

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

EXPERIMENTAL

(Nature of Service)

WL2XOV

(Call Sign)

XC MO

(Class of Station)

0968-EX-CN-2020

(File Number)

NAME Lockheed Martin Corporation

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 d) of the Commission's Rules

Station Locations

(1) MOBILE: DEEP SPACE PROBE

Frequency Information

MOBILE: DEEP SPACE PROBE

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
8200 MHz	MO	360KG2D	186.3 W (ERP)	

Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (2) Following launch of the satellite, the licensee must notify the FCC through electronic submission to the license file, of the status of the satellite (transmissions commenced, etc.), not later than 7 days after commencement or expected commencement of transmissions, and of termination of transmissions, not later than three months after such termination.
- (3) Upon receipt of a conjunction warning from the JSpOC or other source, the licensee must review the warning and take all possible steps to assess and, if necessary, to mitigate collision risk, including, but not limited to: contacting the operator of any active spacecraft involved in such warning; sharing ephemeris data and other appropriate operational information with any such operator; modifying spacecraft attitude and/or operations.

This authorization effective July 12, 2021 and
will expire 3:00 A.M. EST July 01, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (4) POINT OF COMMUNICATION: LUNIR CubeSat.
- (5) 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 NNH16CO94C. 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.
- (6) All Lockheed Martin Corporation operations shall conduct on an unprotected, non-interference basis to authorized AF stations. If notify interference occurs to authorized AF operations, Lockheed Martin Corporation shall cease the operations under this authorization.
- (7) This authorization is for the period not to exceed 6 months from the LUNIR deployment date.
- (8) Initial operations, after deployment from SLS as LUNIR is ascending from its deployed altitude 70,000 km until 215,000 km, approximately 24 hours, are only authorized for the Low Gain Antenna (LGA) operational mode with the transmit power of 2.1 Watts and an antenna gain of 1 dBi.
- (9) Operations on 8200 MHz with 360K00G2D emission shall comply with the PFD limits as specified in ITU Radio Regulation, Table 21-4 of Article 21.16.
- (10) Lockheed Martin Corporation requires providing AF (jimmy.nguyen@us.af.mil) with:
 - a. Stop buzzer POC info for operations;
 - b. LUNIR deployment date and the end of LUNIR mission date, as soon as it becomes known.
- (11) Further extension beyond current expiration date will have to be re-coordinated and approved by NTIA-Federal Agencies.