Exhibit – Section 8.3.28 of NTIA Manual

Use of Fixed Devices That Re-Radiate Signals Received From the Global Positioning System

- 1. The applicant confirms that this authorization is for indoor use only, and is required for the single device at the specifically proposed site. The only location of deployment is the laboratory at the business headquarters of the applicant in Irving, Texas.
- 2. The device is to be used as Experimental Test Equipment to provide indoor access to GPS signals providing time and position information for test and verification of land mobile radio equipment in the laboratory of the applicant at a single location.
- 3. It is understood that the maximum length of the authorization will be two years, with possible renewal.
- 4. The area of potential interference to GPS reception which is within the applicant's laboratory facility is under the control of the applicant. The area of potential interference is well within the perimeter of the building. Reference attached drawing for detail.
- 5. The maximum equivalent isotropically radiated power (EIRP) is such that the calculated emissions are not 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 tests are being conducted. The calculations showing compliance with this requirement are attached to this exhibit and are based on free space propagation with no allowance for building or other additional attenuation. See the attached, a calculation of compliance with this guideline, including a calculation of the link budget. The GPS repeaters being installed will be set to a maximum transmitter output of (see Exhibit #2) pWatts. This results in a maximum of -140 dBm at 100 feet due to free space loss. However, the output power will be adjusted down to a nominal minimum operational level.
- 6. GPS users in the area of potential interference to GPS reception will be notified that GPS information may be impacted for periods of time, but it is not anticipated that there will be any such users, given the limited application of this GPS repeater. The need is anticipated to be occasional test use and for short periods of time.
- 8. The use is limited to activity for the purpose of testing land mobile radio equipment/systems of the applicant manufacturer.
- 9. The "Stop Buzzer" point of contact for the authorized device, Ms. Angie Seay, Regulatory Support Engineer, Communications Sector, JVCKenwood U.S.A. Corporation, will be available at all times during GPS re-radiation operation of the device under any condition. Ms. Seay's telephone number is (678) 449-8879.