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Enabling Land Dominance for America's Warfighters
PEO GCS Portfolio Overview

**Armored Fighting Vehicles**
- Bradley Fighting Vehicles System
  - A3; ODS-SA; ODS*
  - 4 Mission Roles:
    - M2A3 Infantry Fighting Vehicle (IFV)
    - M3A3 Calvary Fighting Vehicle (CFV)
    - Bradley Fire Support Team (BFIST)
    - Engineer Vehicle
- MLRS Carriers (Managed for PM FAL by PdM Bradley)
- Paladins / FAASVs
- FMS M2A2 Saudi Arabia

**Stryker Brigade Combat Team**
- Flat Bottom Hull (FBH) Strykers
- Double V-Hull (DVH) Strykers
- 17 Variants (10 FBH and 7 DVH):
  - Commander’s Vehicle (CV & CVV)
  - Medical Evacuation (MEV & MEVV)
  - Infantry Carrier (ICV & ICVV)
  - Engineer Squad (ESV & ESVV)
  - Mortar Carrier (MCV & MCVV)
  - Anti-Tank Guided Missile (ATGM & ATVV)
  - Fire Support Vehicle (FSV & FSVV)
  - Mobile Gun System (MGS)
  - NBC Reconnaissance (NBCRV)
  - Reconnaissance Vehicle (RV)
  - Armored Knights

**Main Battle Tank Systems**
- Abrams Tanks
  - M1A2 SEPv2; M1A1 SA
- M88 Recovery Vehicles
  - M88A1; M88A2
- FMS Abrams Variants
- FMS M88A2 Recovery Vehicles

**Armored Multi-Purpose Vehicle (AMPV)**
- Armored Multi-Purpose Vehicles
- 5 Mission Roles
  - General Purpose (GP)
  - Mortar Carrier Vehicle (MC)
  - Mission Command (MCmd)
  - Medical Evacuation Vehicle (ME)
  - Medical Treatment Vehicle (MT)

**MLRS Carriers (Managed for PM FAL by PdM Bradley)**
- Paladins / FAASVs
- FMS M2A2 Saudi Arabia
“The Iron Triangle Challenge”

Lethality

Mobility

Survivability

Mission Command

No capability can be adjusted in isolation

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Recent Past – Focus Survivability

Tank Urban Survival Kit (TUSK)

- Loader’s Armored Gun Shield II (LAGS)
- Rear camera
- Stabilized Weapon Stations
- Mine Resistant Driver Seat
- Loader’s Thermal Weapon Sight
- Abrams Reactive Armor Tiles I & II
- TC Shade
- Abrams Belly Armor
- Universal Headrest Bracket
- Weldments for Mine Resistant Driver Seat
- Weldments for Abrams Reactive Armor Tiles II Turret
- Weldments and cable for Counter Sniper/ Anti-Materiel Mount

Bradley Urban Survivability Kit (BUSK)

Stryker Survivability

- Mine Roller Adapter Kit (MRAK)
- SLAT Armor
- Reactive Armor Tiles
- CREW
- Hull Protection Kit
- Tire Fire Suppression Kit
- Blast Mitigation Kit
- SRAT II Kit

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Current Priorities – Restore SWAP-C & Mobility

Abrams M1A2 SEP v3

ECP 1a (Power)
- Network Compatibility
- M1024 (Mission Critical)

Power Generation/Distribution
- Battery Monitoring System
- Increased Ammunition Armor
- Triple Ring

Line Replaceable Modules (LRM)
- Mission Control Unit
- Turret Control Unit
- Hull Control Unit
- Commander's Display Unit
- Driver's Control Panel
- Gunner's Control Panel
- Common High Resolution Display

Sustainment
- Auxiliary Power Unit

Lethality
- Ammunition Data Link to support new Tank rounds

Protection
- CHEW (v4)

Lighting
- Vehicle Health Management System

ECP 1b (Lethality)
- Improved Commander's Independent Thermal Viewer (CITV)
- XQHN FLIR
- Laser Range Finder
- Laser Pointer
- Color Camera

Improved Gunner's Primary Suit
- XQEN FLIR
- Improved LWR
- Color Camera

Advanced Multi-Purpose (AMP) Round Integration

Metrology/Sensor for Improved Firing Accuracy

Enabling Enhancements
- Improved on-board diagnostics
- On-board Video Capturing
- Continued architecture standardization via Victory Architecture Compliance
- Integrated MIL-STD-TECS

ECP 2 (Network)

Power Train
- XQHN FLIR

Enabling Capabilities
- Improved M240, M240B, and M240C

Accelerated Technologies
- 24V Power Interface System

Enhancements
- 120V power and drop-in CO2 canister
- Enhanced Tracking

Commander Independent Weapon System

Bradley A4

ECP 3b (Lethality)
- Commander's Independent Viewer (CV)

Power Train
- XQHN FLIR

Enabling Capabilities
- Improved M240, M240B, and M240C

Accelerated Technologies
- 24V Power Interface System

Enabling Enhancements
- 120V power and drop-in CO2 canister
- Enhanced Tracking

Commander Independent Weapon System

AMPV

Common Powertrain, Suspension, Driver’s Station and Commander’s Station

Stryker ECP

ECP 1 Approach:
- Mitigate mobility degradation caused by survivability improvements
- Address vehicle space, weight, power and cooling (SWAP-C) challenges that are further impacted by addition of the Network

Engine Upgrade
- 930 hp engine to buy back mobility power

Chassis Upgrades
- Mitigated increased Gross Vehicle Weight (GVW) (599-605 lbs)
- Optimized Cgline for 450 hp

Electrical Power Upgrade
- 970 Amp electrical power generation
- Solid state distribution system

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The Changing World Landscape and Leading Threat Actors

- Re-emergence of Peer Threat - Russian Behavior More Provocative and Aggressive
  - China, Iran, North Korea, Non-State Actors, Terrorism
- Challenges to European Sovereignty
- Traditional, Asymmetric, and New Threats Continue to Challenge Our Forces
- Need for Heavy forces and Main Battle Tank Systems not Diminished

“Moscow’s military foray into Syria marks its first use of significant expeditionary combat power outside the post-Soviet space in decades. Its intervention underscores both the ongoing and substantial improvements in Russian military capabilities and the Kremlin’s confidence in using them as a tool to advance foreign policy goals. Despite its economic difficulties, Moscow remains committed to modernizing its military.”

James Clapper, Director of National Intelligence
Challenges to our Combat Vehicles

The consequences of innovation and increased reliance on information technology into the future will have significant bearing on how we fight and win on the next battlefield.

- “New” Threats including Cyber, hand-held electronics, tactical drones, and increased use of electronic warfare / Jamming / GPS Denial

- Proliferation of older technologies such as high-end anti-tank weapons
Rapid Developments

30x173mm Family

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Development Investments

**Abrams Lethality**

- **Improved Gunner’s Primary Sight**
  - 3GEN FLIR
  - Improved LRF
  - Color Camera

- **Advanced Multi-Purpose (AMP) Round Integration**

- **Meteorological Sensor for improved firing accuracy**

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**Enabling Land Dominance for America’s Warfighters**
Extending Range

Extended Range Cannon
Artillery

XM208 Gunmount
XM1113
XM654 Supercharge
New Lethality Modes – Multi Role Vehicles

Stryker Mobile Expeditionary High Energy Laser (MEHEL) Demonstrator

Stryker Counter-UAS Mobile Integrated Capability (CMIC)
From Lethality To Protection: Active Protection Systems (APS)

Rapidly equipping for an unknown and unknowable battlefield with tailorable scalable solutions

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QUESTIONS

Survivability

Lethality

Mobility

Mission Command