# **DESCRIPTION OF MODIFICATION**

### 1. <u>Introduction</u>

DRS Soneticom, Inc. ("DRS") requests modification of the WF2XFE experimental license to add an additional fixed and mobile location.

### 2. <u>Purpose and Nature of the Operation</u>

DRS was issued the WF2XFE license to support research and development to improve the state-of-the-art of broadband, software defined radio receivers and receiver systems. The experiment involves the operation of base station and mobile station equipment which was manufactured by a provider of commercial wireless infrastructure and mobile equipment. This equipment has not been and will not be modified by DRS or another party from the original manufacturer's specifications. The equipment is typically intended to be operated by service providers of wireless communications and DRS intends to operate the equipment in a similar manner; however, with the following exceptions:

A. The purpose for operation is for collecting data on known transmitted signals from both the base station and mobile stations that are affected by a typical signal environment and not to provide wireless service, and

B. DRS requires data collection for analysis to improve our product or to demonstrate product capabilities. The analysis of data collected from equipment operation requested in this application will enable DRS with the ability to improve its products and to provide solutions that are of interest to DRS' customers.

This application seeks to add an additional fixed and mobile location to the existing license.

## 3. Directionality of Antenna

113° in Horizontal Plane; Bearing 180°; 1° downtilt.

## 4. <u>Mitigation of Interference/Stop Buzzer</u>

The power level and use of directional antennas are intended to replicate signals as the signals would be transmitted in a typical commercial network. The use of directional antennas reduces interference by limiting the signal to a reduced area as in a typical cellular/PCS network. This frequency bands selected are intended to allow DRS to locate frequencies that are not in use, in order to avoid interference to U.S. cellular & PCS frequencies. DRS 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:

Mike Prendergast - Mobile Number (321) 720-7288