

DESCRIPTION OF OPERATIONS

Lockheed Martin Corporation ("Lockheed Martin") hereby seeks authority under Part 5 of the Commission's rules to conduct radio testing in and around its Palmdale, CA facility.

Specifically, Lockheed Martin desires to test and authenticate the effectiveness of L3's MiniT2 technology as a viable option for control of an aircraft platform using a Common Data Link (CDL) terminal. L3's MiniT2 Transceiver is a fully capable CDL terminal enhanced for wideband mobile networking. Initial testing occurs with manned aircraft, limited to LOS operations only, within 150 NM of the base station.

Initially, Lockheed Martin intends to focus on ground testing at its Palmdale facility, which will consist of a single fixed (ground station) antenna and an airborne modem installed in a truck. This configuration will assist to characterize the behavior of the datalink in dense or structurally challenging areas.

The next phase of testing would involve installing the mobile radio in a manned flying testbed to characterize the behavior of the datalink in flight. Aircraft operations would be limited to an altitude of 50,000 ft.

The proposed installation location for the Stinger ground antenna is ideal for system integration, lab proximity, and will afford sufficient separation from human exposure to any radiation.

Ground directional antenna details:

- (a) Width of beam in degrees at the half-power point: 1.1 deg
- (b) Orientation in horizontal plane: 360 deg
- (c) Orientation in vertical plane: -5 deg to +85 deg