

03-January-07

Question 4: Government Project Description

Per NTIA criteria provided via email originated by Karl Nebia, 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 on various systems while they are inside Textron Systems Wilmington, Massachusetts facilities.

Textron Systems has several current contracts with the Department of Defense to design, develop, manufacture, test and field a variety of battlefield sensor systems that incorporate GPS reception as a capability necessary to their intended functions. Textron Systems is pursuing additional contracts as well, and asks that the requested license not be restricted to supporting a single contract. A sample of currently active contracts requiring GPS reception follows:

Intelligent Munitions Systems:	W15QKN-06-C-0161
Future Combat Systems – Unattended Ground Sensors:	3EC1927
Tactical Reconnaissance System – Seismic/Acoustic:	F19628-03-C-0053

The FAA has issued a statement via email indicating that FAA coordination is not required for GPS re-radiators. A copy of that statement is attached to this application.

Other attachments to this application contain system diagrams, component specifications, power calculations, and stop buzzer Points of Contact to assure that the GPS re-radiators comply with all criteria in section 8.3.28 of the NTIA Manual.

Please note that the free space path loss calculations ignore the distance from the re-radiating antennas to the nearest outer wall, allowing only for 100 ft of losses from the antennas. Thus, the actual re-radiated signal strength at 100 ft outside the buildings will be lower than the calculated values and provide additional margin below the -140 dBm maximum value specified by the NTIA.

The specific objective we wish to accomplish is to ensure that the GPS functionality of our systems are developed, manufactured and tested in the most efficient manner available while maintaining the highest standards of quality and reliability.

This program will reduce time and effort required for systems development and testing, increase production efficiency and ultimately enable Textron Systems to provide products to our Department of Defense customers at a lower cost than would otherwise be possible.

Very Respectfully,

Danny Hankins
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- Technical Contact

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