

PUBLIC INTEREST STATEMENT

1. Introduction

Leidos, Inc. (“Leidos”) respectfully requests that the Commission grant a two-year experimental license to permit Leidos to operate the facilities specified in the attached application.

2. Purpose and Nature of the Operation

The purpose of this experiment, which is a continuation of the operations previously authorized under STA under call sign WG9XSM (File No. 0487-EX-ST-2013), is to support communication systems development and integration associated with the Defense Advanced Research Projects Agency (DARPA)-sponsored Anti-Submarine Warfare (ASW) Continuous Trail Unmanned Vessel (ACTUV) by demonstrating reliable, point-to-point, wideband data network connectivity between a mobile surface vessel and a shore station. At the time of filing for the existing STA, the ACTUV program had expected to shift system testing and operations to a location other than Pass Christian, MS in January 2014. The ACTUV program now expects to continue testing and operations in the Pass Christian, MS and surrounding area for the foreseeable future, with possible expansion to other locations when technical maturity of the system permits.

Leidos tests this connectivity using a surrogate vessel (representing an actual ACTUV) and a station near the shoreline, each equipped with a Harris Corporation RT-1944/U SeaLancet radio system. Test operations are controlled from the shore station with uninterrupted telephone connectivity for “stop buzzer” contact. The results of this testing will inform Leidos and DARPA of the suitability of this type of communications in the transfer of sensor data from the actual ACTUV to shore nodes as well as confirming performance of hardware selections. The ACTUV will significantly enhance future US Navy ASW capabilities. The connectivity that will be proven through the operation of this system will be critical to ACTUV worldwide operational feasibility.

The government contract associated with these experimental transmissions is as follows:

Contract Number:	HR0011-12-C-0086
Contract Agency:	Defense Advanced Research Projects Agency (DARPA) Tactical Technology Office (TTO)
Contract POC:	Dr. Bob Brizzolara, Contracting Officer Representative (703) 696-2597; robert.brizzolara@navy.mil

Waiver of the Station ID rules set forth at Section 5.115 is respectfully requested.

3. Minimum Frequency Requirements

It is noted that although Leidos has requested the bands of 2200-2500 MHz, its minimum frequency requirements are as set forth below – a grant of a license meeting the requirements below is respectfully requested:

2202-2302 MHz

1. Center frequency range: 2212-2292 MHz
2. Channel Spacing: 5 MHz steps

2392-2447 MHz

1. Center frequency range: 2402-2437 MHz
2. Channel Spacing: 5 MHz steps

4. Interference Mitigation

Leidos is well aware of its obligations under Part 5 of the Commission's rules to avoid interference to co-channel licensees in non-experimental services, and will take all steps to ensure compliance with this obligation. With respect to interference mitigation, the following is provided:

- Authority is requested for only limited and sporadic operation of the facilities. Specifically, operation of the facilities will occur only between 6 am- 10 pm (CT). In addition, during those hours, operation will be sporadic, not continuous. In fact, there may be extended periods of non-operation during the authorized period. It is expected that on each day, transmissions will not exceed eight hours in cumulative duration.
- The applicant will only require the use of one 20MHz channel within the requested frequency band at any given time.
- The applicant will employ a monitor-before-send transmission scheme to ensure that the channels are free prior to operation under the requested license.
- The applicant will utilize the lowest power setting required to maintain effective communications.

5. Stop Buzzer

Leidos advises that the following will be available by wireless telephone and will act as "stop buzzers" if any issues regarding interference arise during testing:

Primary: Keith Crabtree – 703-283-5695

Alternate: Bob McCummins – 228-343-5893

For the foregoing reasons, Leidos respectfully submits that approval of this application is in the public interest, convenience and a necessity.