

To Whom It May Concern,

We are currently on contract from the Missile Defense Agency (Contract Number: FA8818-08-D-0038) within the U.S. Department of Defense to provide a threat representative target for an upcoming missile interceptor test. As part of our test process, we assemble and functionally test the target at our Orlando facility. During test, we capture telemetry from 10 watt L-band and C-band transmitters within the following frequencies 2214.50-2276.50 MHz at a 10W (20W ERP).

We are in the process to determine if an FCC license is needed to radiate within our building to test our telemetry system. Our current contract calls for testing to start on August 18, 2014 and continue to intermittently test through February 19, 2015. Any effort to expedite this process would be greatly appreciated.

The purpose for these tests are to determine that a Telemetry link consisting of a variety of sensors, a PCM encoder with encryption, and transmitter has the proper spectrum to satisfy the link margin for a PCM/FM modulated system for a BER of $10E-6$ with a signal to noise ratio of 12.4dB.

In order to demonstrate that the system meet the goals, the deviation has to be set correctly and is monitored via a spectrum analyzer along with observing eye-patterns of the demodulated signal.

By performing these tests prior to deployment, a minimum power level to achieve these goals can be determined empirically using telemetry test equipment and additional attenuators.

Normally a link budget is performed analytically but performing the analysis empirically will enable us to make better utilization of the available spectrum and reduce the emissions whenever possible.

The transmitters are:

Airborne Telemetry Products Transmitters T-610, (Qty. 2)

Airborne Telemetry Products Transmitters ST-800, (Qty. 2)