

From: Dan Hankins

To: Leann Nguyen

Date: January 26, 2021

Subject: Request for Info - File # 1035-EX-CN-2020

Message:

Due to an error in our template, we will need to modify the application to correct requested power values for transmitter terminal and ERP given in pW. We are also adding revised attachments for link budget calculations, Question 7 exhibit, and a new exhibit with a compliance check list for NTIA Manual section 8.3.27. Per OET correspondence instructions, the text of the checklist showing compliance with NTIA section 8.3.27 is included below as follows:

(b) Per NTIA 8.3.27, the station class should be "XT"; The device (GPS re-radiator) is to be used as Experimental RNSS test equipment, for the purpose of testing GPS receivers installed in aircraft. We are attaching a revised Question 7 exhibit to correct the reference to be section 8.3.27 vice 8.3.28.

(c) Entry into the GMF must be done by the FCC or NTIA. Textron Aviation Spectrum Management does not have access to the GMF.

(d) We understand that the maximum length of the assignment is 2 years (24 months) with possible renewal. This is the term we requested on our application.

(e) The facility containing the GPS re-radiators is operated and controlled by Textron Aviation.

(f) Textron Aviation has reviewed the spreadsheet template we used to calculate the link budget and determined that there was an error in converting the power from dBm to pW. This error occurred for the power at the amplifier terminals, and for the ERP power radiated from the antenna, resulting in a substantially higher value than it should have been. The radiated power equation has been modified to use distance in meters instead of feet, and the result meets the criteria for -140 dBm/24 MHz at 30 meters outside the nearest exterior wall. A revised spreadsheet with link budget calculations for each re-radiating controller and antenna is being attached. The revised spreadsheet shows the equations used to calculate the values. We will amend the application to correct the transmitter and ERP power for each re-radiating antenna.

(g) Textron Aviation posts signs at/ear entrances to the areas using GPS re-radiators with the following text:

WARNING
GPS
RE-RADIATOR
IN USE
GPS
Information
received may be in
error

(h) The GPS re-radiators are only used to functionally test RNSS systems on aircraft while they are inside the hangar or production line areas. All use is indoors only.

(i) An attachment with "Stop Buzzer" points of contacts has been attached to the application. Multiple contacts are provided to ensure POC availability.