Federal Agency: Army
Office: Army Contracting Command-Red River Army Depot (ACC-RRAD)
AoI Title: Power Pack Interface & Test Sets
CSO AoI Number: A005
AoI Release Date: 30 Oct 2025
Responses: See CSO W911RQ-26-S-C001 for Procedure Details

1. General Information

1.1 Introduction

This announcement is for a Power Pack Interface & Test Sets Area of Interest (AoI) under the ACC-RRAD Commercial Solutions Opening W911RQ-26-S-C001. Interested parties are highly encouraged to visit the Government Point of Entry (www.sam.gov) to review the ACC-RRAD CSO special posting in its entirety to obtain more information on the process for submission evaluation of the CSO AoI Responses.

This CSO AoI seeks to solicit innovative solutions that meet the objectives detailed in Sections 1.2 and 1.3. The term innovative is defined as any technology, process, or method, including research and development that is new as of the date of proposal submission; or any new application of an existing technology, process or method as of the proposal date.

ACC-RRAD is not obligated to extend a request for proposal or make an award as a result of this CSO AoI; all awards are subject to the availability of funds and successful negotiations. This CSO AoI is not an authorization to begin performance, and in no way obligates the Government for any costs incurred by the Offeror associated with developing a Response. Prior to commencement of any activities associated with performance under this CSO AoI, the Government will issue a written directive or contractual document signed by the Contracting Officer with appropriate consideration established. ACC-RRAD reserves the right to modify the requirements of this CSO AoI.

The authority to issue this CSO AoI is derived from ACC-RRAD Commercial Solutions Opening W911RQ-26-S-C001, dated 09 Oct 2025. The CSO authority is DoD Class Deviation 2022-O0007.

1.2 AoI Background

Red River Army Depot (RRAD) Dynamometer Branch has a need for the design, manufacture, and installation of a Power Pack Interface & Test Sets to perform limited operation and performance testing of power pack units for the Bradley Fighting Vehicle System, Multiple Launcher Rocket System, and Armored Multi-Purpose Vehicle. A power pack is the engine and transmission combination designed for rapid replacement in armored vehicles. These power packs typically tested outside the vehicle before installing would connect to the vehicle using a ground hop kit.

1.3 Improved Power Pack Interface & Test Sets

RRAD is interested in a commercial solution offering "CSO" for the design, manufacture, and installation of a Power Pack Interface & Test Sets that will improve upon the current process. These units are currently performance tested using dated analog vehicle instrumentation that at times requires replacement of sensors for the operator to get a required reading to verify power pack conformance as required by military end users' standard TM and NMWR's. RRAD is looking to improve/integrate this process to enhance our safety, capabilities, capacity and to reduce maintenance / operating costs involved with the current process.

We are looking for advanced manufacturing capabilities that convert the power packs analog inputs into digital readouts with print capability of power pack performance for verification.

At a minimum. RRAD is requesting a new Power Pack Interface & Test Sets to complete the required tests as described.

· Start and Operate Power Packs (Ground Hop)

· Monitor continuously that power packs operate within set parameters.

· Provide feedback through display, record, and optional automated control.

· Read, record, test, and display transducer signals from the power packs.

· Read, record, test, and display switch signals from the power packs.

· Read, record, test, and display data bus signals from the power packs.

· Ability to automate run and test cycles waiting for user input as needed.

· Create automated run reports including calculating or sampling of records collected.

· Provide accelerator position signal to the power packs.

· All analog IO channels used should have a similar high resolution.

· All equipment connectors shall be made to an automotive, industrial, or military standard and sealed for at least weather protection to prevent water intrusion from pack washing.

The following system requirements must also be met:

· Must account and reconcile for hardware differences in diagnostic standards.

· Records for configurations, tests, notes, related documents, and collected information shall be stored in a file standard that is open to allow interoperability of data analysis tools.

· Tests and cycles shall be programmable by depot personnel.

· Tests shall be able to run concurrent to one another.

· Should allow for multiple graphical dashboards that allow for cell and power pack control. Data processing and layouts should be editable by depot personnel.

· Shall have IO channels sufficient for cell monitoring and control.

· Emergency Stop functionality must be integrated into the cell and testable.

·Large at least 32" or two at least 20" computer monitors. To allow for easy monitoring of instruments. All test result data will be printable.

·Weather station mounted to enclosure to measure relative humidity and ambient temperature.

·Uninterrupted Power Supply (UPS) capable of providing 120VAC power of 500W for a minimum of 10 minutes.

· Communicate cell and run status using OPC UA, IEC62541

The system must be capable of powering and verifying the expected operation of sensors and other measurable electronic outputs of the power pack systems. The system will record test events and specify deviations from expected values. In addition, a pass, fail, and untried value will be displayed and recorded. All displayed and tested values shall be near real time having a latency not exceeding 500ms after a significant change. All recorded data records will be time stamped. All test events including start and end of tests will have time stamps. System shall be capable of recording operation and sensor data signals for the capture of data for review and comparison to other power pack systems.

2. AoI Constraints

Any selected company/companies will be required to be registered in the System for Award Maintenance (sam.gov).

3. Submission Requirements

A written solution must be sent via e-mail submission by 5:00 P.M. (CDT) on 30 Nov 2025, with subject line stating **INNOVATIVE SOLUTION** to usarmy.rrad.acc.mbx.cso@army.mil

Solutions received after the specified due date and time will be discarded and not be evaluated by the Government.

AoI Open Period – This AoI shall close at 5:00 P.M (CDT); 30 Nov 2025.

Point of contacts:

AoI questions can be sent to:

Contracting Officer: christopher.l.johnston20.civ@army.mil

CSO/AoI POC: jacob.j.horn.civ@army.mil