

From: Michael Miller

To: Nimesh Sangani

Date: May 03, 2021

Subject: Additional Information Request

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Message:

1) When I coordinated your STA request your emission request you 1M00G1D but now it shows up as 2M00G1D. Why did you change your emission? What is the value that you're requesting? I can't see any exhibit in your application that suggest that you changed the emission.&nbsp;

Answer:&nbsp;The design was not changed, but the bandwidth calculation was corrected.&nbsp;  
&nbsp;The 1 MHz data flow goes through a Convolutional Encoder which doubles the data rate and doubles the bandwidth to 2MHz.&nbsp;So, the correct calculated bandwidth is 2 MHz.

2) During coordination of other matters NASA and NanoRacks LLC., NASA was informed the EIRP is expected to be 9 dBW. This is in excess of the requested of 8.013 dBW based on the 2W and 5 dBi gain antenna.&nbsp;

Answer: On March 3, our project initially told NASA the EIRP is 9 dBW.&nbsp;Later that day, a clarification was sent to NASA, indicating that the 9 dBW number was a simple outside estimate, that did not take into account cable and connector losses.&nbsp;NASA accepted this explanation.

3) Will the transmitters radiate continuously once activated, until de-orbit with F9 upper stage?&nbsp;

Answer: No, we will transmit when we are over a ground station, based on the orbit plan, We will deorbit in 6 hours or less.

4) Are you planning to have a command link?&nbsp;

Answer:&nbsp;Yes.&nbsp;This link is licensed and operated by the ground station owner, the Near Earth Network.&nbsp;The command link is described in the revised NTIA Space Data Form, and Spacecap.&nbsp;Both have been posted as exhibits to the application.

5) Will you be able to shutdown if harmful interference is experienced to licensed users?

Answer: Yes.&nbsp;The command set includes a shutdown command.&nbsp;The Stop Buzzer contact information has&nbsp;been posted as an&nbsp;exhibit to the application.