

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

EXPERIMENTAL

(Nature of Service)

WK2XDL

(Call Sign)

XC MO

(Class of Station)

0225-EX-CN-2019

(File Number)

NAME Leidos, 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(c) of the Commission's Rules

Station Locations

- (1) MOBILE: Airborne Operations Around Bridgewater VA, within 64.5 km, centered around NL 38-22-00; WL 78-57-37
- (2) MOBILE: Temporary Fixed Ground Operations Bridgewater VA, within 1 km, centered around NL 38-22-00; WL 78-57-37
- (3) MOBILE: Airborne Operations Around Manassas VA, within 370 km, centered around NL 38-43-15; WL 77-30-54
- (4) MOBILE: Temporary Fixed Ground Operations Manassas VA, within 1 km, centered around NL 38-43-15; WL 77-30-54

Frequency Information

MOBILE: Airborne Operations Around Bridgewater VA, within 64.5 km, centered around NL 38-22-00; WL 78-57-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1780.71-1790.29 MHz	MO	9M58G1D	20 W (ERP)	
4400-4460 MHz	MO	9M58G1D	20 W (ERP)	

This authorization effective August 29, 2019 and
will expire 3:00 A.M. EST September 01, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Airborne Operations Around Bridgewater VA, within 64.5 km, centered around NL 38-22-00; WL 78-57-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5250-5600 MHz	MO	9M58G1D	20 W (ERP)	
5650-5850 MHz	MO	9M58G1D	20 W (ERP)	
9.75-9.95 GHz	MO	42M8G1D 64M0G1D	316 W (ERP)	
10.15-10.45 GHz	MO	42M8G1D 64M0G1D	316 W (ERP)	
14.4-14.83 GHz	MO	42M8G1D 8M00G1D	20 W (ERP)	
15.15-15.35 GHz	MO	64M0G1D	20 W (ERP)	

MOBILE: Temporary Fixed Ground Operations Bridgewater VA, within 1 km, centered around NL 38-22-00; WL 78-57-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1780.71-1790.29 MHz	MO	9M58G1D	20 W (ERP)	
2483.5-2500 MHz	MO	9M58G1D	0.5 W (ERP)	

Frequency Information

MOBILE: Temporary Fixed Ground Operations Bridgewater VA, within 1 km, centered around NL 38-22-00; WL 78-57-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4400-4460 MHz	MO	9M58G1D	20 W (ERP)	
5250-5600 MHz	MO	9M58G1D	20 W (ERP)	
5650-5850 MHz	MO	9M58G1D	20 W (ERP)	
9.75-9.95 GHz	MO	64M0G1D 42M8G1D	316 W (ERP)	
10.15-10.45 GHz	MO	42M8G1D 64M0G1D	316 W (ERP)	
14.4-14.83 GHz	MO	42M8G1D 8M00G1D	20 W (ERP)	
15.15-15.35 GHz	MO	64M0G1D	20 W (ERP)	

MOBILE: Airborne Operations Around Manassas VA, within 370 km, centered around NL 38-43-15; WL 77-30-54

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4900-4940 MHz	MO	9M58G1D	20 W (ERP)	

Frequency Information

MOBILE: Airborne Operations Around Manassas VA, within 370 km, centered around NL 38-43-15; WL 77-30-54

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5250-5600 MHz	MO	9M58G1D	20 W (ERP)	
5650-5850 MHz	MO	9M58G1D	20 W (ERP)	
9.75-9.95 GHz	MO	42M8G1D 64M0G1D	316 W (ERP)	
10.15-10.45 GHz	MO	42M8G1D 64M0G1D	316 W (ERP)	
14.75-14.83 GHz	MO	42M8G1D 8M00G1D	20 W (ERP)	

MOBILE: Temporary Fixed Ground Operations Manassas VA, within 1 km, centered around NL 38-43-15; WL 77-30-54

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2483.5-2500 MHz	MO	9M58G1D	0.5 W (ERP)	
4900-4940 MHz	MO	9M58G1D	20 W (ERP)	
5250-5600 MHz	MO	9M58G1D	20 W (ERP)	

Frequency Information

MOBILE: Temporary Fixed Ground Operations Manassas VA, within 1 km, centered around NL 38-43-15; WL 77-30-54

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5650-5850 MHz	MO	9M58G1D	20 W (ERP)	
9.75-9.95 GHz	MO	42M8G1D 64M0G1D	316 W (ERP)	
10.15-10.45 GHz	MO	42M8G1D 64M0G1D	316 W (ERP)	
14.75-14.83 GHz	MO	42M8G1D 8M00G1D	20 W (ERP)	

Special Conditions:

- (1) 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.
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) Coordinate with the local Society of Broadcast Engineers frequency coordinator and the affected Fixed Microwave Service licensees prior to operation in 2400-2483.5 MHz band.
- (5) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (6) The authorized station herein must not be used for air traffic control communications.
- (7) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (8) Leidos, Inc. must schedule at least 10-working days in advance, airborne operations at/around Manassas, VA, through RTPS PES to protect Navy and Marine Corps 2200-2290 MHz/4400-4940 MHz telemetry assignments. Real Time Telemetry Processing System (RTPS) Project Engineer Stations (PES) at NAS Patuxent River 301-342-1542.

Special Conditions:

- (9) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the U.S. Government; contract number W56KGY-16-D-0001. 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.
- (10) Stop buzzer contacts:
 - Noah Quay (530) 415-7139
 - Isaac Wiggins (907) 315-1760
 - Clarence Simpson (540) 831-0261
 - Brandi Moomau (540) 470-7151
- (11) Fixed operation is not permitted.
- (12) Operation is subject to coordination prior to activation and, as appropriate, possible scheduling with Paulette Woody, pwoody@nrao.edu, (304) 456-2107, when used within 20 nautical miles of the National Radio Quiet Zone.