

PUBLIC INTEREST STATEMENT

1. Introduction

DRS Signal Solutions, Inc. ("DRS SSI") respectfully requests that the Commission grant a two year experimental license to permit DRS SSI to operate the facilities specified in the attached application.

2. Purpose and Nature of the Operation

DRS SSI, headquartered in Gaithersburg, MD, is world leader in high-performance Signals Intelligence (SIGINT) tuners and receivers covering frequency ranges from HF through SHF, data recording & collection, software definable radios, and geo-convergence systems. The company has served the Intelligence Community for more than fifty years, with cutting edge Size, Weight, And Power (SWAP) reduction, world class microwave technology, and tools to search, intercept, analyze, and record signals.

The purpose of this research and development experiment, a continuation of the operations previously authorized under WH9XEA, is to analyze signal characteristics in the 2-30 MHz frequency band. DRS SSI confirms that imposition of the same Special Conditions and notch outs as specified for WH9XEA is acceptable for this license request.

Collection of transmitted signals in a field environment is necessary to improve processing techniques to measure signal parameters. This R&D effort supports developing techniques and systems that could be used by military, law enforcement, and other government agencies to identify transmitters of interest. This RD effort involves the transmission from a common radio transceiver and collect data using specialized receiving equipment designed to capture and analyze the signal. A specialized waveform is also transmitted that will aid the ability to analyze atmospheric effects on transmitted HF signals.

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

3. Modulation of the Requested Signals

For emissions using 6K00A3E, 3K00J3E, 8K00F3E: These transmissions will use an audio signal to modulate the transmitted waveform.

For emissions using 65K0G1N: The transmission is a periodic, phase modulated waveform from a digitally synthesized signal.

4. Interference Mitigation

DRS SSI 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, DRS SSI advises that it will employ a monitor-before-send transmission scheme to ensure that the channels are free prior to operation under the requested license.

5. **Stop Buzzer**

DRS SSI advises that the following will be available by wireless telephone and will act as a “stop buzzer” if any issues regarding interference arise during testing:

Bill Farley - (321) 794-2455

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