

Complete Program of Research and experimentation proposed

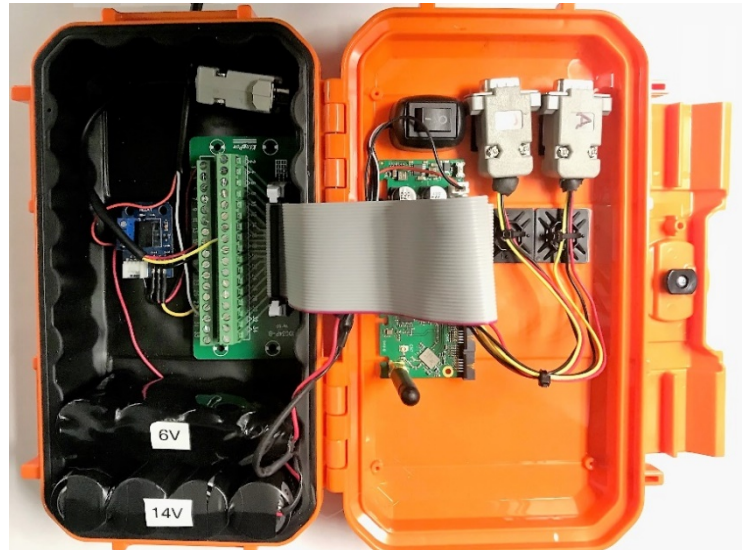
US3 makes a sewer overflow sensor designed to alert the City of Houston when sewer levels exceed an acceptable threshold. The device will be installed in Combined Sewer Overflow (CSO) and Sanitary Sewer Overflow (SSO) locations to monitor regulated flow conditions.

When the sewer level exceeds the acceptable threshold, the ultrasonic sensor detects this, and a voltage output signal will be sent as an alarm, over the OpenWay Riva network, to the US3 application.

Description of equipment and theory of operation

The waterproof enclosure contains:

- Itron Riva DEV LE
- batteries to power device
- Batteries to power External Devices
- TTL Relay
- antenna
- connection to the ultrasonic sensor
- Connection to a Single point level sensor



Outside the orange enclosure, there is a secondary float sensor that hangs at the alarm level in case the ultrasonic sensor fails to detect the dangerous water level as it rises.

Specific objectives sought to be accomplished

Our objective in seeking an experimental license is to provide the customer with early units while the radio in the device is modified to achieve Single-modular transmitter certification.

How the program of experimentation has a reasonable promise of contribution to the development, extension, expansion, or utilization of the radio art, or is along a line not already investigated

Our program will enable the use of radio to improve timely detection of conditions that could cause public health issues.

