL 148-27-38

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
604 MHz	MO	308MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	
10.25 GHz	MO	500MF0N	193 W (ERP)	
16.4 GHz	MO	2G00F0N	484 W (ERP)	
16.4 GHz	MO	2G00F0N	153 W (ERP)	

MOBILE: Anchorage, AK, within 80 km, centered around NL 61-13-00; WL 149-54-02

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
589 MHz	MO	338MQ0N	15 W (ERP)	
769-788 MHz	MO	19M0Q0N	15 W (ERP)	
879.5 MHz	MO	161MQ0N	15 W (ERP)	

Frequency Information

MOBILE: Anchorage, AK, within 80 km, centered around NL 61-13-00; WL 149-54-02

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10.25 GHz	MO	500MF0N	193 W (ERP)	

Special Conditions:

- (1) Subject to prior coordination with American Society for Healthcare Engineering of the American Hospital Association (ASHE/AHA): Dale Woodin, ASHE Advocacy Director; American Hospital Association, One North Franklin; Chicago, IL 60606; (312) 422-3812, (312) 422-4571 (fax), dwoodin@aha.org.
- (2) All operations subject to coordination with the Gulf Area Frequency Coordinator located at Eglin AFB, Florida, prior to use with the area bounded by 27 degrees N. 33 degrees 30' N; and 83 degrees W. 90 degrees W.
- (3) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at https://www.sbe.org/sections/freq_local.php to find the appropriate coordinator.
- (4) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (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 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.
- (7) All operations in China Lake CA are subject to prior coordination with Western Area Frequency Coordinator at (760) 939-6948.
- (8) The designated point-of-contact to terminate transmissions if interference occurs is Mr. Adam Robertson, at (801) 762-7263.
- (9) During transmission, aircraft shall not exceed the altitude of 10000 feet.
- (10) Operations in the upper and lower 700 MHz bands must be prior coordinated with existing and new Part 27 and Part 90 licensees to avoid interference.
- (11) Operation must be prior coordinated with MID AFC at (301) 342-1194.
- (12) Operation in the bands 806-821 MHz and 851-866 MHz is subject to prior coordination with the Associated Public Safety Communications Officers, Inc. (APCO); ATTN: Director of Frequency Coordination; 351 North Williamson Blvd.; Daytona Beach, FL 32114-1112; Telephone: (386) 322-2500.
- (13) Operation in the band 1695-1780 MHz is subject to prior coordination with the Advanced Wireless Services (AWS) licensees.
- (14) Operation is subject to notification of the Location & Monitoring Service licensees (902-928 MHz) within 50 miles of the test areas.