

## Exhibit – Section 8.3.28 of NTIA (rev 1/2023)

### 8.3.28 Use of Fixed Devices That Re-Radiate Signals Received From the GPS

Except as otherwise authorized under Section 7.14, federal agencies and departments may, under the following conditions, operate fixed devices that re-radiate signals received from the GPS or other Radionavigation Satellite Service (RNSS).

- a. Individual authorization is for indoor use only and is required for each device at a specific site. If more than ten devices may operate in a single site/building - whether continuously or intermittently - the frequency assignment must note the total number of reradiators and maximum EIRP of the most powerful re-radiator device.  
**Yes. Indoor use only. 1 device**
- 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 RNSS receivers" and describing how the device will be used.  
**N/A. Not requesting specific frequency**
- c. Approved applications for frequency assignment will be entered in the GMF.  
**N/A. Not requesting specific frequency**
- d. The maximum length of the assignment will be two years, with possible renewal.  
**N/A. Not requesting specific frequency**
- e. The area of potential interference to GPS reception (e.g., military or contractor facility) has to be under the control of the user. Areas beyond the range for potential interference are protected by the maximum power calculation described in f. below, and thus no further record notes are required for frequency assignments.  
**Yes. Able to be controlled.**
- f. The EIRP must be such that the 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 calculation for maximum EIRP shall be based on free space propagation with no allowance for additional attenuation (e.g., building attenuation) as shown below.  $P_{T_{max}} = P_R + 20\log_{10} f + 20\log_{10} (30+d) - 27.55$ . Applications requesting power greater than the  $P_{T_{max}}$  calculated at  $d = 0$  meters (i.e. 39.3 pW for L1, 23.8 pW for L2, and 21.9 pW for L5) must provide the distance from the transmit antenna to the nearest exterior wall so that reviewing agencies can determine if the requested power meets the maximum EIRP described above.  
**See exhibit "Link\_Budget\_FCC.pdf"**
- g. Applications requesting consideration of non-zero building attenuation in order to meet the -140 dBm/24 MHz limit at 30 meters from the building must provide detailed justification and measured values for the building attenuation for agency review.  
**N/A. Not requesting**
- h. GPS users in the area of potential interference to GPS reception must be notified that GPS information may be impacted for periods of time.  
**Yes, acknowledged.**
- i. The use is limited to activity for the purpose of testing RNSS equipment/systems.  
**Yes, acknowledged.**