

From: Barbara Levy

To: Leann Nguyen

Date: September 24, 2015

Subject: FCC file 0465-EX-PL-2015

Message:

Below are Ball Aerospace responses for section 8.3.28 a, and e-i:

- a. The repeaters at Ball Aerospace are only used indoors.
- e. Ball facilities are under Ball control.
- f. Our procedures direct the power going into the GPS repeater antenna to be less than -120 dBm. $\text{Loss} = 32.45 + 20\text{Log}(d) + 20\text{Log}(f)$. In our case, $d = 100\text{ft} = 0.03\text{km}$, and $f = 1575.42\text{ MHz}$, so loss at 100ft = 109 dB, and the power at 100ft is -229 dBm.
- g. We are not aware of any GPS users in the area.
- h. We use the repeater only for testing our satellites and instruments that need a GPS input to operate.
- i. Rob Osborne can serve as the 'Stop Buzzer' point of contact.