



DEVCOM ARMAMENTS CENTER NDIA MUNITIONS EXECUTIVE SUMMIT

Ammunition Enterprise Cross-Service Panel

20 MAR 2024

Presented by:

**Mr. Chris J. Grassano, SES
Director, DEVCOM Armaments Center**

THIS IS DEVCOM ARMAMENTS CENTER



MISSION

Lead innovative research and lifecycle engineering of armaments solutions.

Forging the Future of Armaments

VISION

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

DEVCOM ORGANIZATION



GEN James E. Rainey
CG Army Futures Command



BG John M. Cushing
CG DEVCOM



CSM Brian Haydt
CSM DEVCOM



Dr. Eric Moore
Deputy to the CG



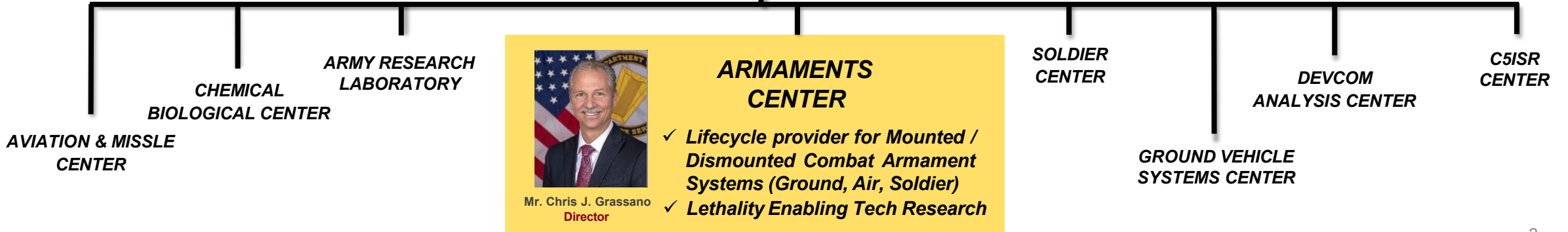
Honorable Douglas Bush
ASA(ALT) AAE & SPE



Assigned/Direct Support _____
Coordination - - - - -



BG David C. Trybula
DCG DEVCOM



ARMAMENTS CENTER TOP PRIORITIES



People

- Develop and Retain Army Civilian Leaders
- Cultivate Armaments Expertise and Workforce Culture
- Establish and Maintain Armaments Unique/Critical Facilities and Infrastructure

Army 2040

- Design and Deliver Next Gen Armaments Concepts and Capabilities to Inform the Future Army
- Design Integrated Armament Solutions Tied to Concept-Capabilities for 2040
- Design Cross-Cutting Enabling Technologies for Armaments of 2040

Army 2030

- Support the Modernization of the Organic Industrial Base
- Improve Support to the Armaments Acquisition Lifecycle

Army 2030 & 2040

- Improve Weapons and Munition System Characterization, Safety, Suitability, and Reliability Assurance
- Design and Deliver Advanced Fire Control and Collaborative Enabling Technologies for Armaments

OUR SUPPORT TO THE AMMUNITION ENTERPRISE



- Provide Engineering to Assist with Increasing Industrial Base Capacity and Capabilities in Support of U.S Replenishment Efforts
- Work with Suppliers to Improve Manufacturing Processes & Reduce Costs
- Participate on IPTs Conducting Failure Analysis Efforts / Root Cause Efforts to include Government, Industry and Academia
- Transition S&T Efforts into Acquisition Programs
- Support Elimination of Single Point Failures
- Utilize Cooperative Research and Development Agreements to Propose & Execute Material Change Proposals to Improve Functionality / Reduce Costs
- Provide Acquisition Support to the Program Managers (e.g. Tech Evals, Source Selection)
- Implement Technical Data Management Processes
- Perform Quality Engineering / Assurance (e.g., process audits, inspections, testing)

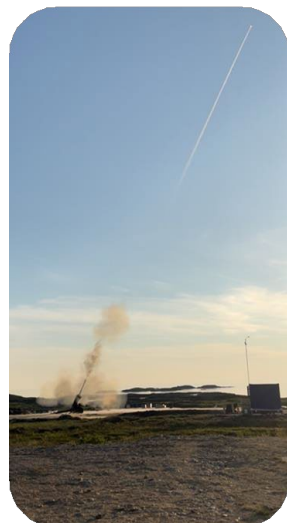


ADDRESSING ARMY 2040 CHALLENGES FOR ARTILLERY



Need to look at:

1. Range
2. Targets
3. Survivability
4. Challenging environments
5. Expanding Domains
6. Compatibility



Extended Range 155mm Munitions have been assessed & validated to provide significant operational and cost-effective massing value for both current and future cannon capability

Industry partnerships needed to innovate, spiral, integrate and produce affordable range extension

Some Technology Investment & Partnership Areas:

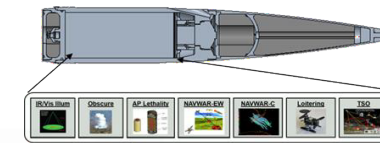
- Extended range gun-launched 'bus' maneuverable airframes
- Post launch propulsion & Sub-munition Expulsion
- Fuzing, resilient Guidance, Nav & Control
- Common/Modular payloads - kinetic and non-kinetic
- Design for more effective manufacturing processes, joining, material availability
- Collaborative/Swarming/hand-off methodologies for munitions and sub-munitions post-launch

ALIGNING ARMAMENTS TO STRATEGIC PRIORITIES



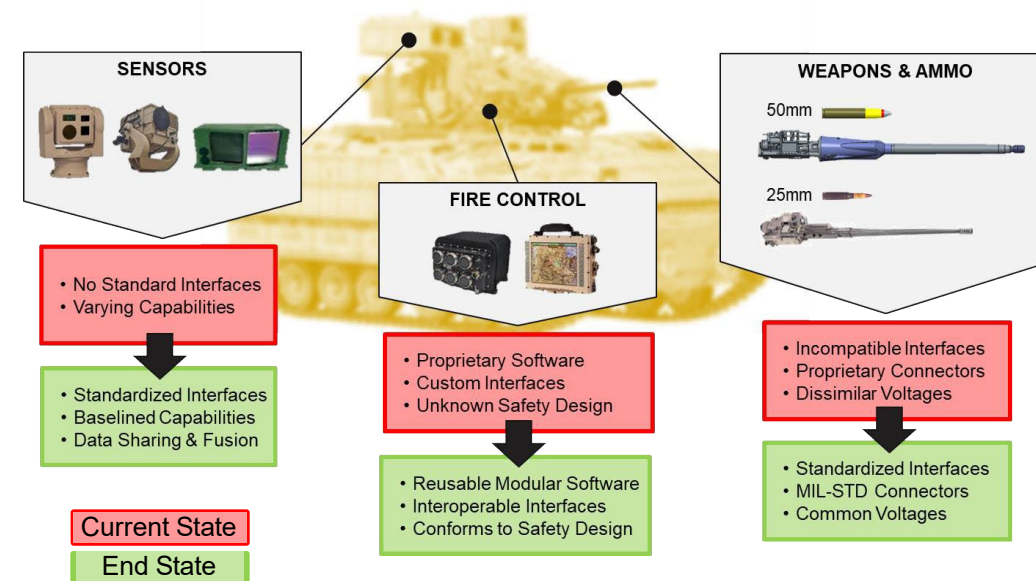
Strategic Alignment to AFC 2040 Transformation

- Formation based capability integration
- Human Machine Integration – Formation (HMI-F) – Offloading risk
- Increasing lethality & survivability of light formations
- Innovating at the round // Launched Effects (LE)
- Common controllers & 'Picatinny Rail' for modular armaments (CLIK)
- Contested Class V logistics
- Mortar indirect fires organic to maneuver formation



Assured Armaments Reference Architecture (AARA) = Modular Open Systems Approach (MOSA)

- Enhances interoperability – increases options and agility to meet new & emerging needs into development and acquisition
- Architecture governs internal and external interfaces for integrated Armaments System solutions, maximizing efficiency
- Transition new capabilities without requalifying all Line Replaceable Unit (LRU) interface changes with every component upgrade
- Foster environment of innovation and competition to provide the best of breed solution supporting Armaments modernization and transformation



PARTNERING THROUGH TECHNOLOGY TRANSFER



- Our most common tools:
 - CRADAs
 - Educational Partnerships
 - Service Agreements
 - Consortia
 - Patent Licensing
 - IR&D
 - SBIR/STTR
 - International Agreements

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

- **Science & Technology**

POC: Michael George, michael.c.george1.civ@army.mil

- **Cooperative R&D Agreements (CRADAs)/Patent Licenses/Testing Services/Engineering Services**

POC: Andrew Lenz, andrew.j.lenz6@army.mil

- **IR&D Technical Interchange**

POC: Donald Geiss, donald.a.geiss.civ@army.mil

- **Small Business Innovation Research**

POC: Peter Susberich, peter.a.susberich.civ@army.mil

- **International Cooperation**

POC: Chirag Trivedi, chirag.y.trivedi.civ@army.mil

- **Department of Defense Ordnance Technology Consortium (DOTC)**

POC: Tim Garry, timothy.j.garry2.civ@army.mil



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

BROAD AGENCY ANNOUNCEMENT (BAA) – W15QKN-21-R-0ER7



EMERGING WEAPONS AND MUNITIONS SYSTEMS AND SOLDIER LETHALITY RELATED TECHNOLOGIES

1. Advanced Materials
2. Electronics / Sensors
3. Manufacturing Technology
4. Power and Energy
5. Energetics Innovation
6. Revolutionary Armament Design Concepts
7. Fuze Technology
8. Autonomy; Guidance, Navigation and Control
9. Disruptive Lethality Concepts
10. Advanced Fire Control
11. Next Generation Logistics and Supportability Technologies
12. Environmental and Demil Technologies
13. Biometric Collection, Matching, Analysis & Sharing
14. Containerized Software Applications & Orchestration
15. Government Cloud Software Factories Enabling DevSecOps
16. Small Arms Lethal Technologies
17. Digital Engineering
18. Testing Methodology
19. Artificial Intelligence
20. Technology Transfer
21. Networked Lethality
22. Weapons Systems
23. Advanced Maintenance Technologies
24. Automated Test Systems (ATS) Technology
25. Advanced Munition Payloads
26. Operations Research System Analysis (ORSA) Modeling & Simulation Tools
27. Joint Program Executive Office Armaments and Ammunition (JPEO A&A) Item Research

OTHER FAR-BASED CONTRACT OPPORTUNITIES



Notice ID	Title
W15QKN-24-R-0022	Weapons Omnibus R&D IDIQ Base (coming soon)
W15QKN-24-Q-0004	AC Metal and Wood Finishing BPA
W15QKN-24-Q-0019	AC Packing and Crating Materials BPA (coming soon)

Search sam.gov Contract Opportunities by Notice ID to access the solicitations



THANK YOU.

Mr. Chris J. Grassano, SES
Director
DEVCOM Armaments Center

chris.j.grassano.civ@army.mil

