



U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND – GROUND VEHICLE SYSTEMS CENTER

Industry Days - Ground Vehicle Survivability & Protection

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GROUND VEHICLE SURVIVABILITY & PROTECTION



Mission

Bring our Soldiers home injury free with superior ground vehicle survivability and protection systems

Vision

To be the renowned leaders in decisive survivability and protection products and services throughout the ground domain lifecycle



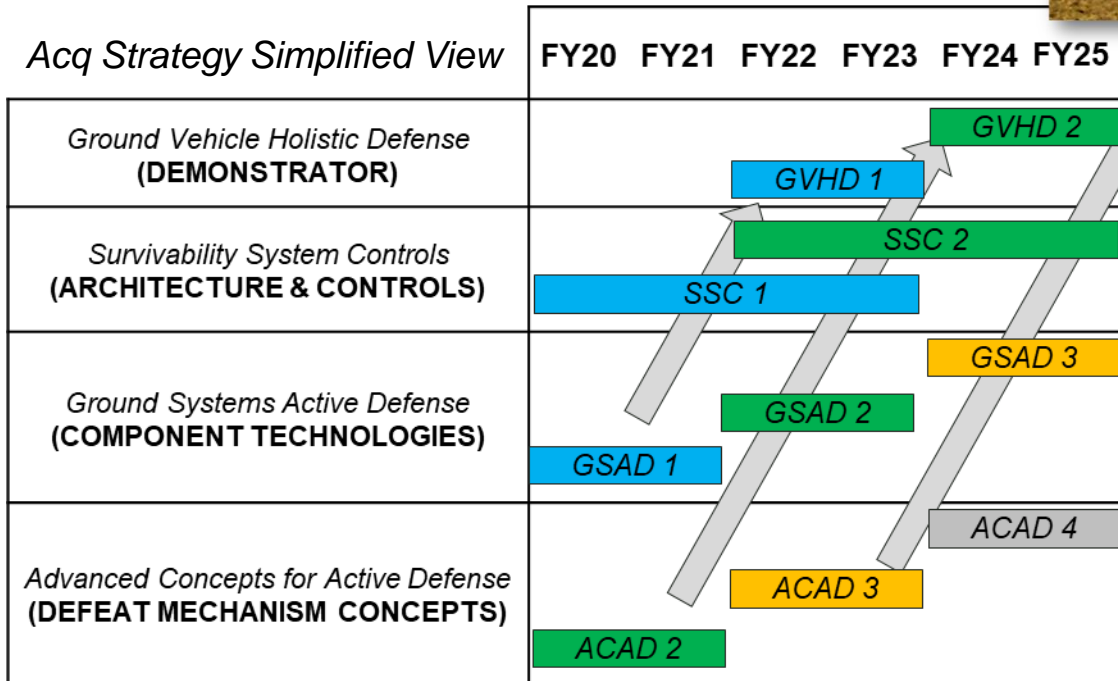
STRATEGY: HOLISTIC DEFENSE



- Holistic Defense will be achieved through modular, open systems that incorporate advanced active and passive/reactive component technologies working in tandem
- The Modular Active Protection System (MAPS) Base Kit is the foundation for this capability



Acq Strategy Simplified View



Strategic Goals

- Defeat emerging threats
- Reduce armor/anti-armor cycle-time
- Improve System SWaP
- Reduce Procurement Cost

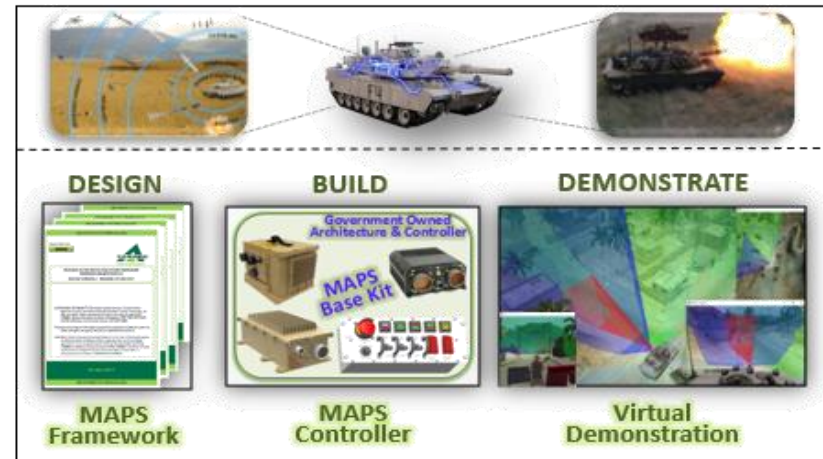


TECHNOLOGY FOCUS AREA: Active Defeat



Technical Challenge

1. Current ground vehicle survivability & protection systems are discrete solutions that provide limited capability
2. Modular, open protection system architectures and active component technologies are needed for integration into a holistic defense system
3. Multiple technology spirals are planned to feed Vehicle Protection System tranches in FY22, 24, and 26



Investment Strategy

Existing Contracts FY19 & FY20 – Information is not publically releasable

CRADAs For Modular Active Protection Framework (MAF) Compliance and Development Efforts

- Laser Warning Receivers – Collins Aerospace, SAAB, Elbit Systems North America
- Hostile Fire Detection – IAI Elta
- Radar Dev. – RADA
- Active Protection Systems – Raytheon, Tencate, Artis, BAE Systems, Northrup Grumman

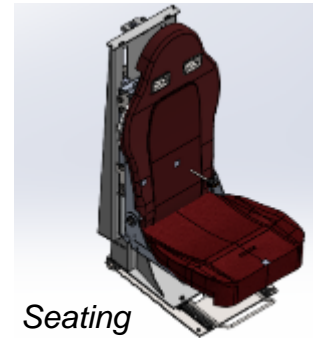


TECHNOLOGY FOCUS AREA: Passive/Reactive Defeat



Technical Challenge

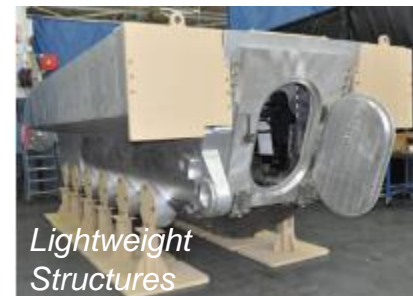
1. Current ground vehicle survivability & protection systems are discrete solutions that provide limited capability
2. Lightweight passive/reactive component technologies that complement active systems are needed for integration into a holistic defense system
3. Multiple technology spirals are planned to feed Vehicle Protection System tranches in FY22, 24, and 26



Seating



Modular Armor



Lightweight Structures



Energy Absorbing Devices

Investment Strategy

Existing Contracts FY19

- System Survivability Prototype Concepts: MettleOps LLC, \$13.4M – Awarded design, analysis, and fabrication of component technologies
- Ballistic Modeling & Simulation Code Development: SwRI, \$3.5M – Awarded development of EPIC hydrocode

Opportunities for Partnership FY20

- Passive/reactive armor and blast mitigation prototype concepts : (36 months), \$20M – Design, analysis, and fabrication of future prototype component technologies



GVSP SUMMARY



- Achieving ***Holistic Defense*** through modular, open systems that incorporate advanced active and passive/reactive component technologies working in tandem
- Significant reduction (>30%) in core GVSP S&T budget as CCDC GVSC moves heavily towards autonomy R&D
- **We want Industry to leverage our expertise**
 - Visit our sub-system evaluation display and learn about our prototyping and virtual/physical evaluation capabilities



GVSP



Visit Us at Booth 1