

FCC Exhibit

Purpose of Experiment

Pacific Microwave Research, Inc. (PMR) has received a prototype development test and evaluation grant from the Center for the Commercialization of Advanced Technologies (CCAT, www.ccatsandiego.org) to develop a Tactical Video Transmitter (TVT). Pacific Microwave Research is a California Corporation engaged in the design, development, and manufacturing of microwave video transmission equipment for the law enforcement, military, and intelligence markets.

PMR's TVT will provide First Responders in the Homeland Security community; including police, fire, hazmat, and other officials, the ability to collect and transmit realtime video imagery from the scene of a disaster to support decision making and crisis management. The proposed system consists of a body worn digital microwave transmitter, camera (visual or thermal), and other sensors (chemical, biological, nuclear) and omni-directional antenna. The system may be mounted on a human or robotic device and provide video imagery to a nearby command center in a non-line-of-sight environment.

The proposed development and demonstration system will utilize the frequencies allocated to First Responders under 47CFR Part 90 Subpart Y (90.1213) to support digital video communications for public safety agencies.

PMR will develop the transmission system for this project based on its current Coded Orthogonal Frequency Division Multiplex (COFDM) digital technology. The experiment will include testing of different COFDM bandwidths to determine the best combination of occupied bandwidth, data rate, and system robustness.

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