

**Persistent Systems, LLC  
Request for Grant of Special Temporary Authority  
File No. 0813-EX-ST-2020**

**AMENDED NARRATIVE EXPLANATION OF OPERATION**

Persistent Systems, LLC requests a grant of special temporary authorization for a period of five days (7/13/2020-7/17/2020) for terrestrial-only technical demonstrations and testing of a mobile (MANET) product line in the vicinity of Avon Park, Florida. USSOCOM TE 20-3, a network and data management themed research and development effort, will focus on emerging technology/technical applications, and their potential to provide solutions for future special operations capabilities. The venue location for these demonstrations and tests has changed from Texas A&M University to Avon Park, Florida. All operating parameters remain the same, and the dates of the tests are the same.

Two frequency ranges are specified within the band 2200-2290 MHz, each for one single channel with a 20-megahertz occupied bandwidth emission. In each case, the preferred frequency range is specified, to provide a consistent benchmark for testing and evaluation. However, the frequency agility of the system is reasonably broad in steps of 5MHz, 10MHz, 20MHz in the event that these two channels require some adjustment. In addition, the system can operate between a maximum of 10 Watts and a minimum of 12 milliwatts TPO. Frequency and power changes can be conducted remotely and the minimum power necessary will be used in each test. Technical demonstrations and testing will cover system operations, real-time sensor/telemetry data, voice communications, and high-definition full motion video to/from individual data links. Throughout the testing period, frequency changes and/or complete shutdown of all radiating source from the Wave Relay units can be accomplished immediately.

A variety of antennas will be used during the tests to determine the optimum link margins. No antenna will exceed 6 meters AGL. All antennas utilized will be omnidirectional and low gain (i.e. less than 3dBi). Omnidirectional antennas will be used in close proximity to personnel and third-party vendors at Avon Park, Florida.

Should any interference be reported, all technical demonstrations and testing will cease immediately and will not resume unless/until all such interference is resolved to the reasonable satisfaction of the complainant. *The stop buzzer contact for this test is Mr. Marshall Bonham, whose telephone number is (254) 247-9912. Other questions should be directed to undersigned communications counsel, who can be reached as follows:*

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