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

Technical and Engineering Services Contract Industry Day

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OPSEC#6058

01 FEB 2022

INTRODUCTION
AND OPENING REMARKS

- **Mr. John Jolokai** – *Army Contracting Command – Detroit Arsenal (ACC-DTA), Civilian Deputy to the Executive Director*

- **Mr. Jeffrey Jaster** - *GVSC, Deputy Exec. Director, Modeling Simulation & Software*

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ARMY FUTURES COMMAND & DEVCOM – GROUND VEHICLES SYSTEMS CENTER

Army Futures Command (AFC)

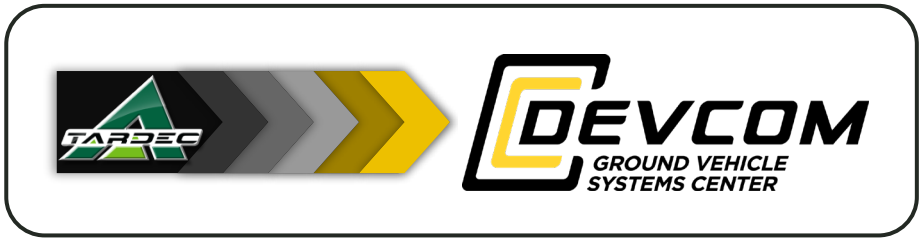
- Army Futures Command leads a continuous transformation of Army modernization

U.S. Army Combat Capabilities Development Command (DEVCOM)

- U.S. Army Combat Capabilities Development Command provides innovative research, development, and engineering to produce capabilities for decisive overmatch to the Army

DEVCOM Ground Vehicle Systems Center (GVSC)

- DEVCOM Ground Vehicle Systems Center provides innovative research, development, and engineering to support ground systems and provide and integrate ground system capabilities for decisive overmatch in the future



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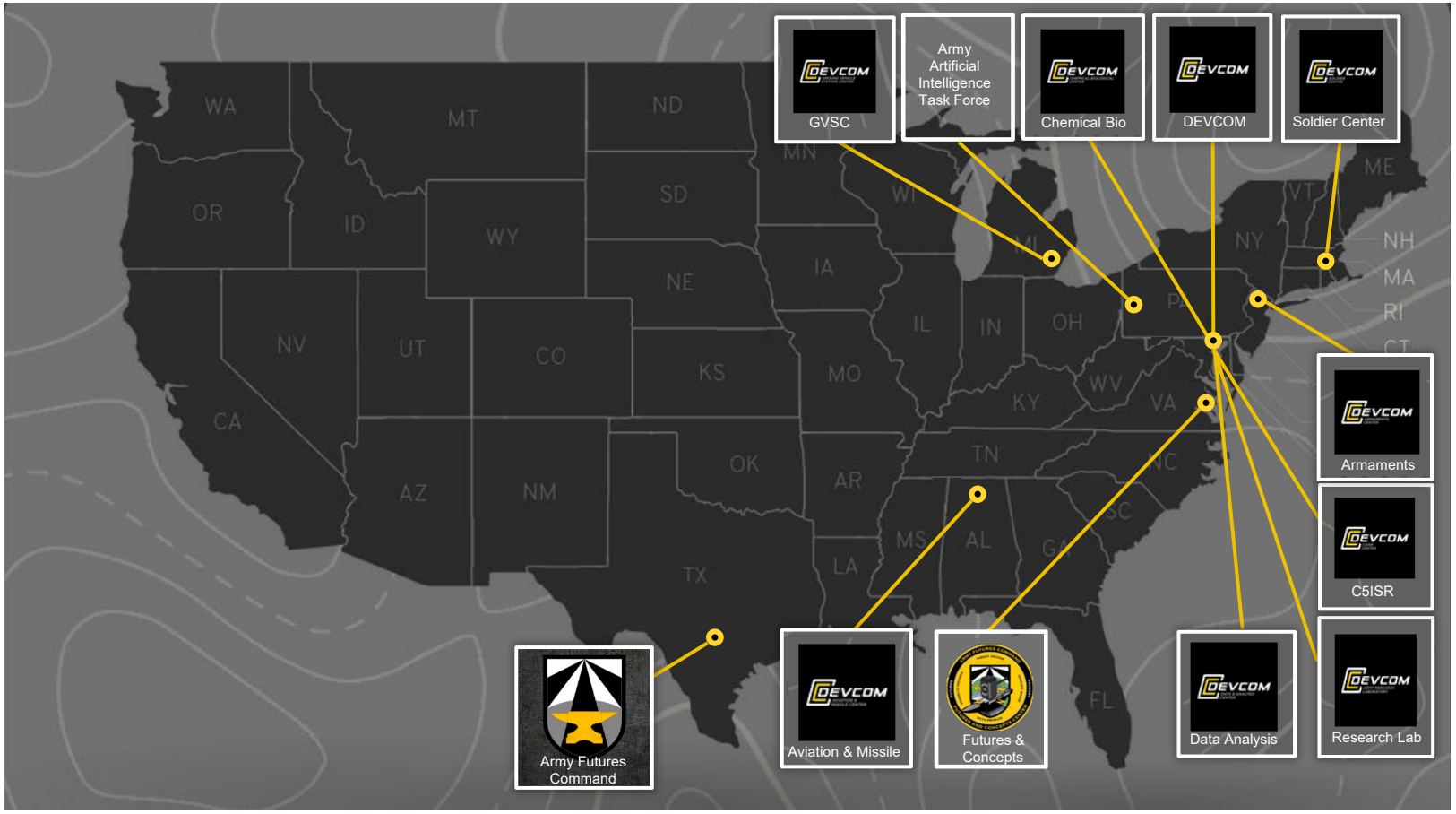
ARMY FUTURES COMMAND



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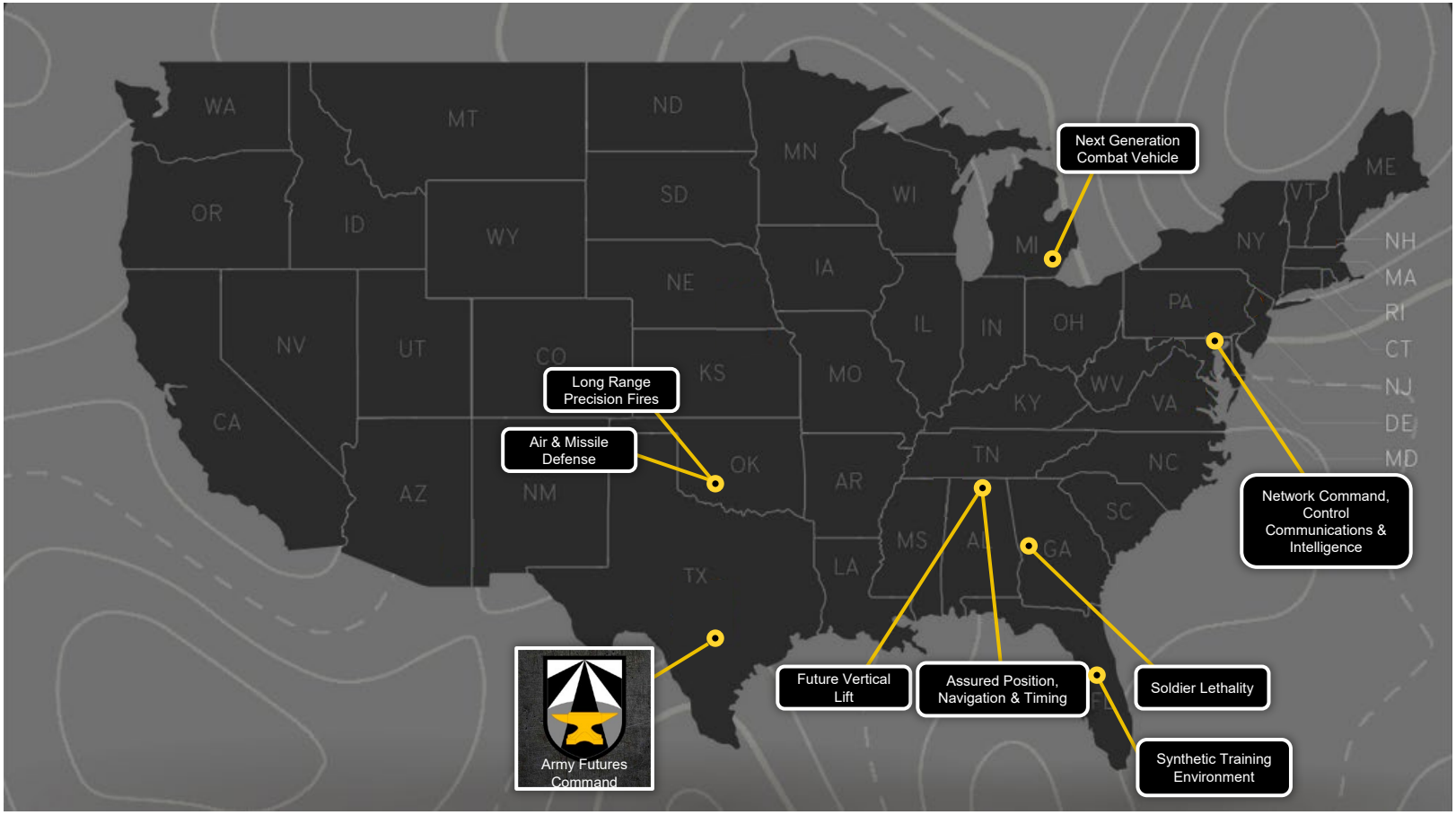
CROSS-FUNCTIONAL TEAMS



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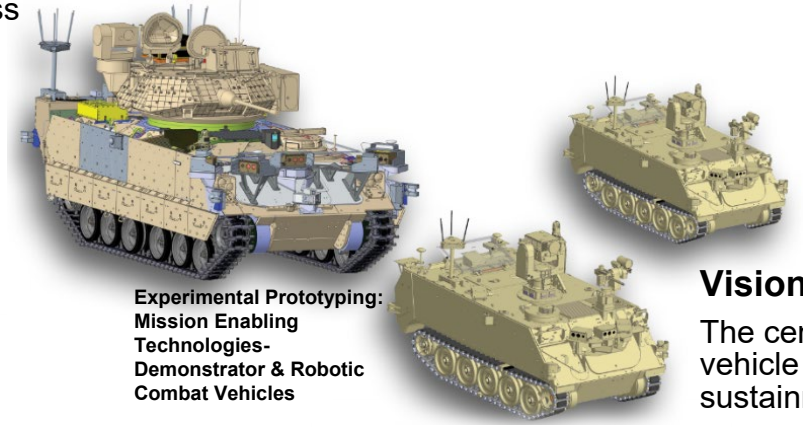
GVSC MISSION AREAS & VISION

Mission

Develop, integrate, demonstrate, and sustain ground vehicle systems capabilities to support Army modernization priorities and improve readiness



Experimental Prototyping: Mission Enabling Technologies-Demonstrator & Robotic Combat Vehicles

Vision:

The center of excellence for DoD ground vehicle systems modernization and sustainment solutions

GVSC's Four Primary Mission Areas

1) Develop and integrate the next generation technologies to ensure ground system dominance
2) Provide world class functional engineering expertise to our PEO CS&CSS and PEO GCS partners
3) Provide world class sustaining engineering expertise to our TACOM partner
4) Recruit and develop the engineering talent to achieve the above

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SUPPORT TO OUR PARTNERS

AFC CFTs
- Long Range Precision Fires
- Next Gen Combat Vehicles
- Future Vertical Lift
- Network Command, Control Communication & Intelligence
- Air & Missile Defense
- Soldier Lethality
- Assured Position, Navigation & Timing
- Synthetic Training Environment

Support Modernization

- Develop and Integrate Technology Aligned with the Army's Cross Functional Teams (CFTs)

PEOs

Support Acquisition

- Provide Functional Engineering Expertise
- Develop & Demonstrate Advanced Technology Upgrades
- Support Acquisition Programs with Modeling, Simulation, and Testing

TACOM
Depots & Arsenals

Support Readiness

- Provide Sustaining Engineering Expertise to Depots & Arsenals
- Support Obsolescence Management & Mitigation
- Provide Technical & Problem Solving Support

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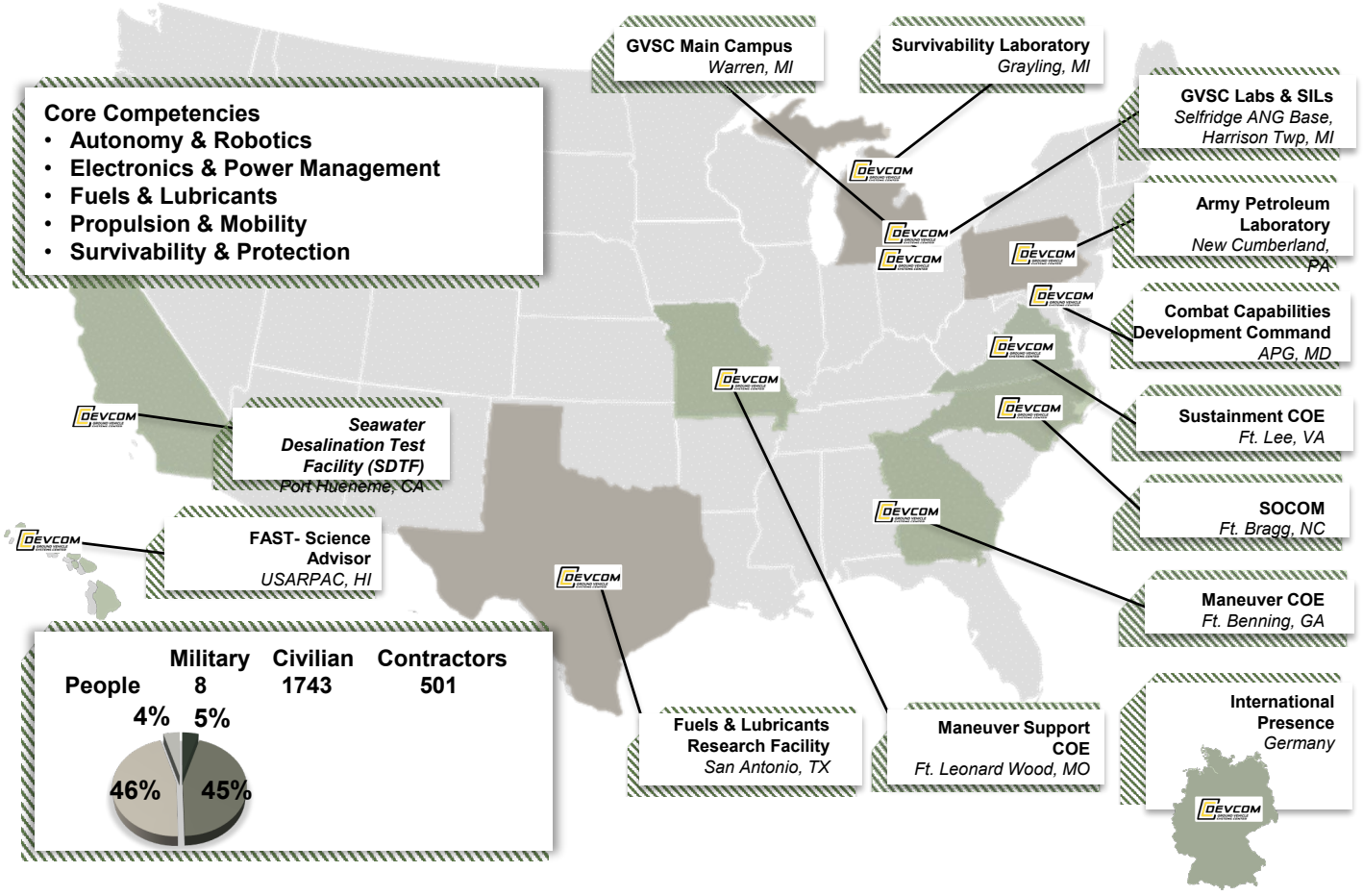
GVSC PEOPLE & INFRASTRUCTURE



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AGENDA

0900	Welcome and Opening Remarks – Mr. John Jolokai, ACC-DTA Mr. Jeffrey Jaster, GVSC
0920	Agenda and Ground Rules
0925	GVSC Presentation of Functional Areas and Requirement Mr. Phillip Wolanin, Software Engineering Center Mr. Edward Andres, Vehicle Electronics & Architecture Mr. Rakesh “Rocky” Patel, Ground Vehicle Robotics
1010	Break
1020	ACC-DTA Presentation of Notional Milestone Schedule, Contract Structure, Facility Requirement, and Anticipated Evaluation Criteria Ms. Kimberly Nelson, Contracting Officer, ACC-DTA
1100	Lunch – GVSC and ACC-DTA convene
1230	Answer Session
1330	Closing Remarks – Mr. Phillip Wolanin

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GROUND RULES

- Today's briefing is for informational purposes and to facilitate meaningful feedback from Industry.
- Content is subject to change; nothing said or shown today is binding on the Government.
- Request for Proposal (RFP) language takes precedence over anything presented today.
- Instructions for obtaining the briefings presented here and future updates will be posted to SAM.gov
  - It is the responsibility of the contractor to monitor the website for announcements/changes.

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GROUND RULES (continued)

- Questions are desired and encouraged.
  - Questions shall be submitted via the MS Teams chat function at any time during the briefing. All questions are anonymous unless the questioner self-identifies. ** Please do NOT enter company name in the body of the question.** No party outside of the Government will see the questions as they are submitted.
  - The Government will answer as many questions as possible during today's session. The Government also reserves the right to not provide responses to all questions submitted.
  - A consolidated list of questions and answers will be posted to SAM.gov following the one-on-one sessions within 10 business days.
- Comments and other feedback also encouraged.
  - The Government will consider, but not publically respond to comments only.

TES CONTRACT SCOPE AND WORKLOAD OVERVIEW

Mr. Phillip Wolanin, Software Engineering Center

Mr. Edward Andres, Vehicle Electronics & Architecture

Mr. Rakesh “Rocky” Patel, Ground Vehicle Robotics

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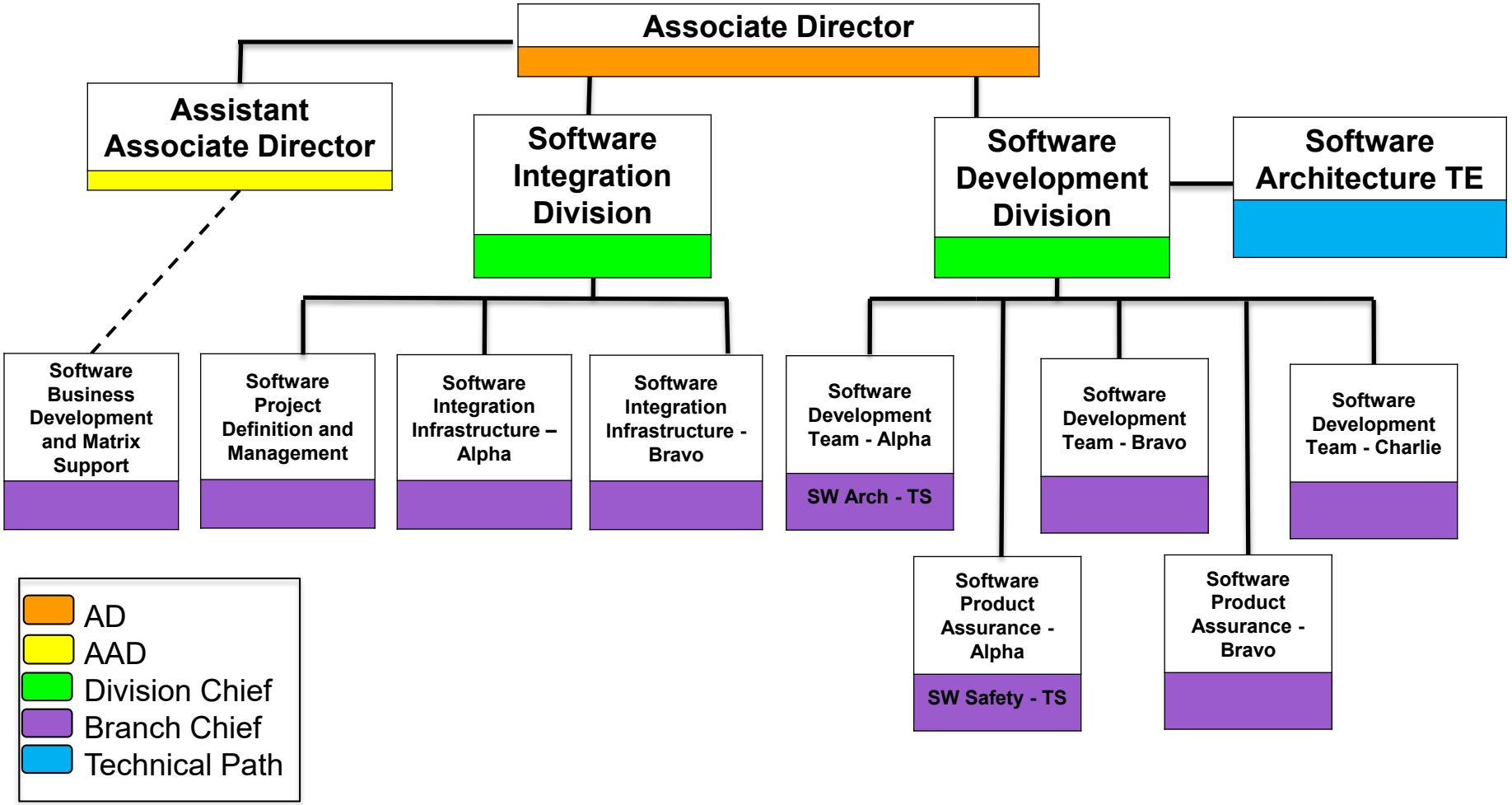
SOFTWARE ENGINEERING CENTER (SEC)



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SOFTWARE ENGINEERING CENTER

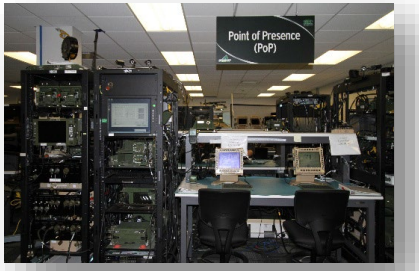
Providing critical software acquisition and post production software support for Ground Combat and Combat Support Systems

Workforce

- Civilians
- Support Contractors
  - Multiple contract & industry partners

Facilities

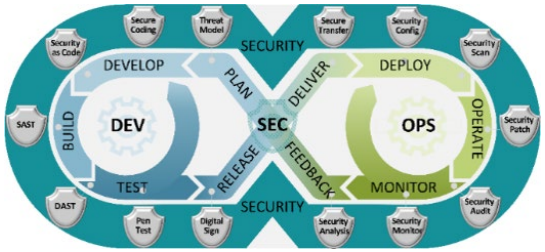
- 70,000 square feet of available workspace
  - Locations at DTA, SANGB & Huntsville
  - High bays with tactical equipment essential for systems integration, software engineering and testing
  - Cleared for CCI equipment usage and storage
  - Existing support contracts in place to surge offsite as needed



Key Leader Vehicle Software Development Lab

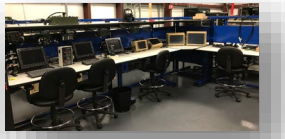
Core Competencies

- Software Engineering Technical SME's
- Software Fielding SME's
- Software Project Engineering
- Software Architecture
- Software Process Improvement
- Software Development
- Software Test Engineers
- Product & Process Quality Assurance (PPQA) Engineers
- Software Lab & Tool Support
- Software Assurance
- Software Safety
- Software Configuration Management (CM)
- Embedded Software Engineering
- Independent Verification & Validation (IV&V)



Programs Supported

Abrams V2 & V3
Armored Multi-Purpose Vehicle
Army Watercraft Systems
Bradley
DS-Viper
Early Entry Fuel Distribution System
Joint Assault Bridge
Joint Light Tactical Vehicle
M-ATV Key Leader Vehicles
M1A1 Embedded Diagnostics
Mission Enabling Technology – Demonstrator
Mobile Protected Firepower
Optionally Manned Fighting Vehicle
Petroleum Quality Analysis System
Prognostic Predictive Maintenance
Robotic Combat Vehicle
Route Clearance Systems
Self Propelled Howitzer Systems
Stryker Family of Vehicles
Unmanned Ground Vehicles
Vehicle Protection Systems



Joint Light Tactical Vehicle Software Integration Lab

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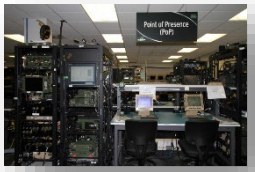
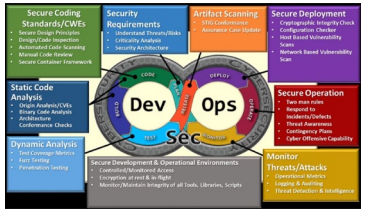
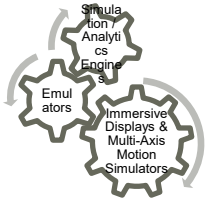
SEC STRATEGIC CAPABILITY PROGRESSION







2021

2025

2030

Near Term Capabilities:

- System Management
- Software Development and Sustainment
- Software Acquisition Support
- Software and System Integration Lab Environments
- Software Interoperability Certification Testing
- System Testing and Integration Engineering
- Software Configuration Management
- Information Assurance
- Interoperability Engineering
- Embedded Systems Engineering
- Tools and Lab Environment Engineering
- Software Product Quality Assurance
- Software Architecture
- Software Requirements Definition
- Software Safety
- Software Material Release
- Software Process Development

Mid Term Capabilities:

- Software Test Simulation
- Software Test Automation
- Independent Verification & Validation
- Open Software Architecture
- Software Product Lines
- Ground Vehicle System Safety Board
- DevSecOps

275% Expected growth

Far Term Capabilities:

- Vehicle Agnostic SIL
- Immersive Soldier engagement environment (i-see)

Software Center Rendering

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SEC – SOFTWARE SUPPORT

- **Enhanced Software Readiness across PEO CS&CSS and PEO GCS Programs of Record**

MRAP Integrated Bridge

M1200 Knight

JLTV

Petroleum Quality Analysis

Main Battle Tank Embedded Diagnostics

Bradley

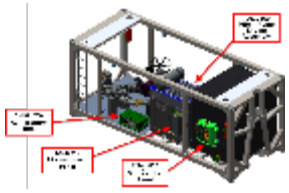
Stryker PM Support

Self-Propelled Howitzer

AMPV

LAV

Abrams


Early Entry Fuel Distribution System

MTRS-II, CRS-I, CRS-H, SMET, M160

JAB/ABV

- **GVSC Software Development and Integration**
  - MET-D, MAPS, Autonomous Systems, Etc.

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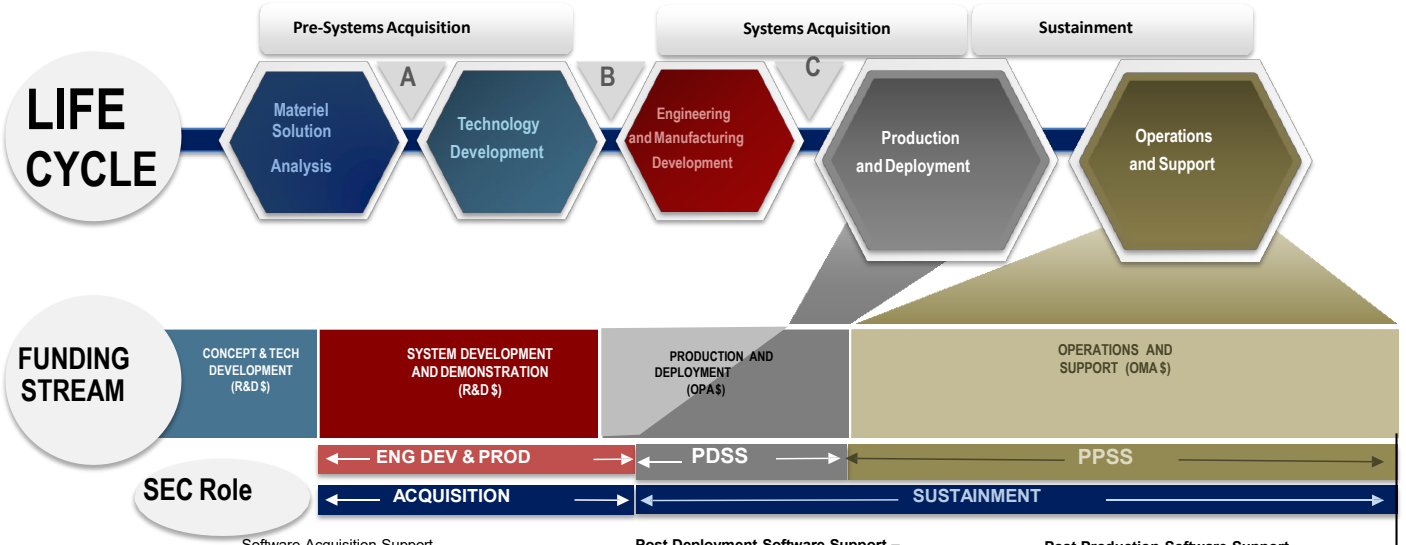
FUNCTIONAL SUPPORT AREAS

Software Development	Software Product Assurance	Software Business Development and Matrix Support	Software Project Definition and Management	Software Integration and Infrastructure



Software Acquisition Support –
SEC provides software engineering technical expertise as matrix employees to PMs. This support includes defining software requirement, overseeing software testing, performing configuration management and guiding acquisition decisions to reduce life- cycle support costs.

Post Deployment Software Support –
From the point a system is provided to

the First Unit Equipped (FUE) to the end of production (there are exceptions – this is the general rule). Funding is the responsibility of the PM and generally funded with OPA or OMA.

Post Production Software Support –
Starts first year after production ends

until item divested by the Army. Funded with OMA from Depot Maintenance (Army G4) accounts.

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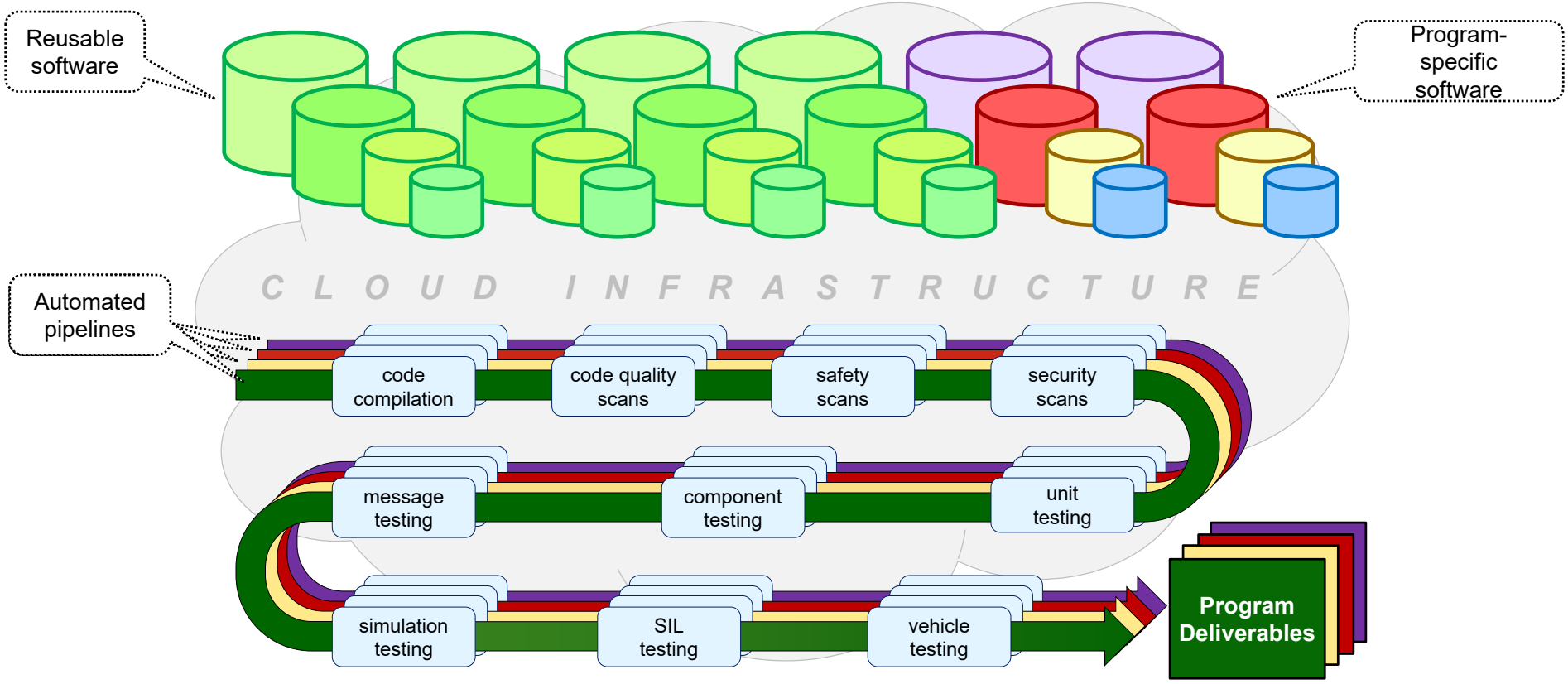
GVSC SOFTWARE FACTORY: PRODUCTION SOFTWARE



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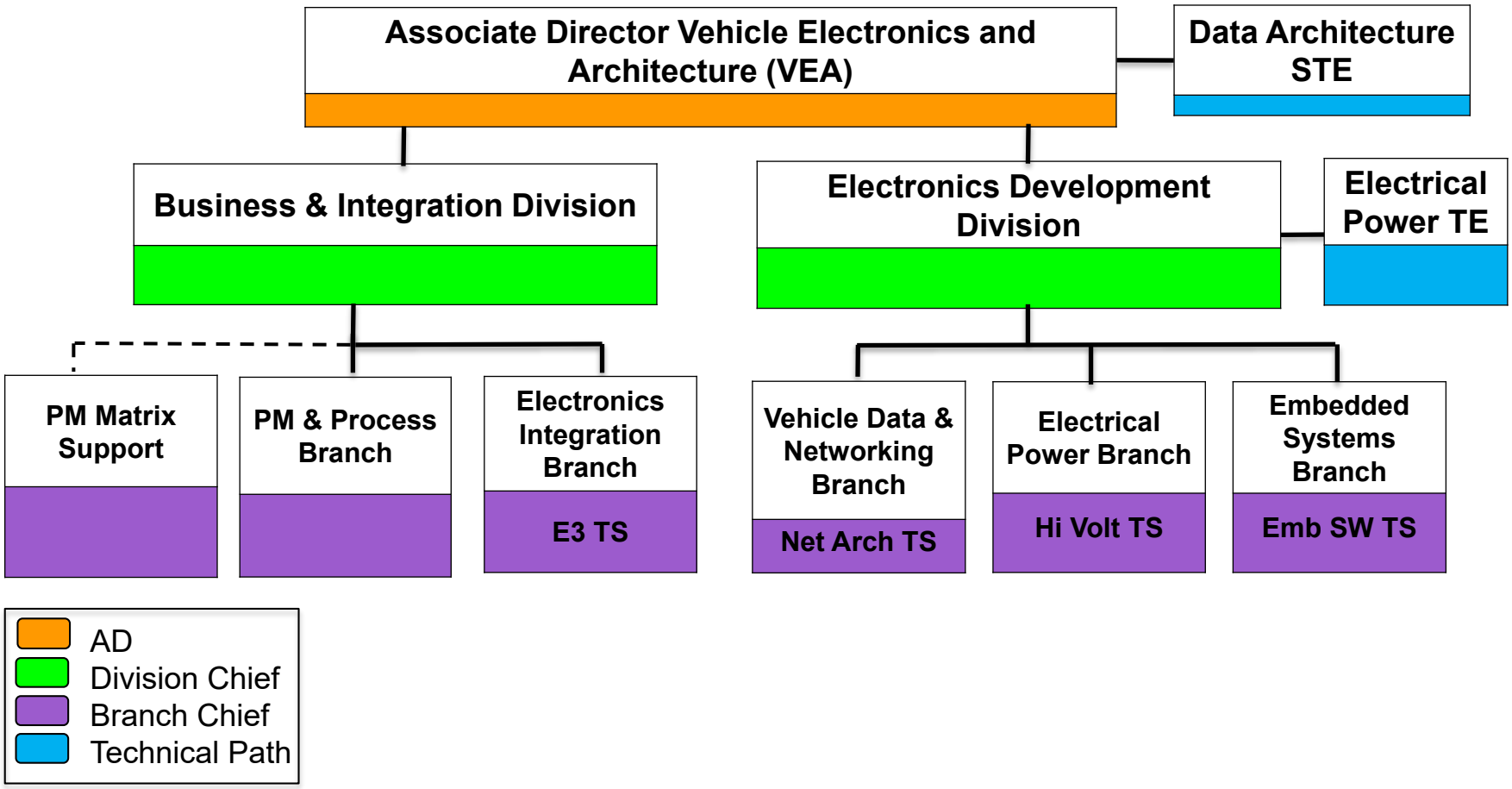
VEHICLE ELECTRONICS & ARCHITECTURE (VEA)



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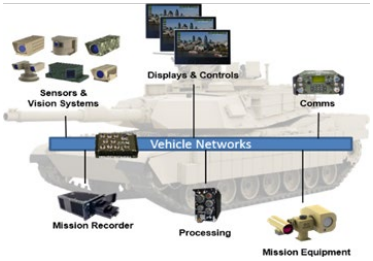
VEA ENGINEERING SERVICES

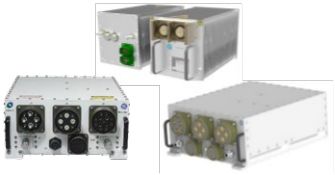
VEA Engineering Support Mission

- VEA leads cutting edge R&D efforts in the development of power & data network system architectures, designs and implementations for current and future force capabilities.
- VEA provides collocated matrix engineering support to our PM customers and also provides non-collocated engineering support services.
- VEA services include:
  - Vetronics lifecycle acquisition support
  - C5ISR electronics & network integration
  - Vetronics architecture development (MOSA)
  - Power & data network system design & analysis
  - Power & data spec/standards development
  - Electromagnetic Environmental Effects (E3) - EMI/EMC
  - Embedded systems software engineering
  - Independent Verification & Validation (IV&V)
  - Electronics tech evaluations
  - Fielding and field support

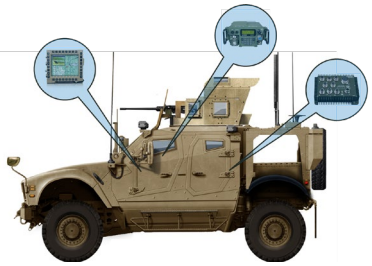
Vetronics



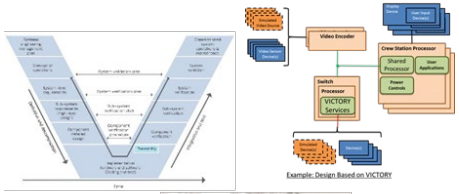
Electrical Power Distribution & Management



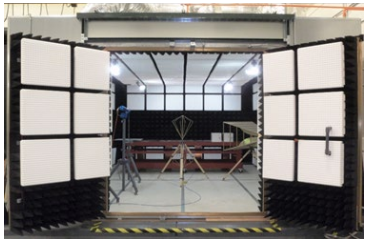
C5ISR & Network Integration



Engineering Services



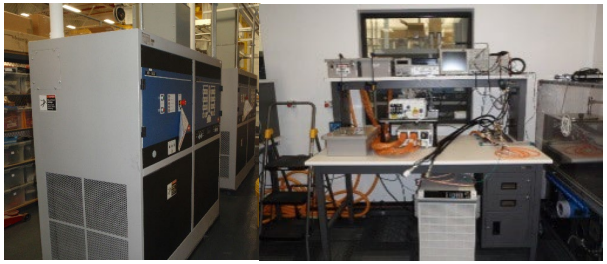
EMI Analysis & Test



SYSTEMS INTEGRATION & TECHNOLOGY HANGER (SITH)

The SITH is VEA's development laboratory. The SITH has 3140 sq. ft. of environmentally-controlled lab space. It's a unique facility with numerous benches for hardware & software development, high bay space w/ 4T crane for vehicle integration and test, and a semi-anechoic EMI test chamber. Additionally, it contains (2) AV-900 ±750VDC/900A power supplies for a high power distribution capability for 600VDC power electronics work.

Power Bench

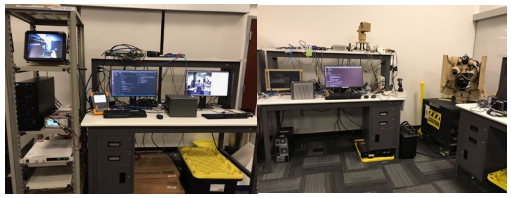


Supports electronics development. Contains a high power distribution capability for 600VDC work on benchtop or in the EMI chamber.

EMI Chamber

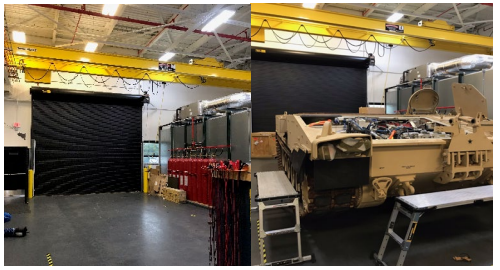
LQMS, A2LA, ISO 17025 compliant. Supports subsystem development EMC/EMI testing IAW MIL-STD-461 for Army Ground Vehicles to include high voltage components

Data Networking & Video Distribution Benches



Supports electronics development. Supports MOSA and high bandwidth video and data distribution networks and architectures.

High Bay w/ Crane



Supports the ability to conduct vehicle integration activities and electronic and power component installation.

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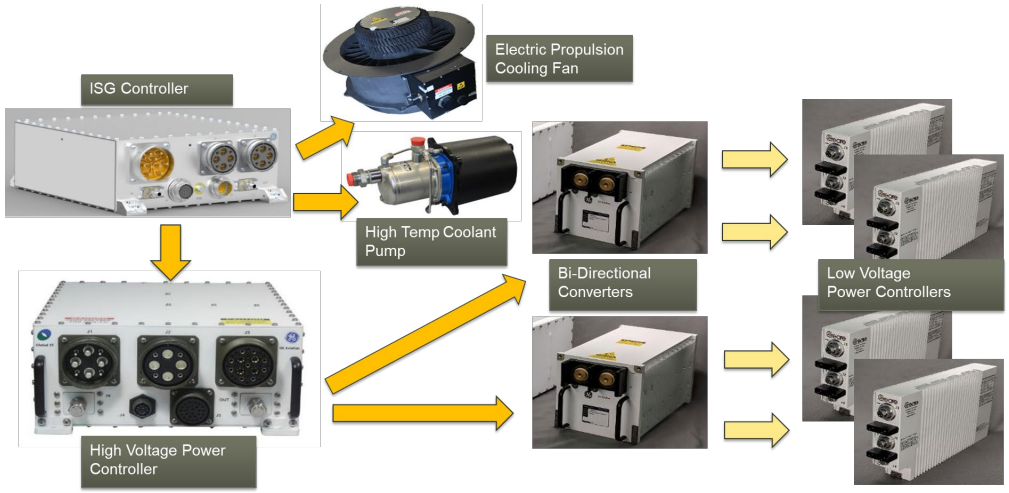
600VDC ELECTRICAL POWER ARCHITECTURE

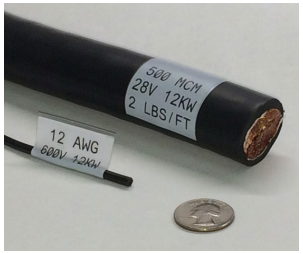
Why High Voltage?

- Conventional power generation no longer sufficient
- Higher voltage leads to lower current
- Lower current has dramatic effect on lowering power loss and cable sizes
- 28Vdc has a practical limit to around 25 – 30 kW of power
- 600Vdc has a practical limit of around 500 kW of power
- Supports Hybridization or electrification and green initiatives



Supports New Capabilities

- Energy Weapons
- Active Defense/Protection
- Silent Mobility (size and weight dependent)
- Micro Grid (vehicle powers TOC or TAC)
- Electrification of hydraulic loads to improve efficiency



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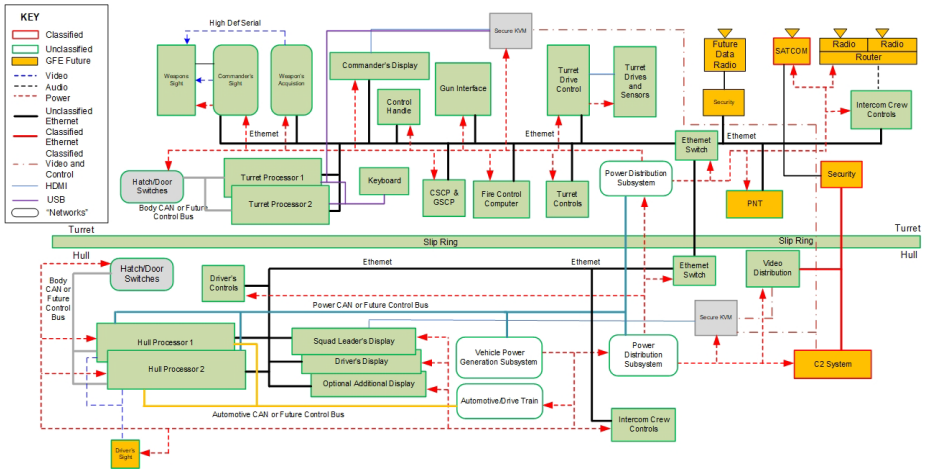
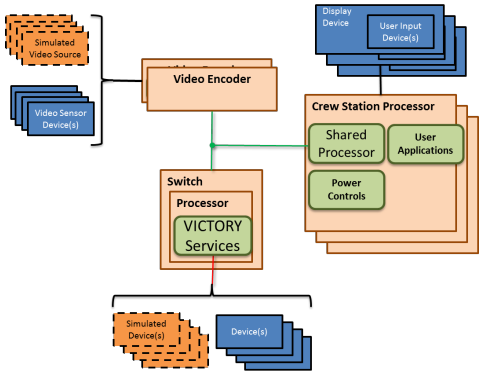
VEHICLE DATA NETWORK ARCHITECTURE

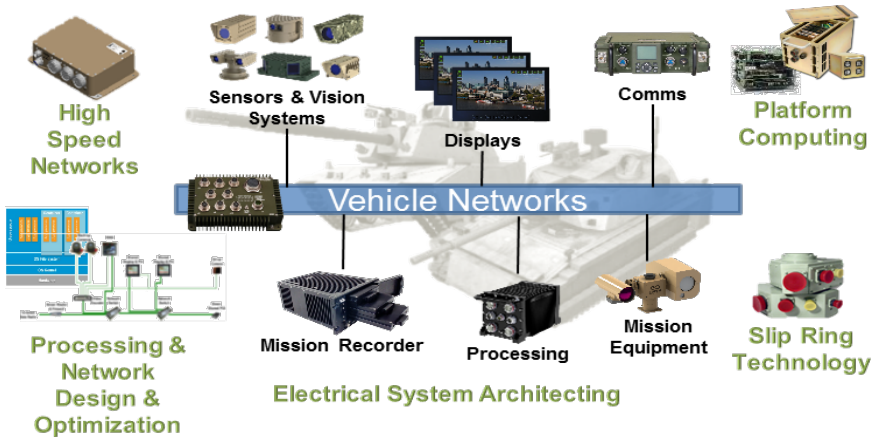
Objectives

- Demonstrate a holistic combat vehicle architecture for management of data, video/audio, and power
- Mitigate implementation risk of networking onboard vehicle systems
- Reduce SWAP and cab clutter
- Distribute PNT information to devices and subsystems
- Demonstrate control of C5ISR systems
- Demonstrate access control
- Reduce dependency on single suppliers
- Development of a next generation slip ring and I/O scheme





ENHANCED VETRONICS R&D



E-Vetronics is developing the following capabilities:

- Lethality Enabled Slip Ring System
- Time-Sensitive Networking
- PCI-E Video Distribution
- CMOSS PCX Chassis Development
- Smart I/O
- GCIA Architecture Enhancements

Purpose:

The purpose of the E-Vetronics program is to develop and demonstrate a military standard open architecture for combat vehicles to manage data, video, and power systems to enable future combat vehicle capabilities such as advanced protection, lethality and network systems.

Products:

- Military Standards for Ground Vehicle data, video, voice, and power architecture
- Performance specifications and component demonstrations for:
  - digital containerization to enable the use of shared reliable processing
  - networking components to enable high bandwidth and low-latency networking
  - reusable infrastructure to address the situational awareness needs for a tactically relevant environment.
- Performance specification, component development, and demonstration for advanced slip ring to support High Voltage (HV) and Low voltage (LV) power and networking

Payoff:

- The payoff is the ability to integrate advanced network, lethality and protection capabilities to existing and future platforms at an affordable cost.

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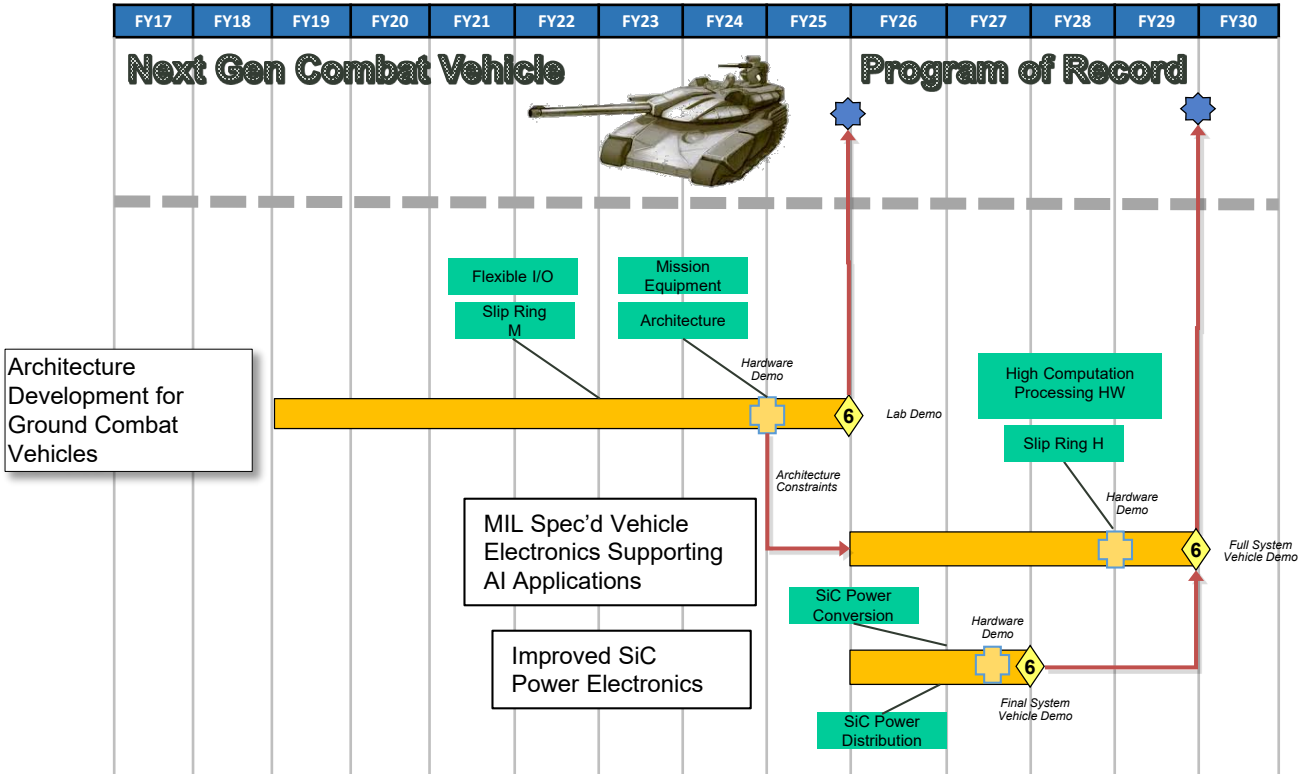
VEA TECHNOLOGY ROADMAP



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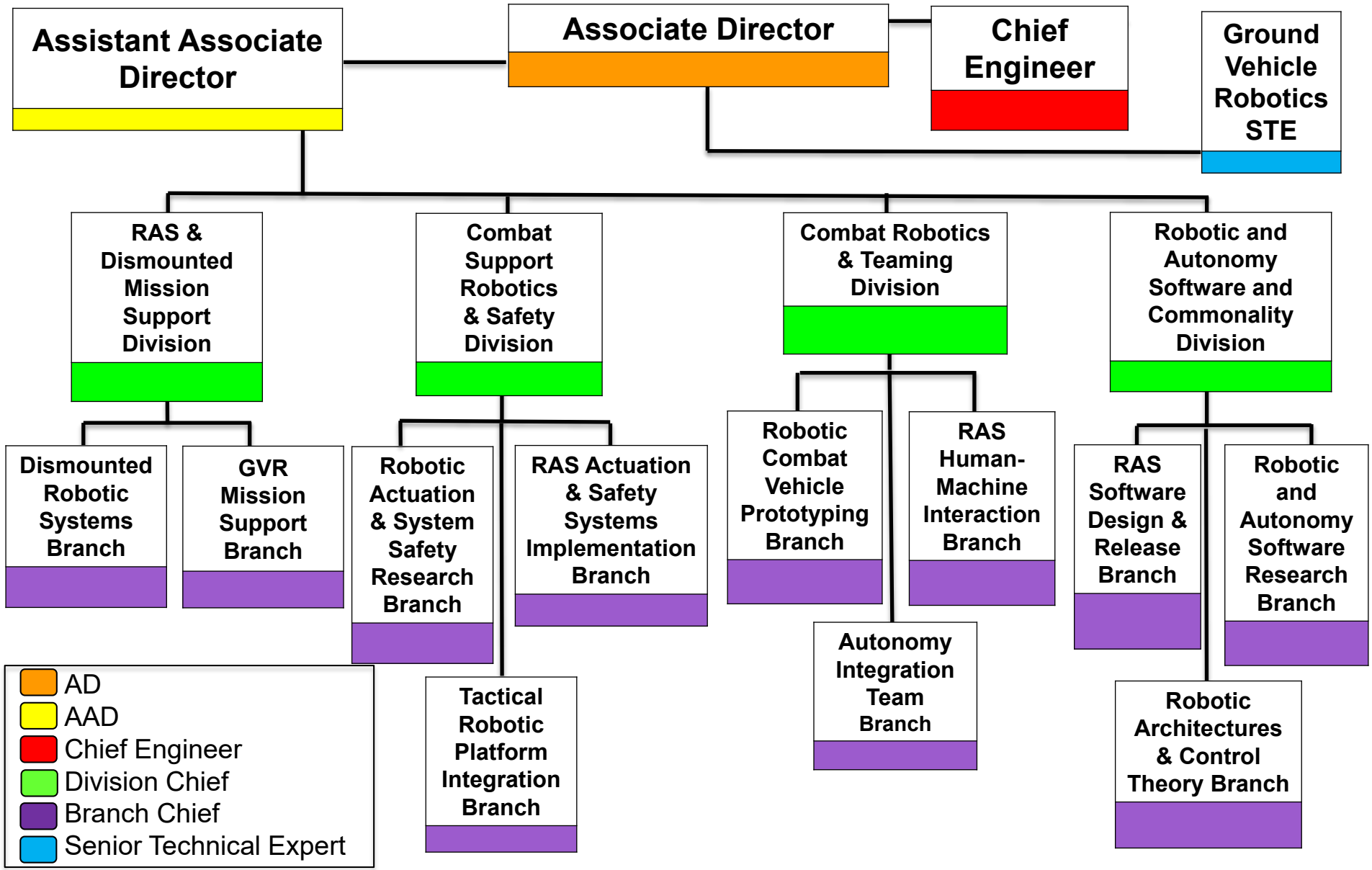
GROUND VEHICLE ROBOTICS



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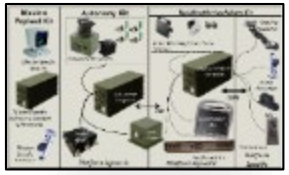
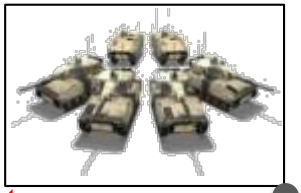
AUTONOMOUS SYSTEMS STRATEGIC CAPABILITY PROGRESSION





2015

Active Safety Driver Assist Appliqué Kits (2015)

2020

Extend the Reach of the Warfighter (2020)

2025

Autonomous Convoy Operations (2020-2025)

2035

Combined Arms Maneuver (2030-2035)

Increasing Capability and Difficulty

Near Term Capabilities

Fully Integrated Kitted Solutions

- *Fault-Tolerant Architectures*
- *Enable unmanned cargo delivery*
- *Enhanced Platoon, Squad, and Soldier situational awareness.*
- *Autonomy augments the Solider*

Mid Term Capabilities

Autonomy Augmented Legacy Systems

- *Remote Lethality*
- *Semi-Autonomous Mobility*
- *Man/Unmanned Teaming Capability on legacy systems*
- *Autonomy as a force multiplier*

Far Term Capabilities

Purpose Built Unmanned Platforms

- *Advanced machine learning*
- *Enable manned and unmanned teaming in both air and ground maneuver through scalable sensors, scalable teaming, Soldier-robot communication, and shared understanding*
- *Autonomous system operates as team member*

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KEY PROGRAMS BUILDING THE FOUNDATION FOR GROUND ROBOTICS

DEVCOM GROUND VEHICLE SYSTEMS CENTER

Built on Open Autonomy Architecture

AGVRA
Autonomy Behavior "App Store"

ROS-M

IOP

GMSA

Logistics Resupply

Autonomous Ground Resupply

Develop and demonstrate an improved and optimized distribution system that integrates new & emerging technologies across the full spectrum of operational and tactical supply movement operations.

Expedient Leader Follower

Rapidly delivery and issue 60 leader follower enabled PLSs to Soldiers for a one year Operational Technical Demonstration (OTD) starting 4QFY19.

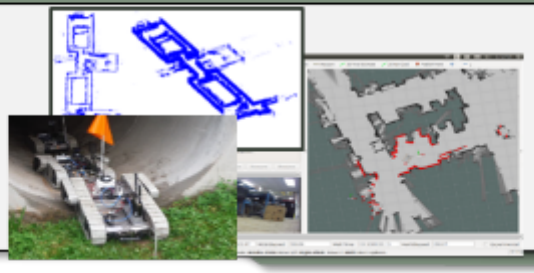
Robotic Combat Vehicles

Combat Vehicle Robotics

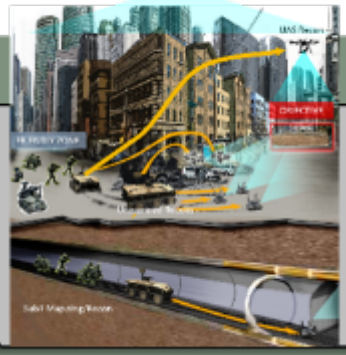
Develop/integrate technologies that enable scalable integration of multi-domain robotic and autonomous system capabilities teamed within Army formations supporting all combat warfighting functions.

Future Manned / Unmanned Teaming Formations

Robotics for Complex Missions



Development of capabilities to support urban and underground operations such as unmanned complex tunnel investigation, CBRNE missions, breaching, CEMA and reconnaissance.



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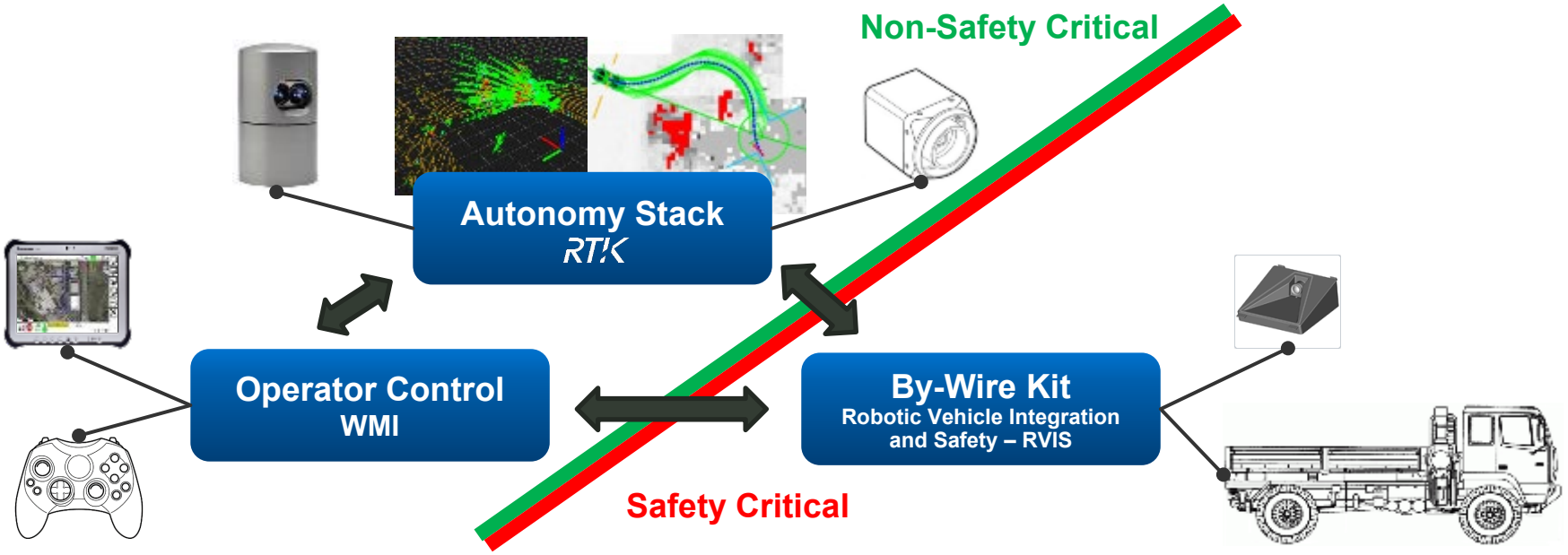
HIGH LEVEL ROBOTIC VEHICLE ARCHITECTURE

Robotic Technology Kernel (RTK)

Government-owned “library” of tested, vetted, managed, inter-compatible ROS packages which together establish a de facto common robotics “platform” and can be combined to form parts or all of an “autonomy kit/stack” for ground robots.



Warfighter Machine Interface (WMI)

Government-owned and developed, extensible user interface software for control of robotic and manned vehicles as well as their subsystems and payloads.

Safety critical system isolation strategy will allow us to move faster

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CROSS-PLATFORM MODULAR AUTONOMY

Robotic Combat Vehicle (RCV) - Light

RCV - Medium

Leader - Follower (L-F)

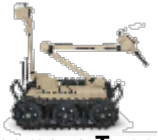
LVSR

Ground Based Anti Ship Missile

Automated ERCA Resupply

Small Multipurpose Equipment Transport (S-MET)

Common autonomy and robotic control software across numerous ground applications for the Army and the USMC



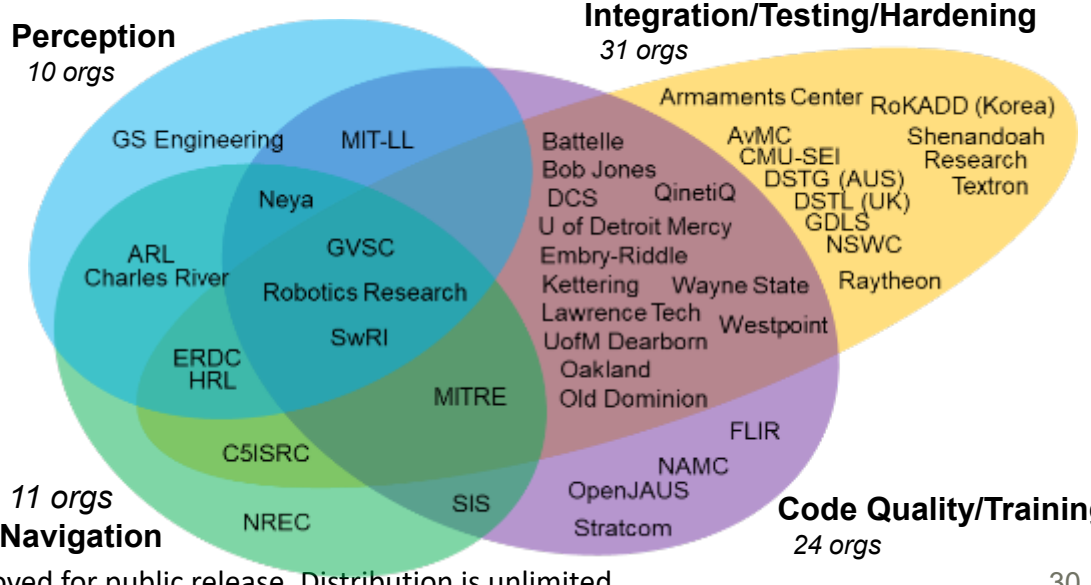
Autonomous Tunnel Exploration

Autonomous Multi-Domain Launcher

RTK & WMI

- Government owned, public/private partnership developed
- MOSA Design and implementation
- Broad industry, academia and OGA usage
- Periodic open competition brings in new vendors to create new behaviors and capabilities (6 awards in FY21)
- Ground OEMs choosing to use RTK / WMI on their robotic systems
- 3rd party validation of approach and capabilities leveraging FFRDCs

RTK Supplier Ecosystem



ARMY GROUND AUTONOMY ECOSYSTEM

RTK *is the Primary Autonomy Stack For Transitioning University, Vendor, and Government Software to multiple PoRs*

SMET

ARL Autonomy Stack

DEVCOM ARMY RESEARCH LABORATORY

non-ITAR / non-CTI

UTDD and AI2C

Other Transaction Agreements

DARPA, FFRDCs, and UARCs

RTK

TRL 4 – 6

Algorithm Fight Club

CoVeR

EET Testing Crucible

TRL 6

GVSC Autonomy Stack

RTK

EAR / CTI

SW Foundry

7+

Soldier Feedback

Leader-Follower

Programs of Record

Robotic Combat Vehicle

ERCA TMI

Autonomous MD Launcher

LiveEval LiveEval

FY SimEval SimEval FY

CoVeR Engineering Evaluation Test *(EET) is the independent technical assessment process for vetting University, Vendor, and Government Software Performance*

6.1 6.2 6.3 6.4+

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LEADER FOLLOWER ROSETTA STONE

Tactical Wheeled Vehicle (TWV) Leader Follower (LF) know simply as Leader Follower

Three major efforts:

- **Autonomous Ground Resupply (AGR): Leader Follower S&T 6.2/6.3 effort FY16-FY21**
- **Directed Requirement (DR): Expedient Leader Follower 6.4 effort FY18-FY20**
- **Program of Record (PoR): Leader Follower 6.5/OPA effort FY20-FY25**

Key system components:

By-Wire Active Safety Kit (BWASK):

- Enables a TWV to become a robot
- Hardware ~20 year life
- Components commercial and available

Autonomy Kit:

- Government owned software
- Software updates ~annually
- Hardware ~5 year life

Warfighter Machine Interface (WMI):

- Government owned software
- Software updates ~annually
- Hardware ~5 year life

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RCV-L/M FUNCTIONALITY

RCV-L Quick Specifications
- Diesel-Electric Series Hybrid
- 8,500 lbs. GVW
-- Designed by Pratt & Miller / QinetiQ

RCV-M Quick Specifications:
-Designed by Textron and FLIR Systems
-Electric Vehicle
-25,250 lbs GVW

Capability Area	RCV-L Capability	RCV-M Capability
Situational Awareness	Fixed IOP Cameras	360SA EO Sensor Modules
	PTZ Camera	PTZ Camera
E-Stop	AWSS	E-Stop
Payloads	CROWS-J	MCT-30
	Tethered UAS	Tethered UAS
	MILES	SOM XM75
		MILES
		MUG-V (FLIR)
Controllers	WMI	WMI
	RWS control grip	RWS control grip
	E-Stop Controller	MUG-V Native Controller
	Logistics Controller	E-Stop Controller
		Logistics Controller
Networks	Silvus Radios	Silvus Radios
	Agile Router	Agile Router
Autonomy	RTK	RTK
	Waypoint following	Waypoint following
	Teleoperation	Teleoperation
	Drive by Wire	Drive by Wire

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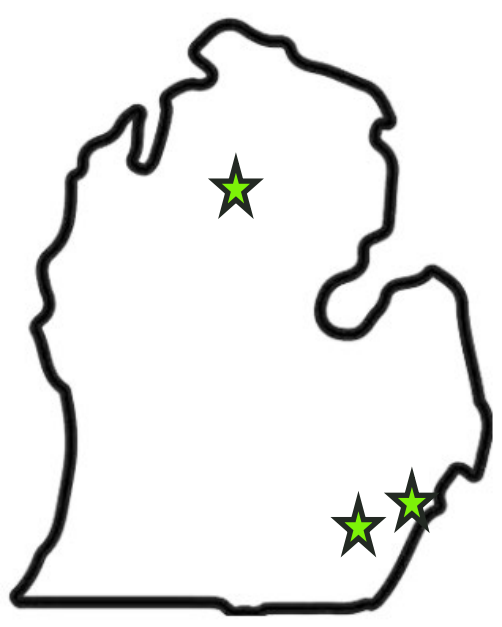
GVR LABS OVERVIEW

GVR Testing Sites in Michigan

GVR utilizes test sites at the Detroit Arsenal, Selfridge NGB and Camp Grayling NGB. Two Arsenal sites include a small two acre test track for sensor and small UGV system evaluation and a on-road off-road loop area which includes 12 acres of paved and grass area suitable for medium to large vehicles. Selfridge has an on and off road test loop with approximately 3.5 acres of area for testing UGV's and UAS systems. Camp Grayling contains numerous test site areas including live fire ranges within its 140,000 acre site for UGV and UAS testing.

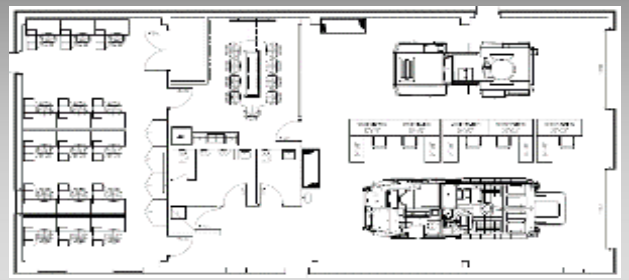


GVSC 200C - Robotics Systems Integration Laboratory (SIL)

Modeling and simulation, including hardware-in-the-loop simulations and testing/development of systems from hand portable robots to full sized combat and tactical platforms. Allows electrical and mechanical hardware design, 3D printing, fabrication and integration of modifications to existing platforms based on user requirements. Includes 3+ full sized high bays with crane access and SIL lab bench areas.

Selfridge Building 521 – Government Robotics Lab

Lab space at Selfridge with a small test area just outside the building for medium robotic vehicle testing. The lab provides 2 high bays and multiple work stations for system integration.



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Short Break

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TES CONTRACT INFORMATION

- **Ms. Kimberly Nelson, Contracting Officer**
  - Notional Milestone Schedule
  - Contract Structure
  - Facility Requirements
  - Anticipated Evaluation Criteria

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NOTIONAL MILESTONE SCHEDULE

The following information is DRAFT only and subject to change:

Actions	Projected Date
Draft RFP Release (Sections C, H, and Labor Categories) Draft RFP Release (Sections A through H) Updated Draft RFP	June and October 2021 January 2022 February 2022
Issuance of Solicitation	March/April 2022
Receipt of Proposals	May/June 2022
Contract Award	FY23 Early 2nd Quarter

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CONTRACT STRUCTURE

- **Indefinite Delivery, Indefinite Quantity (IDIQ) "D" Type Contract w/ Five Ordering Periods and Two Optional Ordering Periods**
  - Approximately 1,888,346 Labor Hours per Ordering Period
  - Contract Minimum: TBD
  - Contract Maximum: 13.2M Labor Hours

- **Order Pricing**
  - Labor Rates, by Labor Category, for each Ordering Period
  - Labor will be Cost Plus Fixed-Fee (CPFF)
  - Incidental Materials, Other Direct Costs (ODCs), and Travel will be Cost Reimbursement ONLY, no Fee

- **Task Orders and Task Order Projects**
  - Overarching Task Orders covering customer groups (GVR, SEC, VEA, etc.) or large project groups (Bradley support, MRAP support, AWS support, etc.)
  - Task Order Projects cover individual efforts within a customer group and exist as separate CLINs and SLINs within the Task Order (Leader-Follower, MAPS, MET-D, etc.)

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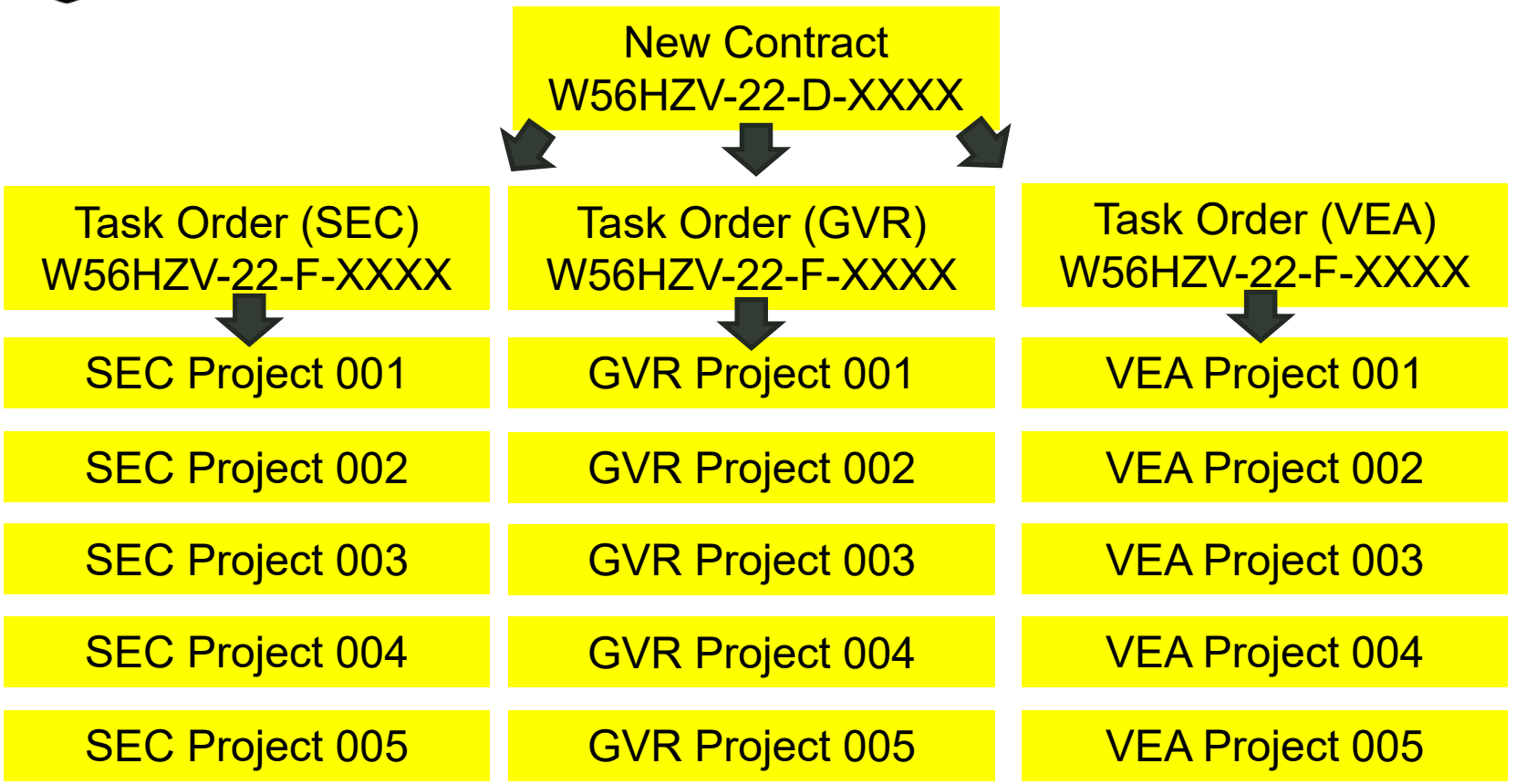
CONTRACT STRUCTURE SAMPLE



New TOs can be added by Organization or by special requirement as needed

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CONTRACT STRUCTURE (CONT'D)

- **CLIN and SLIN structure**
  - Each Task Order Project will be assigned a four-digit CLIN
  - Labor, Material, Travel, and ODCs assigned as six-digit SubCLINs by Project
  - First digit of CLIN indicates Ordering Period, remaining three digits indicate Task Order Project number

First CLIN Digit	Remaining Digits	SLIN 5th/6th
0 = Unused	000 = Base Contract Provisions	Labor SLIN XXXXAX
1 = Ordering Period 1	001 = TO Project 001	Mat. SLIN XXXXBX
2 = Ordering Period 2	002 = TO Project 002	Travel SLIN XXXXCX
3 = Ordering Period 3	003 = TO Project 003	ODC SLIN XXXXDX
4 = Ordering Period 4	004 = TO Project 004	
5 = Ordering Period 5	005 = TO Project 005	
6 = Option to Extend	006 = TO Project 006	
7 = Option to Extend	007 = TO Project 007	
8 = Unused	008 = TO Project 008	
9 = Unused	009 = TO Project 009	
	- AND SO ON -	

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FACILITY REQUIREMENTS AT TIME OF AWARD

The contractor shall have an operational facility within 30 miles or less from 6501 E. 11 Mile Road, Warren, MI 48397-5000 that meets the following requirements which are to be completed at time of contract award:

a) The facility must contain three distinct vehicle bay areas that are capable of supporting ground combat and/or tactical vehicles at any time for full operation, to include test, integration of mechanical and electrical components (C.4.7) and vehicle installation (C.4.17) activities:

   i. Shall be capable of storing a vehicle of at least 40 feet in length, 14 feet wide, and with at least a 3 foot perimeter access to the vehicle.
   ii. Be capable of storing, upgrading, and maintaining ground combat and/or tactical vehicles that weigh up to 60,000 pounds

b) Shall also be adjacent to System Integration Laboratory (SIL) bench space, which shall be a minimum of 300 sq. ft.
c) Shall have a garage door(s) that is at least 14 foot wide by 14 feet tall.
d) Shall have an operational facility space of at least 5,000 square feet with a minimum ceiling height of 20 feet tall and includes conference space and seating.

   i. Have workstations for at least twenty Government engineers that are a minimum of 6-foot by 7-foot and have internet connection.
   ii. Have a conference room that accommodate a minimum of 14 people with video conferencing (a camera and MS Teams) capability.

e) Shall have an overhead mounted crane capable of lifting a minimum of (4) tons.
f) Crane shall have a lifting height of at least 16 feet above floor level.
g) Each vehicle bay shall have a vehicle exhaust removal system capable of evacuating all of the exhaust occurring from a vehicle ejecting 700 Cubic Feet per Minute. The exhaust system shall include a flexible hose at least 5.5 inches in diameter which can reach vehicle positions on the ground up to 14 foot elevation from the middle to rear of the vehicle bay, with suction ends able to withstand 600 degrees Fahrenheit exhaust temperatures without deformation.
h) Each vehicle bay shall be capable of providing at least 300 amps of 28 Volts Direct Current (VDC) power to the NATO Slave connector on the vehicle and be capable of providing 208 volt 3 phase power up to 50 (Kilovolt Ampere) KVA.

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FACILITY REQUIREMENTS DOCUMENTATION - PROPOSAL

In order to be eligible for award, the offeror shall meet the following requirements at time of contract award. The offeror shall provide the following acceptable evidence to demonstrate it can meet the following facility requirements at time of contract award:

1) Physical address and CAGE code (if applicable) of facility

2) Proof of ownership of proposed physical address. If not owned by the prime offeror, the offeror shall also provide a copy of an actual lease agreement or contingent lease agreement for use of proposed building. The lease agreement must include the following:

   a. Include the physical address of the proposed operational facility
   b. State the prime offeror has right of first use of the facilities for performance of the contract resulting from this RFP W56HZV-22-R-0003 at any time necessary to perform in accordance with the individual WDs
   c. Be valid for the full duration of the contract
   d. Be signed and dated by both parties

3) Provide a certification that the offeror's proposed operational facility meets the requirements above.

4) Provide schematics and drawings of the proposed facility that demonstrates the layout and conformance to the following requirements:

   a. Three vehicle bays, space claim for three theoretical vehicle that are each 40 ft. long and 14 ft. wide, SIL bench space, garage door(s), crane, 20 workstations, and conference room space/seating for 14 people.

The Government may elect to consider data obtained from internal and external sources other than the offeror's proposal. If the Government has reason to question the validity of the evidence provided by the offeror, it may result in the offeror being determined ineligible for award.

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FACILITY REQUIREMENTS
24 MONTHS AFTER AWARD

The contractor shall provide the following vehicle bay requirements to be completed no later than 24 months after contract award.

- Be capable of handling and storing military Communications Security (COMSEC) equipment including radios IAW AR 380-40, Chapter 8, Controlled Cryptographic Item (CCI) handling, shipping, storage, and use chapter. The contractor shall apply for COMSEC clearance no later than five days after contract award.

- Be capable of handling and safeguarding information and equipment IAW the DD Form 254, Attachment 0008.

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ANTICIPATED EVALUATION CRITERIA

- In addition to Cost/Price and Small Business Participation, the Government is also considering criteria that may involve the following:

  – Technical Experience
  – Sample Tasks
  – Management

- **Basis for Award:** The Government intends to award a Single Award, IDIQ, CPFF Contract. An award will be made to the offeror whose proposal represents the best value to the Government in accordance with the solicitation criteria, and is eligible for award. Proposal selection will be made utilizing the source selection trade-off process, considering the evaluation Factors and their relative order of importance, to identify the proposal which represents the best value and is most advantageous to the Government.

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Lunch Break

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Answer Session

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CLOSING REMARKS

- **Mr. Phillip Wolanin** – Division Chief, Software Integration
  Software Engineering Center

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