

PROPOSED PROGRAM

Teledyne FLIR, LLC is the designer and manufacturer of handheld devices that detect and identify radioactive materials or explosives along with a line of drones. As a feature on some of our products, we include the ability to provide GPS coordinates on the device. In order to ensure proper functionality of the GPS receivers in our devices, we must test them accordingly. Building construction materials block GPS within these areas and thus GPS repeaters are necessary. This is why we are seeking an experimental license to test the functionality of the GPS hardware in our handheld production and service areas along with our drone production area. A total of 3 repeaters will be necessary to cover these separate areas.

EQUIPMENT

The equipment is from GPS Source (64 N. Mission Dr., Pueblo West, CO 81007)

Stations 1 and 2 are A11-M-V-P110/5 amplifiers with L1P passive output antennas and L1A active input antennas

Station 3 is GLI-METRO-G amplifier with GNSS-3P passive output antenna and GNSS-3A active input antenna

All stations are limited to L1 band only.

OBJECTIVES

The specific objectives to be accomplished with the continued use of these products is

- To provide our test/development area with re-radiated GPS signals
- To make the GPS development process more convenient and efficient for next generation devices
- To provide efficient testing of our GPS capable products that are currently in production
- To provide efficient testing of our GPS capable products that are returned for routine service

EXPERIMENTATION CONTRIBUTION

Most customers, public safety, border patrol, homeland security, etc., require GPS capability in handheld radiation detection and identification instruments. Also, drones require GPS for navigation. Being able to test the GPS functionality part way through build and again for quality control, allows us to build the highest quality products for those who need it most when protecting the public from threats.