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VERTEX

USE CASES

ARMORED FORMATIONS

DEC 12-13, 2023 | AUSTIN, TX

Each day, small group breakout sessions will bring problem owners and potential problem solvers together for a live, serious discussion on how to approach these complex Armored Formations challenges.

www.vertex.aal.army

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PROTECTION

DECEMBER 12, 2023

Countering Enemy Drones

The Army seeks solutions to defend personnel and equipment by disabling or destroying aerial swarms, high-speed racing drones, and autonomous drones. Applicable technologies may include, but are not limited to, unmanned aerial solutions, communication disrupting technologies, and auto-detection and targeting systems.



Disrupting Enemy Detection & Targeting

We are pursuing counter enemy surveillance capabilities to make vehicles and their optical, thermal, acoustic, and electromagnetic emissions difficult to detect or, if detected, harder to target. Effectively camouflaging these signatures or creating false positive diversions increases the security of personnel and equipment.

PROTECTION

DECEMBER 12, 2023

Operating in Complex Terrain

How do we safely maneuver armored vehicles through complex urban areas or restrictive environments? What innovations in robotics, satellite communications, or sensor technologies can decrease exposure to vulnerable situations?



Active Defense/Advanced Vehicle Protection Suites

The Army wants to explore combinations of active and passive defense solutions in layers to disrupt, deter, and ultimately defeat threats and fortify vehicle and crew protection.

PROTECTION

DECEMBER 12, 2023

Obstacle Breaching & Water Crossing Operations

We are interested in faster and safer ways to breach obstacles and improve water crossing operations. Breaching obstacles require more than one technique, often detonating and plowing minefields, avoiding anti-tank ditches, physical barriers, concertina wire, and more. Wet gap or water crossing may include different rafting or bridge building solutions. Improvements within these use cases may include human-machine integration or robotics decreasing the need for equipment-intensive solutions, and expediting the operation.



LETHALITY

DECEMBER 13, 2023

Friend or Foe

Better detection, classification, and identification improves confidence and reaction time on the battlefield. Our allies may be using the same equipment as our adversaries, and we need better identification tools to tell the difference. Additionally, there is a lack of native integration between surveillance systems and guided weapons systems. We are looking for products that detect, target, and relay information.



Next-Level Target Engagement

New target detection and engagement technologies can lower the cognitive load of crew members. We want to hear from you on commercially-available solutions that expedite target acquisition and engagement while preventing engagement of the same target by multiple systems. Innovations might include auto-target/tracking, ways to employ multiple weapons at the same time, and artificial intelligence tools that can inform decision making such as target prioritization.



RECONNAISSANCE

DECEMBER 13, 2023

Supporting Forces at the Edge

Scout units provide reconnaissance and conduct security operations at the very edge of the battlefield. We need solutions to extend support such as the ability to transport goods and materials, provide medical capabilities and evacuation, and offer versatile tools to support recon operations through autonomous delivery technology.



Analyzing Terrain

Terrain analysis can provide Soldiers with critical information about all aspects of an area - temperature, wind, distance, topography, etc. Your technology should help avoid obstacles, and other terrain that can decrease the chance of mission success, provide multiple route options, and detailed insight - such as resource consumption - for more informed decisions.

RECONNAISSANCE

DECEMBER 13, 2023

Robotic Reconnaissance

Robots, satellites, and drones gather information in high-risk areas. We want to ensure robotic solutions have “first contact” with the enemy, decreasing risk to Soldiers, and providing information needed to mitigate risk.



HOW TO ATTEND?

While anyone can request an invitation, attendance at VERTEX | Armored Formations is limited to 150 people. Individuals will be reviewed and vetted to ensure alignment with the use cases AFC seeks to address at this event before they are formally invited to attend.

If your area of expertise is a good fit, we'll let you know if you are selected to participate. Please do not book your travel arrangements until you have received an invitation to attend.

To allow ample time for in-person selection and travel planning, the deadline to register is November 17, 2023.

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JOIN US.

Request an invite to attend
VERTEX | Armored Formations
by registering online.

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