

Saucon Technologies – Application for Experimental License (for use in Lynchburg, VA)  
Form 442 Confirmation Number: EL 242806  
Form 442 File Number: 0173-EX-CN-2022  
Date of Submission: February 11, 2022

EXHIBIT (Question No. 7)

- A. The program of research is to test, validate, and compare GNSS receivers. Test software and hardware will be used to determine function of GNSS receivers and acquisition times (time to first-fix) using custom software. A GNSS Repeater will be installed on the upper wall of the test area, installed in a lab with a central, indoor location within an office building. The device is to be used as Experimental RNSS Test Equipment for the purpose of testing and evaluating devices using GNSS signals, some of them being GS L1. The device does not transmit a station ID. The GNSS signals are re-radiated in the same format as the signal is seen by the outdoor receiving antenna.

The device that we will be using: ROGER-GPS (GNSS-L1G1GA-BP-US)

- B. Optimization of time to first-fix. Optimization of location accuracy. We want to test new builds of software on our GPS receivers and validate manufacturing and software.
- C. The program of research will enable data-gathering on existing test cases and enable new test cases to be developed. All information will be logged in a lab database, which will help perfect the art.