DESCRIPTION OF OPERATIONS

Lockheed Martin Corporation ("Lockheed Martin") hereby seeks authority under Part 5 of the Commission's rules to permit it to conduct a developmental program. Specifically, Lockheed Martin intends to conduct a Manned-Unmanned Teaming (MUMT) demonstration with the objective of showing expendable-class unmanned aerial systems (UAS) effectively enhancing the capabilities of manned 5th-Gen fighters (e.g., F-35).

The UAS will perform various roles (e.g., decoy, bait, intercept, track, identify), both autonomously and via command from a manned 5th-Gen fighter. Tactical communications between the manned and unmanned vehicles will be essential to mission effectiveness. Commercially available radio equipment will also be used for the tactical communications.



a. Specific objectives sought to be accomplished.

- Range and doppler capabilities of the 5G communications achieve required mission needs
- Data rates and latency requirements for cooperative operations are met
- Link quality (integrity and reliability) satisfy mission requirements

b. Benefits of experimentation

- This experimentation is one of many ongoing Lockheed Martin efforts targeted at advancing the state of 21st century warfare into a joint all-domain operations approach. This requires advanced, resilient communications capabilities that connect current and future assets with leading edge technology, that can rapidly and cost-effectively leverage and evolve with state-of-the-art commercial communications technology.
- Lockheed Martin's 5G.MIL solutions integrate military communications with tactical gateway capabilities (".MIL") and enhanced 5G technology (5G) to enable seamless, resilient and secure connectivity and data flow across all battlefield

assets. The result: the ability to deliver prompt and decisive action on the battlefield.