

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

EXPERIMENTAL

(Nature of Service)

WO9XWB

(Call Sign)

XT      FX MO

(Class of Station)

1092-EX-ST-2019

(File Number)

NAME L3 Datron

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:**

The USMC is testing a lighter smaller off road vehicle. It needs smaller more compact communicaitons gear.

**Station Locations**

- (1) Kaneohe Bay (OAHU), HI - NL 21-26-35; WL 157-44-56; MOBILE: Will not operate outside of the Marine Corp Base, within 2 km, centered around NL 21-26-35; WL 157-44-56

**Frequency Information**

Kaneohe Bay (OAHU), HI - NL 21-26-35; WL 157-44-56; MOBILE: Will not operate outside of the Marine Corp Base, within 2

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 29.6-29.7 GHz | MO            | 1M00G2D             | 15.8 kW (ERP)    | 3.0E-6 %                  |

**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) 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.

This authorization effective August 14, 2019 and  
will expire 3:00 A.M. EST October 15, 2019

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



Special Conditions:

- (3) The stop buzzer contact for this project is Peter Richardson  
Phone: 8055841717  
Email: peter.richardson@L3T.com
- (4) Licensee is authorized to operate an antenna on mobile platform (VMES). The VMES station is authorized to conduct demonstration using the 29.6-29.7 GHz (E-s) frequency band.

## Special Conditions:

- (5) For communication between VMES station and GSO satellite, the operations are subject to the following conditions:
- a. POINT OF COMMUNICATION: INMARSAT 5F3 satellite @ 179.6 degrees E.L. (U. K. licensed) (Call Sign E150028).
  - b. The authorized station's antenna performance specifications do not comply with Sections 25.138(a) and 25.209 of the FCC Rules. The operation of these antennas will not be protected from harmful interference caused by other geostationary satellite networks to the extent that harmful interference would not be expected to be caused to an antenna that is compliant with the antenna performance standards of Sections 25.138(a) and 25.209.
  - c. Operations must be in compliance with the applicable VMES's requirements set forth in Section 25.226 of the Commission's Rules.
  - d. This authorization and any licenses related thereto are subject to compliance with the provisions of the Agreement between Inmarsat on the one hand and the U.S. Department of Justice (DOJ) and the Department of Homeland Security(DHS) on the other, dated September 23, 2008, as amended.
  - e. In accordance with Article 4.4 of the ITU Radio Regulations, the operations authorized herein shall not cause harmful interference to and shall not claim protection from harmful interference caused by, a station operating in accordance with the provisions of the ITU Constitution, the ITU Convention, and the ITU Radio Regulations.
  - f. Prior to commencement of operations with each satellite pursuant to this experimental license, L3 Datron shall obtain a certification regarding the notification of all satellite operators with co-frequency operations within 6 degrees longitude of each satellite, generally describing the experimental operations authorized herein, including the term thereof, and providing a point of contact for the purpose of resolving any complaints of interference. L3 Datron shall obtain a similar certification if, during the term of this experimental license, any of the satellites move orbit locations, or if a satellite operator commences co-frequency operations within 6 degrees longitude of each of the satellites. If the point of contact receives a complaint of harmful interference, the party receiving the complaint (if not L3 Datron) will notify L3 Datron, and L3 Datron shall immediately cease such operations or adjust such operations to avoid harmful interference. L3 Datron will submit a copy of these certification(s) to the Commission for incorporation into the record of this file.
  - g. The stations are authorized, on a non-protected and non-harmful interference basis, to transmit to the geostationary-orbit space stations using the 29.6-29.7 GHz frequency band that are authorized by the Commissions. The stations authorized herein must immediately terminate operations upon notification that such operation is causing harmful interference to any other radio system lawfully operating in the 29.6-29.7 GHz frequency band. The stations authorized herein cannot claim protection from harmful interference from any radio system lawfully operating in the 29.6-29.7 frequency band.
  - h. Operation pursuant to this authorization must be in compliance with the terms of coordination agreements between the authorized GSO Ka-band satellite operators operating in the 29.6-29.7 GHz frequency band and operators of other Ku-band geostationary space stations within six angular degrees of those space stations. In the event that another GSO FSS space station commences operation in the Ka-band at a location within six degrees of any of these space stations, earth stations operating pursuant to this temporary authority shall cease transmitting to that space station unless and until such operation has been coordinated with the new space station's operator or Licensee demonstrates that such operation will not cause harmful

Special interference to the new co-frequency space station.

- i. Transmissions between VMES station and the Inmarsat-5 F3 space station must comply with existing and future coordination agreements reached between the United Kingdom and other Administrations, including the United Kingdom and the United States. In the absence of a coordination agreement, such communications must comport with applicable provisions of the ITU Radio Regulations.
  - j. The VMES station 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.
  - k. VMES station 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 earth station to determine if it is malfunctioning, and each 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.
  - l. Licensee must maintain a point of contact available 24 hours per day, seven days per week, with the authority and ability to terminate operations authorized herein, for discussing interference concerns with other licensees, and must submit a letter to be included in its license file with the name and telephone number of the point of contact prior to commencing operation.
- (6) The authorized stations must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.
- (7) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.