Calspan 2041 Niagara Falls Blvd. Niagara Falls , NY 14304



Response to NTIA Manual Section 8.3.28

a. Individual authorization is for indoor use only, and is required for each device at a specific site.

The installed equipment and locations coordinates of the installed equipment are included in exhibit 1. A diagram of the hanger and the location of the GPS re-radiation transmitter's location are detailed in exhibit 2.

b. Applications for frequency assignment should be applied for as an XT station class with a note indicating the device is to be used as an "Experimental RNSS Test Equipment for the purpose of testing GPS receivers" and describing how the device will be used.

The experimental RNSS Test Equipment will be used for the purpose of testing GPS receivers installed upon aircraft.

c. Approved applications for frequency assignment will be entered in the GMF.

N/A

d. The maximum length of the assignment will be two years, with possible renewal.

Experimental Radio License application 0396-EX-CN-2018 request a license period of 24 months.

e. The area of potential interference to GPS reception (e.g., military or contractor facility) has to be under the control of the user.

The area of interference does not extend beyond property under control of Calspan. A satellite image showing the 100 ft. re-radiation perimeter and Calspan property boundaries is included with this application.

f. The maximum equivalent isotropically radiated power (EIRP) must be such that the calculated emissions are no greater than -140 dBm/24 MHz as received by an isotropic antenna at a distance of 100 feet (30 meters) from the building where the test is being conducted. The calculations showing compliance with this requirement must be provided with the application for frequency assignment and should be based on free space propagation with no allowance for additional attenuation (e.g., building attenuation.)

The GLI Metro shall be configured via the front panel interface for an output level of -77 dBm into a 24 MHz bandwidth, which results in signal levels of -142.61 dBm /24MHz for L1 and -140.44 dBm /24MHz for L2 at a distance of 100 feet from the building where test are conducted. Calculations are included in the attachment submitted as Exhibit 2.

g. GPS users in the area of potential interference to GPS reception must be notified that GPS information may be impacted for periods of time.

The satellite image included in this attachment shows a 100 foot perimeter overlaid on Calspan's property. Only Calspan personnel and authorized visitors are allowed access to this area.

h. The use is limited to activity for the purpose of testing RNSS equipment/systems.

The experimental RNSS Test Equipment will be used for the purpose of testing RNSS systems installed onboard aircraft situated inside the hanger at 2041 Niagara Falls Blvd, Niagara Falls NY 14304.

Calspan 2041 Niagara Falls Blvd. Niagara Falls , NY 14304



i. A "Stop Buzzer" point of contact for the authorized device must be identified and available at all times during GPS re-radiator operations.

The Stop Buzzer POC's are:

Primary: Oscar Scott, Work Phone 1-716-236-1017 Mobile 1-716-393-1325 E-Mail oscar.scott@calspan.com

<u>Secondary:</u> John Babala, Work Phone 1-716-236-1060 Mobile 1-716-485-6535 E-Mail john.babala@calspan.com