

February 25, 2016
CACI Technologies, Inc.
508 McCormick Drive
Suite C
Glen Burnie, MD 20160

Federal Communications Commission
1270 Fairfield Road
Gettysburg, PA 17325

Application Narrative for Proposed Equipment

Under Contract GS00Q09BGD0028, CACI Technologies, Inc. develops and fields new and enhanced capability systems for the Army's VIGILANT PURSUIT System, and mobile Signals and Human Intelligence collection and exploitation system. This work is performed for the Army's Information and Intelligence Warfare Directorate, Aberdeen Proving Grounds, MD, and is performed at a CACI facility at 508 McCormick Drive, Glen Burnie, MD.

The proposed program to bring GPS signal availability into the CACI Glen Burnie, MD facility will provide a needed indoor location, in an RF, and personnel access, controlled environment for testing and evaluation of utilizing GPS technologies to further enhance or broaden the capabilities of the VIGILANT PURSUIT system. It is intended that this testing and experimentation will allow greater ability to locate, and therefore prosecute, targeted emitters. Additionally it will allow improved tracking of soldiers, dismounted from the vehicles, as they perform their missions of locating and identifying potential threat personnel. More accurate, reliable, and secure tracking of these soldiers will allow them to be protected more effectively. It is important that this work be conducted indoors with controlled access due to the sensitive nature of the mission and the system's capability.

The license for which this application is being submitted will be for the use of a single device, for indoor use only. The device will be used as an Experimental RNSS Test Equipment for the purpose of testing GPS receivers. The area under which it will be operated, and potential interference to GPS reception could exist, will be under control of the user. As shown in the calculations provided, the emissions shall be no greater than -140 dBm/24 MHz as received by an isotropic antenna at a distance of 100 feet from the building.

Objectives

We seek to accomplish the following objectives:

1. Illumination of the walled off laboratory space with a GPS signal to allow for the testing and experimentation indoors for continued exploration of utilizing GPS technologies in different ways to provide innovative applications to improve the collection of, and location of, threat emitters as well as to better track, and therefore protect, our soldiers in the field.

2. Further design, development and enhancement of existing GPS applications to provide greater efficiency and more effective means of utilizing GPS derived information.
3. Ability to troubleshoot and repair GPS systems in an access controlled environment.