

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

EXPERIMENTAL

(Nature of Service)

XC MO

(Class of Station)

WJ2XEZ

(Call Sign)

0849-EX-CN-2017

(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: McClellan, CA. Airborne Operations McClellan AFB, within 200 km, centered around NL 38-40-04; WL 121-24-02

Frequency Information

MOBILE: McClellan, CA. Airborne Operations McClellan AFB, within 200 km, centered around NL 38-40-04; WL 121-24-02

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.393 GHz	MO	10M0G1W	20 W (ERP)	

Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) Leidos, Inc. must maintain a U.S. point of contact available 24 hours per day, seven days per week, Stop Buzzers: Mr. Jay Mollet at 540-560-2745 or Mr. James Waddell at 540-831-0261, must be available during any testing or demonstration under this authorization.

This authorization effective December 13, 2017 and
will expire 3:00 A.M. EST December 01, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (5) ESAA authorized herein must employ a tracking algorithm that is resistant to capturing and tracking adjacent satellite signals, and each station must be capable of inhibiting its own transmission in the event it detects unintended satellite tracking.
- (6) ESAA authorized herein must be monitored and controlled by a ground-based network control and monitoring center. Such stations must be able to receive "enable transmission" and "disable transmission" commands from the network control center and must cease transmission immediately after receiving a "parameter change" command until receiving an "enable transmission" command from the network control center. The network control center must monitor operation of each ESAA to determine if it is malfunctioning, and each aircraft earth station must self-monitor and automatically cease transmission on detecting an operational fault that could cause harmful interference to a fixed satellite service network.
- (7) Operation pursuant to this authorization outside the United States in the 14.0-14.5 GHz band must be in compliance with the provisions of Annex 1, Part C of Recommendation ITU-R M.1643, with respect to any radio astronomy station performing observations in the 14.47-14.5 GHz band.
- (8) Leidos, Inc. must take all necessary measures to ensure that the antenna does not create potential exposure of humans to radio frequency radiation in excess of the FCC exposure limits defined in 47 CFR § 1.1307(b) and 1.1310 wherever such exposures might occur. Measures must be taken to ensure compliance with limits for both occupational controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Requirements for restrictions can be determined by predictions based on calculations, modeling or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers. The licensee shall ensure installation of terminals by qualified installers who have an understanding of the antenna's radiation environment and the measures best suited to maximize protection of the general public and persons operating the aircraft and equipment. A terminal exhibiting radiation exposure levels exceeding 1.0 mW/cm² in accessible areas, such as at the exterior surface of the radome, shall have a label attached to the surface of the terminal warning about the radiation hazard and shall include thereon a diagram showing the regions around the terminal where the radiation levels could exceed 1.0 mW/cm².
- (9) Antenna elevation for all operations must be at least 5 degrees above the geographic horizon while the aircraft is on the ground.
- (10) Stations authorized herein must not be used to provide air traffic control communications.
- (11) 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 WI 5P7T-10-D-D420/0007. 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.