

**DESCRIPTION OF OPERATIONS
(MODIFICATION OF LICENSE WH2XHK)**

Lockheed Martin Corporation hereby seeks authority under Part 5 of the Commission's rules to permit it to operate a GPS re-radiation system to validate equipment performance for experimental programs.

This request adds Location 2 and 3 to current license WH2XHK.

Nature of operation:

As to each facility, the requested frequencies correspond to re-radiated L1 and L2 Global Positioning Satellite (GPS) signals, which will be received and then rebroadcasted (1) within a steel covered building.

Transmit Antenna Orientation:	180 degrees vertical, 360 degrees horizontal. Antenna is directional facing down towards the ground inside steel covered building.
Transmit Antenna Polarization:	Right hand circular polarization (RHCP)
Frequencies:	1575.42 MHz, 1227.60 MHz (GPS L1/L2)
Emissions:	11M0W7D, 15M3W7D

Link budgets are attached.

Compliance with NTIA Regulation 8.3.28:

Lockheed Martin certifies that it will operate the equipment consistent with the conditions set forth in the NTIA Manual, Section 8.3.28: In particular, Lockheed Martin states the following:

8.3.28/Item 1:

- Operations will only be conducted indoors.

8.3.28/Item 2:

- Applicant seeks experimental authority. The device is intended to be used exclusively as experimental RNSS test equipment for the purpose of testing GPS receivers.

8.3.28/Item 3:

- NTIA action.

8.3.28/Item 4:

- Applicant seeks authority for a 24-month (2 year) term.

8.3.28/Item 5:

- The area of operation of the equipment will be exclusively under the control of Lockheed Martin personnel authorized for operation of such equipment.

8.3.28/Item 6:

- Operations will be conducted such that no GPS re-radiated signal level greater than or equal to -140 dBm, measured 100 feet from the building perimeter will occur. Calculations are included in Attachment A.

8.3.28/Item 7:

- Appropriate notification will be provided to GPS users in the area of operation.

8.3.28/Item 8:

- The program activities are limited to testing RNSS equipment.

8.3.28/Item 9:

- “Stop buzzer” points of contact for the authorized equipment and available at any point during the operation of said equipment follow:
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