

**DESCRIPTION OF OPERATIONS**

Lockheed Martin Corporation (“Lockheed Martin”) hereby seeks authority under Part 5 of the Commission’s Rules to permit it to conduct research into communications between unmanned aerial systems and ground stations (mobile and static). Lockheed Martin is also conducting research into the possible utilization of these communications technologies at its factory locations to communicate between static machines and mobile machines.

The subject research program is designed to utilize a portion of the cellular n78 band (3300-3400 MHz) in anticipation of next generation wireless communications architectures being developed for this band for both military and other customers.

All operations will be conducted exclusively at Lockheed Martin’s Waterton campus, well into the private property of the campus. Operational areas will be marked appropriately to minimize any potential for radiation hazard exposure to personnel.

Outdoor testing is directional and will be conducted in a valley with 300 foot natural hillsides around it. This environment will significantly reduce any potential for interference to other users of the spectrum.

For directional antenna operations, the following parameters apply:

(a) Width of beam in degrees at the half-power point:	65 ± 10°
(b) Orientation in horizontal plane:	0° or 270°
(c) Orientation in vertical plane:	0°