

## PURPOSE OF EXPERIMENTATION

Lockheed Martin Corporation (“Lockheed Martin”) hereby seeks authority under Part 5 of the Commission’s rules to conduct testing at its Huntsville, AL, facility in support of a United States Army, Advanced Hypersonics Program Office (AHPO) contract.

Specifically, the operations will support lab-based testing of the Secret Internet Protocol Router Network Access Point (SNAP) communication using Ka-Band, Ku-Band, and X-Band frequencies.

Lockheed Martin will limit operations to its property with appropriate protection measures in place for personnel.

Lockheed Martin notes that it will be the operator of the subject equipment at its facility, which itself is owned by the U.S. Government. Lockheed Martin is operating the equipment under the terms of its contract.

The directional antenna information follows:

(a) Width of beam in degrees at the half-power point:

Ka-Band: 0.3 degrees horizontal, 0.5 degrees vertical

Ku-Band: 0.7 degrees horizontal, 0.9 degrees vertical

X-Band: 1.1 degrees horizontal, 1.2 degrees vertical

(b) Orientation in horizontal plane:

Ka-Band: +200 degrees horizontal

Ku-Band: +200 degrees horizontal

X-Band: +200 degrees horizontal

(c) Orientation in vertical plane:

Ka-Band: +90 degrees

Ku-Band: +90 degrees

X-Band: +90 degrees