

EXHIBIT I
DESCRIPTION OF EXPERIMENT

ENSCO, Inc. ("ENSCO") hereby requests an FCC experimental authorization license to conduct experimental testing using the equipment identified herein operating in the 2212 MHz, 2237 MHz, and 2252 MHz bands.

The purpose for this experimental authorization license request is to conduct experimental testing utilizing the SeaLancet (RT-1944/U) radio system for both line of site and over the horizon communications for Unmanned Aviation Systems (UAS) in order to characterize performance characteristics in ground based and airborne relay operations. The testing objective is to gather data on range, link rate, and data throughput of a wireless radio technology.

Testing will consist of an air node carrying up to 2 SeaLancet (Rt-1944/U) radios that will act as a relay to one or more ground nodes. Each SeaLancet system is comprised of the RT-1944/U radio, transmit and receive amplifier, filter and antenna. The filter will be a 20 MHz Band pass at the approved frequencies. This filter eliminates transmit and received radiated signals outside our approved frequencies. The air node will have a small blade antenna on the underside of the plane while the ground node will either have a Directional or Omni pattern antenna. During the testing the air node will fly at different altitudes and distances while test data is transmitted. RF signal strength and bandwidth performance data will be recorded to determine the actual characteristics of the system. Distances of up to 100 miles and altitudes from 500 feet to over 10,000 feet will be tested. These measured values will be used to validate models that have been developed to predict the performance of the system over the varying conditions.

ENSCO acknowledges that all experimental operations conducted in the requested bands will be on a non-interference basis. However, to the extent necessary, ENSCO will utilize its best efforts to avoid and minimize interference. All network traffic will be simulated traffic only, solely for evaluation purposes and not for the purpose of providing network data communications services to user stations. ENSCO will adhere to any Special Conditions placed on the permanent experimental license.

Because the equipment is technically incapable of providing station identification, ENSCO respectfully requests a waiver of the station identification provisions of Section 5.115 of the Commission's rules, 47 C.F.R. § 5.115.

ENSCO submits that a grant of this application is necessary and in the public interest because it will allow the investigation of Unmanned Aviation Systems (UAS) communications for both line of site and over the horizon applications as they operate in the National Air Space (NAS). This is a priority for the FAA as it looks to develop standards and policies for UAS operations in support of commercial applications.

The **stop buzzer contact** for this project is Carol Johnson, Senior Technical Manager at ENSCO, tel: 321-866-0232, mobile: 321-848-4813, email: johnson.carol@ensco.com