

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

WL9XHC

(Call Sign)

XT MO

(Class of Station)

0647-EX-ST-2017

(File Number)

NAME Leidos, Inc.

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

To evaluate the performance of the ViaSat VR-18 SATCOM terminal that is installed on Leidos de Havilland dash-8 aircraft.

Station Locations

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

Frequency Information

MOBILE: McClellan Park, 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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) 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 June 19, 2017 and
will expire 3:00 A.M. EST December 20, 2017

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COMMISSION**



Special Conditions:

- (3) 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.
- (4) 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.
- (5) 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.
- (6) 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.
- (7) Antenna elevation for all operations must be at least 5 degrees above the geographic horizon while the aircraft is on the ground.
- (8) Stations authorized herein must not be used to provide air traffic control communications.
- (9) Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization Under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.