WEBINAR

Predictive Sustainment

MAJ Will Janotka

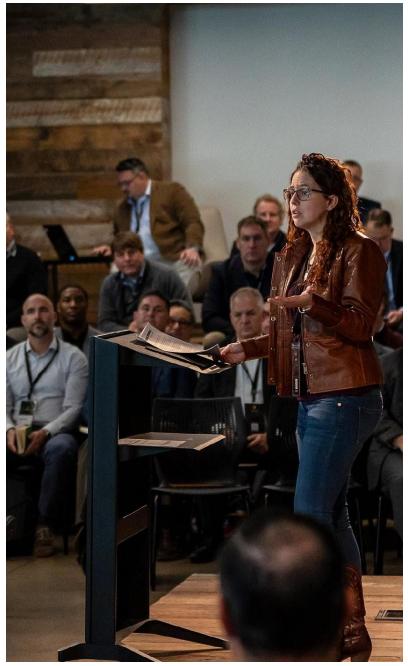
Real-Time Data

AGENDA

The Army is on a mission to update its forces and equipment with improved capabilities. So we're inviting the country's greatest innovators to take some of our biggest modernization challenges and propose new ways to solve them.

1	INTRODUCTION
2	TOPIC DETAILS
3	TIMELINE
4	WHAT'S NEXT?
5	Q&A

AAL is an innovation organization



We Energize

the civil innovation base to solve Army problems

We Experiment

with process and share lessons learned and best practices

We Accelerate

the Army's adoption and integration of technology

Solution Development Partners

Units and Soldiers
Iterative feedback for companies, the Army.
Sourcing problems and ideas for solutions.

Senior Leaders
Priority problems

Industry
Making the Army a preferred partner for the civil innovation base

Labs and Centers
Continued development and integration

PMS, CPE
Solving current gaps and hard problems

PREDICTIVE SUSTAINMENT

The Army seeks high-TRL innovative technologies to autonomously capture and transmit real-time logistical data from tactical vehicles directly to C2 nodes. Technology integration will be driven by experimentation and Soldier-centered feedback.

THE CHALLENGE

The reliance on delayed, manual reporting hinders Army units from reliably capturing the real-time status of maintenance faults and consumables supplies like fuel, ammunition, and water. As a result, predictive sustainment has proven difficult for logistics units, forcing them into reactive operations that slow down combat operations. Transmitting accurate and timely logistics and maintenance reports would enable Army units to effectively sustain maneuver forces.

THE OPPORTUNITY

Develop, integrate, and refine sensor technologies for specific data on select wheeled platforms from Armored Brigade Combat Teams (ABCTs). The intent is to explore, test, refine, and advance vehicular sensor technologies as an industry-government team over the PoP in partnership with the designated operational unit.

THE VEHICLES

- JLTV Variants
- FMTV Variants
- HEMTT Variants
- M978 Fueller
- M1074/1075 PLS
- M149(A2) Water Buffalo
- Load Handling System Compatible Water Tank Rack (HIPPO)

THE DATA

- Maintenance Faults
- Fuel (Self)
- Fuel Supplies
- Water Supplies
- Ammunition Quantities

VEHICLE DATA MATRIX

Name of Vehicle	Type of Vehicle	Maintenance Faults	Fuel Tank (Self)	Water Supply	Fuel Supply	Ammo Count
JLTV Sorts	Light Tactical	Yes	Yes	No	No	Yes (Limited)
FMTV Sorts	Medium Tactical	Yes	Yes	No	Yes (Limited)	Yes (Limited)
M1120 LHS (w/ HIPPO)	Heavy Load Handling	Yes	Yes	Yes (HIPPO)	Yes (Flatrack)	Yes
M978 Fueller	Heavy Tanker	Yes	Yes	No	Yes (Primary)	No
M1074/1075 PLS	Heavy Palletized Load	Yes	Yes	Yes (HIPPO/Rack)	Yes (Flatrack)	Yes (Primary)
M984 Wrecker	Heavy Recovery	Yes	Yes	No	No	No
M1088 Tractor	Medium Line-Haul	Yes	Yes	Yes (Trailer)	Yes (Trailer)	Yes (Trailer)
M977 HEMTT	Heavy Cargo	Yes	Yes	No	No	Yes (Primary)
M149(A2) Water Buffalo	Towed Water Trailer	No	No	Yes (Primary)	No	No

OVERVIEW OF OBJECTIVES

SYSTEM	• Solutions must connect to the vehicle ECU via CAN bus using common protocols like J1939 or J1708 • Systems must operate solely on standard vehicle power 12−24v • Systems can utilize a combination of ECU data and vendor-provided sensors • Solutions must be functional across an Armored Brigade Combat Team's wheeled fleet
DATA MANAGEMENT	• Systems are required to capture and report real-time levels • Data reports must be generated autonomously at defined intervals • Systems must have the capacity to store collected data for up to 24 hours
NETWORK & COMMS	• Transmissions must be possible while the vehicle is in motion or stationary • Solutions must provide efficient data encapsulation for low bandwidth environments • Solutions must be compatible with SATCOM, Radio, and Ethernet • Developers must provide a standardized API to allow military software to pull data • Systems should be designed for future integration into MILTAK 5.1 • Vendor is responsible for providing the necessary physical and logical interfaces (e.g., cabling, drivers, and network bridging) to connect the proposed solution to the vehicle's communication hardware

* Objectives listed above are abbreviated. See full solicitation for more details.

CLARIFICATIONS

- **<u>Technology is due to the unit by 06 November 2026</u>**. We are looking for very high TRL technologies that will require little to no pre-development before integration. Awardees will be able to refine their solution iteratively after specific training events.

- We are **NOT** looking for a predictive sustainment software solution. This Real-Time Data Special Notice is specifically for the sensors and technologies that will gather and encapsulate sustainment data from the listed vehicles.
- An applicant may submit a solution for any combination of Vehicle and Data. A solution does not need to cover every vehicle with every data type available.
- The vendor can expect to utilize existing communication hardware onboard a vehicle, but they must provide the necessary wires/cables to transport their data into that architecture.
- Vendors should expect to deliver and integrate at least 10 units of their solution by 06 NOV.

TIMELINE

PERIOD OF PERFORMANCE TIMELINE

Month 1
September 2026
Project Orientation

Month 4-6
February 2027
Refinement window for product adaption

Operational Evaluation

Month 3
06 November 2026
Equip and Field/Soldier Touchpoint

Month 7-9
Validation

Month 10-12
Follow-On

SPECIAL TOPIC & AWARD DETAILS

W911NF-24-S-0008 for Predictive Sustainment Special Topic: Real-Time Data

ROADMAP

Anticipate award for a 12 month PoP

SOLICITATION MILESTONES

White Paper Submission Period:

May 22 – June 12, 2026

Deadline for receipt of White Papers: no later than 11:59AM (Central), 12JUN2026

PERIOD OF PERFORMANCE

Contract Start:

Q4 FY26

Contract End:

Q4 FY27

HOW TO APPLY

Email to predictive-sustainment@aal.army - please use subject line: "Predictive Sustainment: Real-Time Data Special Notice"

STRUCTURE OF WHITE PAPER

BAA (Section D.2.c): https://aal.mil/assets/files/pdf/baa-published-announcement.pdf

(Must Include)

Cover Page

Organization Overview

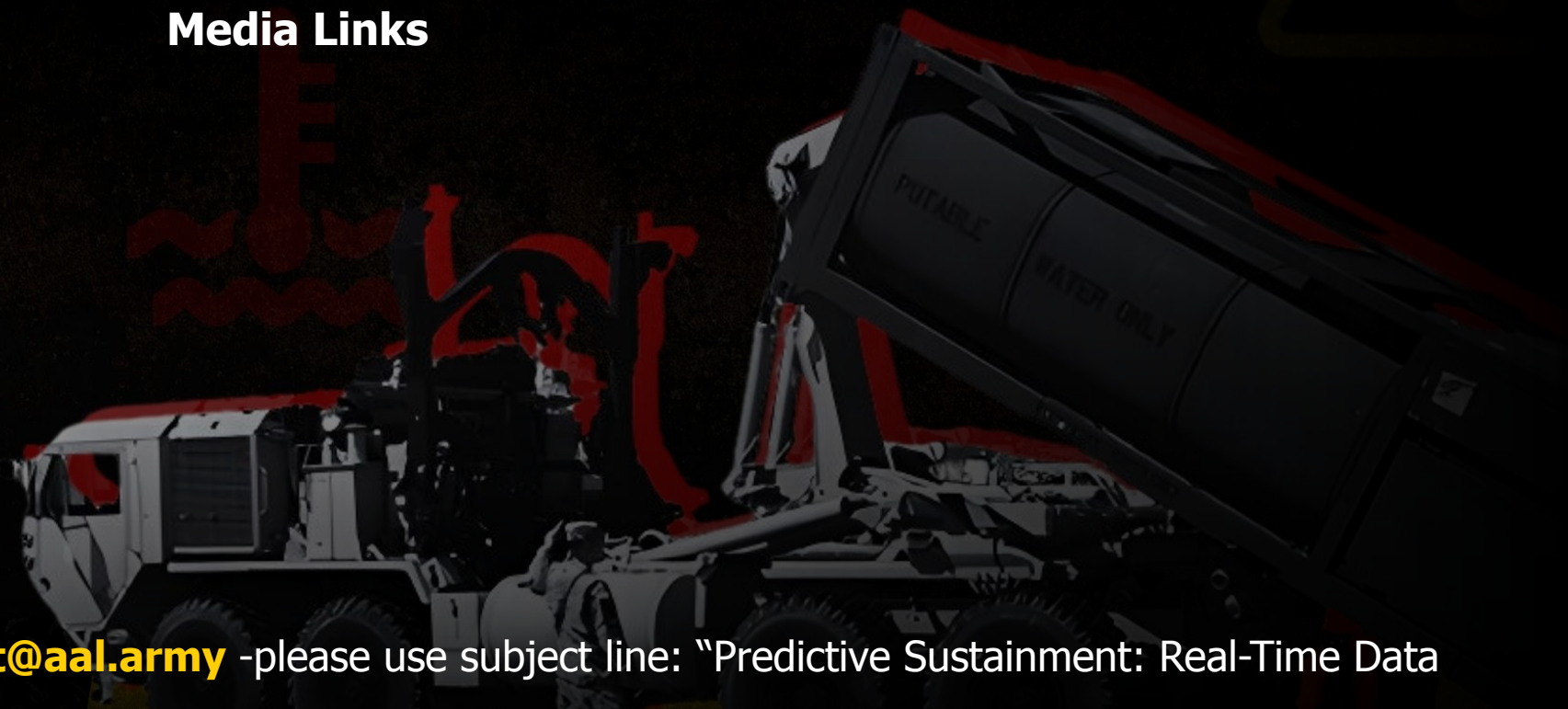
Technical Content

Schedule and Cost

Your Team

(Optional)

Media Links



HOW TO APPLY

Email to **predictive-sustainment@aal.army** -please use subject line: "Predictive Sustainment: Real-Time Data Special Notice"

Q&A

THANK YOU!

Questions

Email to **predictive-sustainment@aal.army** - please use subject line: "[Question] Predictive Sustainment: Real-Time Data Special Notice"

POCs

Programmatic: MAJ Will Janotka

Technical: Ms. Molly Thomson