



U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND ARMAMENTS CENTER

Army DEVCOM Armaments Center Perspective

23 SEPTEMBER 2026

DEVCOM ARMAMENTS CENTER



MISSION

Lead innovative research and lifecycle engineering of armaments solutions.

VISION

To be the most trusted and responsive provider of pioneering armaments solutions for decisive victory.

**Forging the
Future of
Armaments**

OUR CULTURE: WHO WE ARE



Committed

- Acting with urgency on our duty to serve those who serve and protect us
- Delivering what our defenders need to succeed
- Designing safe and trustworthy products
- Workforce dedicated to the Army mission, objectivity, problem solving, and high-quality performance



Talented

- An enterprise of unique expertise
- Incomparable capabilities in Armaments Lifecycle
- Lead in engineering, technology, and innovation
- Enhancing armaments experts through the Armament Graduate School
- Only government organization with CMMI Level 5 certified center



Focused

- Our Five Principles
- Live the Army Values
 - Deliver Results, Own Your Mission
 - Communicate With Purpose
 - Find a Way – Be Bold and Adaptive
 - Team Up For Shared Success



Collaborative

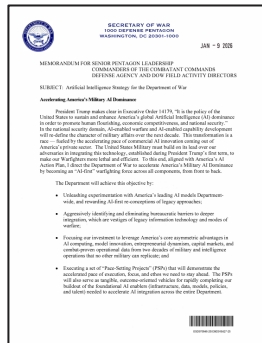
- Cultivating life-long learning and continuous development
- Being professional partners and capable collaborators
- Seeking meaningful connections with industry, academia, and other government agencies
- Succeeding in a dynamic global environment

DOW AI STRATEGY & NPSM-11



DoW AI Strategy Highlights - Data, Analytics, & AI Adoption Guidance

- **Compressed Kill Chains**
 - Accelerates sensor-to-shooter workflows and AI-enabled autonomy to compress decision timelines.
- **Weapon System Governance**
 - Mandates strict adherence to Directive 3000.09 Autonomy in Weapon Systems to ensure human judgment in lethal force decisions.
- **Tactical Edge Autonomy**
 - Drives low-SWaP edge computing deployment for reliable operations in D-DIL environments.



National Security Presidential Memo (NSPM-11) Directives & Mandates

- **Directive 3000.09 Update (90 Days)**
 - Overhauls weapon autonomy policies to integrate modern frontier AI capabilities.
- **Vendor Control & Anti-Tampering**
 - Prohibits commercial kill-switches or unilateral throttling of models during active missions.
- **Rapid Procurement (120 Days)**
 - Creates pathways to quickly onboard multi-vendor frontier models, breaking single-vendor locks.



TOOLS AND RESOURCES

Wide Adoption:

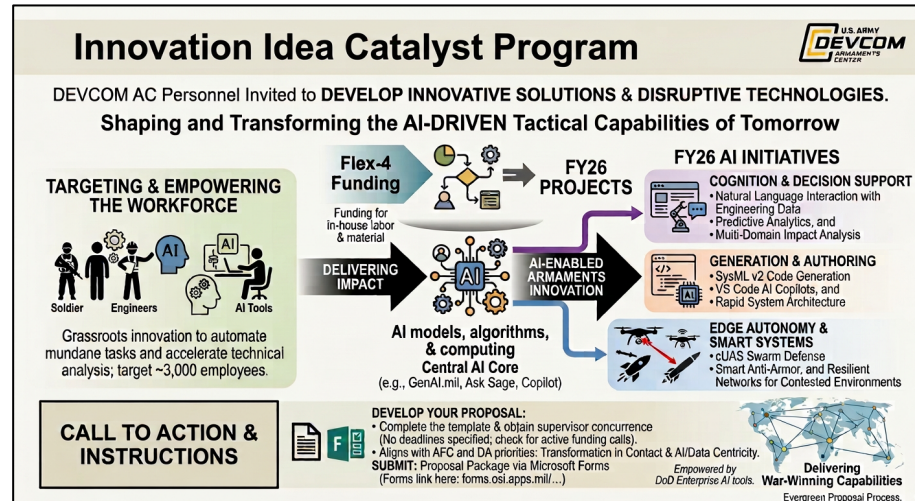
- **GenAI.mil** - Central hub for DoD AI policy, safety training, and authorized portal links.
- **Copilot** - Secure Office 365 integration (Word, Teams, Outlook) to draft memos and summarize.
- **Ask Sage** - Secure multi-model commercial sandbox for data ingestion and compliance.
- Various internal Col / CoP, internal training, and peer-led activities

Localized Adoption:

- **Army Vantage** – Integration of Palantir Army Vantage to query live readiness and supply-chain data.



KEY INITIATIVES



Innovation Idea Catalyst Program

Focus: competitive program targeting ~3,000 employees across the Armaments Center to identify and cultivate truly disruptive, next-generation engineering ideas.

Result: Funded ~10 high-impact projects, strategically investing in cutting-edge AI, machine learning, and tactical autonomy to deliver decisive capabilities to the Warfighter.



Workforce AI Challenge

Focus: Target ~900 employees with a call for AI-driven solutions to reduce burdensome tasks, enhance business processes, and accelerate mission velocity.

Result: Received ~40 submissions culminating in a highly successful workforce showcase, highlighting rapidly developed, high-impact AI tools ready to deliver immediate efficiency gains across our workflows.

Empowering the workforce to pioneer the next generation of armaments technology, turning grassroots innovation into strategic, war-winning capabilities.

INNOVATION IDEA CATALYST PROGRAM

AREAS OF INTEREST



Smart Munitions & Enhanced Fuzing

Applying Machine Learning algorithms to legacy systems to reduce S2S timelines and increase lethality.



Next-Generation Counter-UAS

Integrating AI-powered advanced targeting mechanisms to help Warfighters rapidly engage and defeat low-altitude small UAS threats.



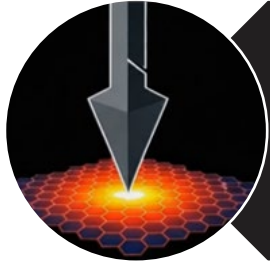
Autonomous Swarming

Developing expendable, autonomous UAS swarms capable of resilient operations in contested environments.

Internally-sourced, disruptive ideas, that are accelerating the development of the AI-driven tactical capabilities that will define the future battlefield.

WORKFORCE AI CHALLENGE

KEY CAPABILITY AREAS



Enabling Armaments Design & Production

Leveraging AI to optimize designs and run predictive real-time simulations of weapon effects.



Enhancing Business & Engineering Processes

Using AI to accelerate technical assessments, automate performance reporting, and optimize administrative workflows.



Reducing Burdensome Tasks

Employing AI to generate technical reports, accelerate software application development, and perform rapid data aggregation and analysis.

Our workforce is leveraging AI to streamline business operations, optimize technology, and accelerate capability delivery.

DIGITAL ENGINEERING ECOSYSTEM

TECHNICAL CONCEPT

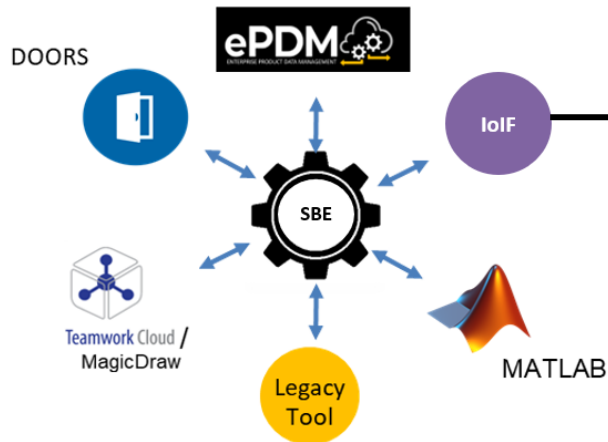


Connect Digital Tools

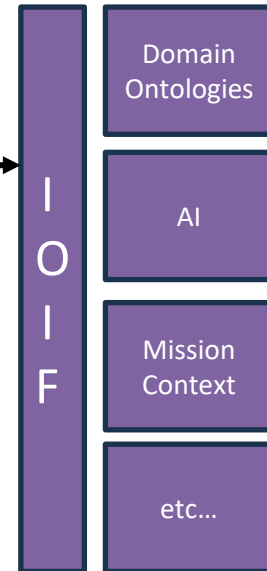
AI & AC-Semantic Context Layer

SBE Vision (DEE Platform)

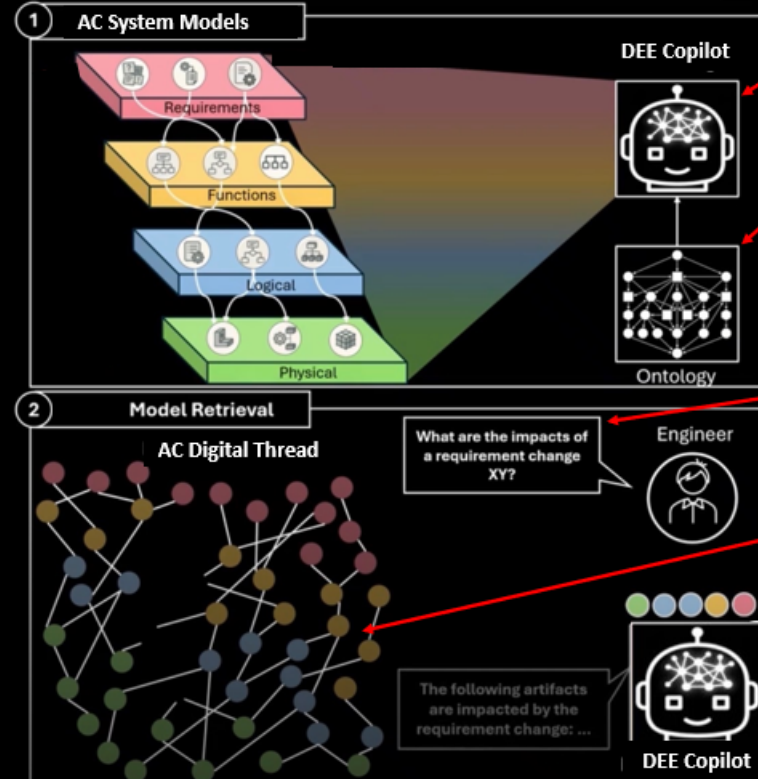
Hub and Spoke Architecture



Capability Extensions



Armaments IPT members talk to their architectures



Armaments
IoIF AC-enriched LLM

Armaments
IoIF Domain Ontology

(The "DNA" of our AC domain concepts, terms, and their relationships)

Questions asked
by AC Engineers

AC System Models & Data
mapped to Armaments
IoIF Domain Ontology

Quick Answers & insights
provided by the LLM

Initial Toolset Integration



CHALLENGES AND OPPORTUNITIES



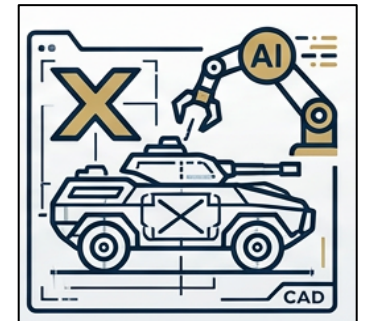
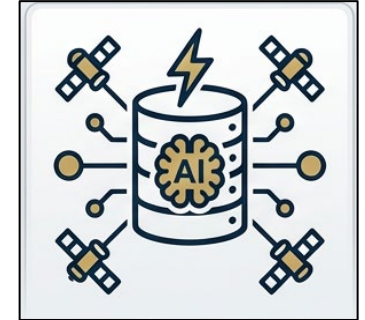
Key Challenges

- Data Readiness
- Cost & Resource Management
- Technical & Integration Hurdles
- Workforce Culture



Strategic Opportunities

- Leveraging Enterprise AI Platforms
- Accelerated Decision-Making
- Revolutionize Systems Engineering
- Empower the Workforce



Integration of Enterprise AI, Digital Engineering, and Data Strategies is the catalyst to overcome hurdles and scale capabilities.

PARTNERING THROUGH TECHNOLOGY TRANSFER



Our most common tools:

- Cooperative R&D Agreements (CRADAs)
- Educational Partnerships
- Service Agreements
- Consortia
- Patent Licensing
- IR&D
- SBIR/STTR
- International Agreements



DEVCOM Armaments Center Transfers Technology to the Industrial Base to Speed Transition to the Warfighter

Visit our Technology Transfer Website
<https://ac.DEVCOM.army.mil/collaborate/>

Let's continue to work together!

TALKS OF INTEREST FROM AC PERSPECTIVE



- A Digital Engineering Ecosystem Chatbot based on Semantically Rich Knowledge Graphs, **Thomas Hagedorn, Systems Engineering Research Center**
- *Case Study:* Assessing Consistency with the AI Ethical Principles, **Benjamin Werner, Army DEVCOM Armaments Center**
- *Insight Session:* Soldier Perspectives in AI and Autonomous Systems, **Elizabeth Mezzacappa, Army DEVCOM Armaments Center**
- Demonstrating Justified Confidence in Autonomous Weapon Systems for DoD Directive 3000.09 Approvals, **Benjamin Schumeg, Army DEVCOM Armaments Center**
- *Case Study:* AI-Assisted Transformation of Operational Recordings into Reviewable Evidence, **Robert DeMarco, Army DEVCOM Armaments Center**
- Introducing Automation to Reform The Model Change Request Process, **Salvatore Latella, Army DEVCOM Armaments Center**

THANK YOU.

