



9 September 2014

Mr. Nnake Nweke, Chief
Experimental Licensing Branch
Office of Engineering and Technology
Federal Communications Commission
Washington, DC. 20554

Re: Request for Expedited Processing and Grant for STA from 5–8 October 2014 at the
Culvert Challenge Demonstration at Ft. Benning, GA

Application for Special Temporary Authority
File No. 0797-EX-ST-2014

Dear Mr. Nweke:

I am writing to you to request expedited processing of the above-referenced application ("Application") wherein Applied Research Associates, Inc. (ARA) has requested that the Commission grant special temporary authority ("STA") to permit ARA to operate the facilities specified in the STA Request for a very limited 4 day period from 5 October 2014 through and including 8 October 2014.

As explained in Exhibit I, ARA has been selected to demonstrate their culvert monitoring capabilities to the U.S. Army user and research and development communities. Our Pointman Unmanned Ground Vehicle (UGV) is one of those capabilities. This application is filed to obtain transmitting authority for the communications module portion of the system. While the demonstration is scheduled for 6 October through 7 October 2014, obtaining a grant effective as of 5 October will permit ARA to conduct preliminary tests of the equipment prior to the start of the demonstration, and permitting operations through 8 October will provide some flexibility in the event of delay due to weather or other factors.

Expedited grant is requested for this very limited 4 day period because ARA was just informed last week of the need to obtain FCC authority for this demonstration. In addition to these reasons and the fact that the requested period of authority is only 4 days, expedited processing is also requested because: the equipment will be operated at very low power levels. As specified in the application, maximum ERP of the operations will be 158 mW in the 4.4 - 5.0 GHz range.

ARA greatly appreciates the Commission's attention to this matter. Should any questions arise with respect to this application, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "John W. Haas", is written over a horizontal line.

John W. Haas
Vice President, Chief Scientist
Automation and Geosciences Sector

**REQUEST FOR LIMITED 4 DAY STA
FOR DEMONSTRATIONS AT THE CULVERT CHALLENGE DEMONSTRATION
AT FORT BENNING, GA**

1. Introduction

By the instant request ("Application"), Applied Research Associates, Inc. (ARA) requests that the Commission grant a very limited 4 day Special Temporary (STA) to operate the equipment specified in the Application at the 2014 Culvert Challenge Demonstration in Ft. Benning, GA from 5 October 2014 through and including 8 October 2014. As explained in this Application:

- This STA is requested for a very *limited 4 day period* from 10/05 - 10/08/2014
- The facilities will be operated at *very low power levels*
- Operation is to support *demonstrations* for potential military and to demonstrate new and innovative systems to the U.S. Army user and research and development communities.

2. Purpose and Nature of Operation

ARA has been selected to demonstrate their culvert monitoring capabilities to the U.S. Army user and research and development communities as part of US Army solicitation W911QX-14-R-0002, Culvert Challenge. ARA's Pointman Unmanned Ground Vehicle (UGV) is one of those capabilities. This Application is filed to obtain transmitting authority for the communications module portion of the system. While the demonstration is scheduled for 6 October through 7 October 2014, obtaining a temporary license effective as of 5 October will permit ARA to conduct preliminary tests of the equipment prior to the start of the demonstration, and permitting operations through 8 October will provide some flexibility in the event of delay due to weather or other factors.

Expedited grant is requested for this very limited 4 day period because ARA was just informed late last week of the need to obtain FCC authority for this demonstration. In addition expedited processing is also requested because:

- The facilities will be operated at very low power levels. As specified in the application, maximum ERP of the operations will be 158 mW in the 4.4 – 5.0 GHz frequency range.
- Authority is requested for only limited operation of the equipment only during the times the demonstration.

3. Stop Buzzer

ARA advises that the following will be available by wireless telephone as the "stop buzzer" if any issues regarding interference arise during testing:

Tyson Burrell
(802) 431-5822