

DESCRIPTION OF OPERATIONS

Lockheed Martin Corporation ("Lockheed Martin") hereby seeks authority under Part 5 of the Commission's rules to permit it to test a developmental system at its locations in Moorestown, NJ and Cherry Hill, NJ. These operations are being conducted in connection with a cooperative research and development agreement (R&D) with DARPA, now under U.S. Government contract (No. HR001121C0076), internal R&D programs, and expected to support future R&D work.

The experimentation is focused on field testing of a broad range of signal emissions including those for telemetry, DF/COMMINT systems, tactical radios, networked radio communication systems, radio navigation systems, WIMAX, and radar. Results from the experimentation will be used to enhance effectiveness of future military radio frequency systems.

Testing activities include system command (telecommand) and performance evaluation (telemetry). Operation under this license neither constrains nor dictates future frequency allocations as the system is an experimental technology demonstration testbed. Operation in telemetry bands allows for system evaluation and preparation for potential demonstrations at other locations and under other licenses that may require air-to-air, air-to-ground, and/or ground-to-ground telemetry.

Many DoD and USG needs related to our activities to develop and demonstrate new capabilities for DoD- and USG-relevant radio systems are dependent upon supporting wide operating bandwidths. Doing so requires spanning multiple bands for brief periods of time. Experimentation utilizing bandwidths wider than requested or at higher power, etc. will be carried out at RF test ranges. This license will support timely experimentation that supports DoD and USG needs without passing on high costs and long schedules associated with test range operations to DoD and USG parties.

Typical testing is expected to be conducted intermittently during daylight hours over the course of one week, notionally once every three months. Operational duration, locations, and power levels have been selected to diminish the chance of interference with primary and adjacent users.

Experiments carried out under this license will develop and demonstrate new capabilities for DoD- and USG-relevant radio systems. DoD service labs, DARPA, and other USG entities are interested in the novel processing and RF capabilities that the license holder aims to develop and demonstrate. These capabilities are being included in USG technology development roadmaps. This early development is critical to successful future programs and technology.