



PROGRAM EXECUTIVE OFFICE  
MISSILES AND SPACE

# PEO MS OVERVIEW BRIEF

Presented by BG Lozano

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U.S. ARMY

# MISSION AND VISION



**Mission:** Develop, field, and sustain Defensive and Offensive Integrated Fires Capabilities in support of all phases of Joint- and All-Domain operating environments by 2030 and continuing beyond.

**Vision:** PEO MS supports the Fires Enterprise with an aligned organization that is agile, versatile, efficient, and responsive, centered around an empowered and professional acquisition workforce. We remain an indispensable acquisition leader in streamlined processes and innovative solutions to deliver integrated offensive and defensive fires materiel solutions to the Warfighter and our allies/partners to defeat the threats.

## Message from the Program Executive Officer

The central challenge facing the United States today is the reemergence of long-term, strategic competition by near-peer competitors, coupled with rapid technological advancements, the changing character of war, and the lack of U.S. dominance in all operating domains. The Army is modernizing key capabilities, updating its doctrine, and realigning its organizational design in order to field a force capable of conducting Multi-Domain Operations (MDO) in one theater by 2028 and in multiple theaters by 2035.

PEO Missiles and Space initiated organizational and workforce changes, by realigning our portfolio to provide a rapid and iterative approach to capability development that reduces cost, technological obsolescence, duplication effort, and acquisition risk. The realigned portfolio increases the speed of delivery, enables design tradeoffs in the requirements process, expands the role of Warfighters throughout the acquisitions process, and uses non-traditional suppliers. This approach – a major departure from previous practices and culture – allows for rapid response to changes in the operational environment and complicates competitors' abilities to offset our systems.

Moving forward, PEO Missiles and Space will continue to improve operations to better meet the needs of the nation and the objectives of the Army. This strategy details the path we will take and how we will prioritize our efforts to achieve our Vision and accomplish our Mission.



**BG Frank Lozano**  
United States Army  
Program Executive Office  
Missiles and Space



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# PEO MS BY THE NUMBERS

## 6

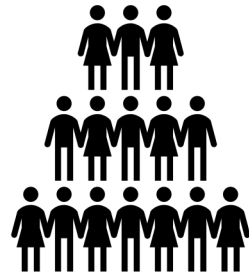
### Project Management Offices

## Workforce

± 500 Core

± 650 Matrix

± 850 Contractors



± 2000

## 41

### Programs of Record

Acquisition Category (ACAT)

15 ACAT I

10 ACAT II

12 ACAT III

### 1 Pre-Major Defense Acquisition Programs

Maneuver-Short Range Air Defense (M-SHORAD)

### 1 Pre-Acquisition Program

Long Range Precision Munitions (LRPM)

### 2 Middle Tier Acquisition

Lower Tier Air and Missile Defense Sensor (LTAMDS)

Interim Indirect Fire Protection Capability (IFPC)



## FY23\*

## \$5.9B

\*Total to Date

## 621

### Active Foreign Military Sales



## 54

### Countries with a Case Value

## \$72.5B

## Presidential Budget Request

## FY23 \$8.3B

## 30

### Operational Needs Statement/Joint Urgent Operational Needs Statement in

## FY22





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# WHAT ARE WE DOING?



## Delivering

### *Environment for success*

**Align PEO MS** to deliver an Integrated and Interoperable Joint Force by FY30 capable of fighting and winning Multi-Domain Operations

**With innovative and agile teams** (including industry, laboratories and academia) to provide solutions/options that meet Warfighter demands when they need it, where they need it

**Continuous experimentation** and prototyping with Soldiers to inform requirements

**Ensuring** Allied Interoperability

## Managing Talent

### *Offensive and Defensive Fires capabilities*

**Common interface** as a point of integration/interoperability

**Force protection** through integration of Joint/Army planning and targeting process

**Integrating Sensors** between Army and Joint to achieve a single combined picture for the commander

## Integrating

### *Fires across all Domains*

**Compete:** Long Range Anti-Access and Area Denial Systems (PEO MS Portfolio)

**Converge Mission Command:** Rapid and Continuous Integration of Warfighter Functions across all Domains (Time, Space, and Capabilities) to overmatch the enemy (Army IBCS)

**Survive:** In Operational Denied Environments (SuReX and CEMA Test bed)

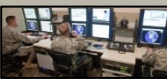
**Integrate Offensive and Defensive Fires** Integrated Fires Test Campaign

*Develop systems that facilitate Integrated Fires to Commanders*

*Delivered by a military and civilian workforce founded on innovation and acquisition excellence.*



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JTAGS



PATRIOT GSE



FAAD C2



IBCS EOC



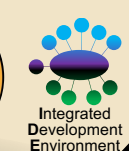
Integrated Fires Mission Command



Defense of Guam



Integrated Fires



Integrated Development Environment



Storm



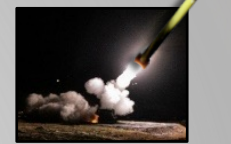
ATACMS



HIMARS



PrSM



GMLRS



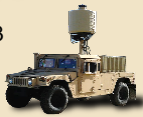
MLRS

41 PROGRAMS OF RECORD

15 ACAT I	
10 ACAT II	
12 ACAT III	
1 Pre-Major Defense Acquisition Program	M-SHORAD
1 Pre-Acquisition Program	LRPM
2 Middle Tier Acquisition	LTAMDS & IFPC



AN/TPQ-53



AN/TPQ-50



AN/TPQ-36



Sentinel A3



Sentinel A4



LTAMDS



STARE



SPIKE NLOS



JAGM



HELLFIRE



Guided & Unguided Rockets



LMAMS



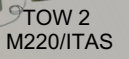
RRRP



ALPS



M299 Launcher



TOW 2 M220/ITAS



LWCLU



IBAS



CCMS-H



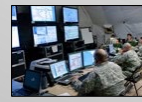
JAVELIN



M260 / M261 Launchers



In Development Long Range Precision Munition



PFM



CWS



STRIKE



AUR+C



BOC



Glide Body



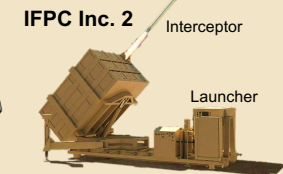
Missile



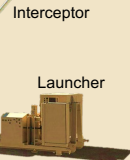
TEL



SHIELD



IFPC Inc. 2



Launcher



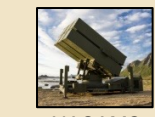
M-SHORAD Inc-1



IDDS-A



LPWS



NASAMS



Avenger



PAC-3 MSE



PAC GEM-T

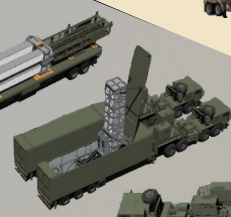


Stinger

MRC FY23/24



Effector SM-6 & Tomahawk



PDS & BOC

**MISSION:** Develop, field, and sustain Defensive and Offensive Integrated Fires Capabilities in support of all phases of Joint and All-Domain operating environments by 2030 and continuing beyond





# SUPPORT TO UKRAINE





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# UKRAINE PORTFOLIO

## PEO MS Support to Ukraine

- ~\$5.2B total as of PD 42
- ~\$3.9B total in USAI funding to date
- 55 Third Party Transfers (TPT) of PEO MS commodities and training to Ukraine

## Systems Provided

- |                     |   |
|---------------------|---|
| • Stinger/Gripstock | • AN/TPQ-36 Firefinders                                 |
| • Javelin/CLUs      | • Avenger   |
| • Switchblade 300   | • GEM/GEM-C/GEM-T                                       |
| • HIMARS            | • PAC-2 / PAC-3   |
| • GMLRS             | • PATRIOT (Q-65Fire, ECS, Launchers, EPP, SRPT, spares) |
| • TOW 2B/ITAS       |   |
| • Q-64 A3 Sentinel  |   |



Stinger



PAC-3



PAC-3 MSE



PAC GEM-T



GMLRS



JAVELIN

TOW 2  
M220/ITAS

PATRIOT GSE



LMAMS



AN/TPQ-36



Sentinel A3



Avenger



HIMARS

**PEO MS has provided ~\$9.1B in capability and services through PD42 & USAI.**





# SUPPORT TO EUCOM





# EUCOM PORTFOLIO

U.S. ARMY

## Systems Provided

- AN/TPQ-36 Firefinder Radar
- AN/TPQ-37 Firefinder Radar
- AN/TPQ-50 Lightweight Counter Mortar Radar (LCMR)
- AN/TPQ-53 Radar
- ATACMS
- ATM Missile
- Counter Unmanned Aircraft Electronic Warfare System (CUAEWS)
- DIGITAL Missile
- FAAD C2
- GMLRS
- Gripstock
- Guidance Enhanced Missile (GEM)
- Guidance Enhanced Missile-Tactical (GEM-T)
- HELLFIRE
- HIMARS LAUNCHER
- Hydra Family of Munitions
- Integrated Battle Command System (IBCS)
- JAGM
- JAVELIN
- Javelin Command Launch Unit
- LCRRPR
- M26
- MLRS M270 Launcher
- NASAMS
- PAC-3 CRI Missile
- PAC-3 MSE Missile
- PATRIOT Fire Units
- PATRIOT Launcher
- Q64 Sentinel
- RRR P
- SOJC Missile
- Stinger Missile
- Switchblade
- TOW
- TOW Launcher

## Countries Supported (1,524 Active Case Lines)

- |                  |           |               |               |
|------------------|-----------|---------------|---------------|
| • Albania        | • France  | • Latvia      | • Turkey      |
| • Australia      | • Georgia | • Lithuania   | • Romania     |
| • Belgium        | • Germany | • Macedonia   | • Spain       |
| • Croatia        | • Greece  | • Netherlands | • Sweden      |
| • Czech Republic | • Hungary | • Norway      | • Switzerland |
| • Estonia        | • Ireland | • Poland      | • Ukraine     |
| • Finland        | • Italy   | • Portugal    | • UK          |



ATACMS



GMLRS



PATRIOT



HIMARS



MLRS

**\$22,061,469,598**





# SUPPORT TO INDOPACOM





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# INDOPACOM PORTFOLIO



## Systems Provided

- AN/TPQ-53 Radar
- ATACMS
- ATM Missile
- Avenger
- FAAD C2
- GMLRS
- Gripstock
- Guidance Enhanced Missile (GEM)
- Guidance Enhanced Missile-Tactical (GEM-T)
- HELLFIRE
- Hydra Family of Munitions
- JAVELIN
- Javelin Command Launch Unit
- LCRRPR
- M26
- MLRS M270 Launcher
- PAC-3 CRI Missile
- PAC-3 MSE Missile
- PATRIOT Fire Units
- PATRIOT Launcher
- RRRP
- Stinger Air-to-Air Launcher (ATAL)
- Stinger Missile
- Switchblade
- TOW
- TOW Launcher

## Countries Supported

(828 Active Case Lines)

- |             |               |             |
|-------------|---------------|-------------|
| • Australia | • Japan       | • Singapore |
| • India     | • S Korea     | • Taiwan    |
| • Indonesia | • New Zealand | • Thailand  |



PATRIOT



PrSM



IBCS



GMLRS



LTAMDS

# \$13,717,472,741





# SUPPORT TO CENTCOM





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# CENTCOM PORTFOLIO

## Systems Provided

- AN/TPQ-36 Firefinder Radar
- AN/TPQ-37 Firefinder Radar
- AN/TPQ-50 LCMR
- AN/TPQ-53 Radar
- ATACMS
- ATM Missile
- Avenger
- FAAD C2
- GMLRS
- Gripstock
- Guidance Enhanced Missile (GEM)
- Guidance Enhanced Missile-Tactical (GEM-T)
- HELLFIRE
- Hydra Family of Munitions
- JAVELIN
- Javelin Command Launch Unit
- LCRRPR
- M26
- MLRS M270 Launcher
- PAC-3 CRI Missile
- PAC-3 MSE Missile
- PATRIOT Fire Units
- PATRIOT Launcher
- RRRP
- SOJC Missile
- Stinger Air-to-Air Launcher (ATAL)
- Stinger Missile
- TOW

## Countries Supported

(1,085 Active Case Lines)

- |               |          |           |                |       |
|---------------|----------|-----------|----------------|-------|
| • Afghanistan | • Iraq   | • Kuwait  | • Pakistan     | • UAE |
| • Bahrain     | • Israel | • Lebanon | • Qatar        |       |
| • Egypt       | • Jordan | • Oman    | • Saudi Arabia |       |



M-LIDS



FAAD-C2



COYOTE



FS-LIDS



# \$39,502,913,015

# INTEGRATED FIRES







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# INTEGRATED FIRES



## WARFIGHTER NEEDS:

- Persistent 360° IAMD layered defense against a broad range of threats
- Capability to fight organically
- Rapid Deployment using existing systems and existing programs of record

## INTEGRATED FIRES:

- Shared sensor track data
- Integration into a joint command center to include missile, air defense and offensive fires
- Ability to integrate future capabilities

Component Architecture Allows for Rapid Modernization

# QUESTIONS?





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# ORGANIZATIONAL ENVIRONMENT

## HEADQUARTERS DEPARTMENT OF THE ARMY

### ARMY COMMAND

 **FORSCOM**
 **Army Future Command  
AFC**
 **Army Materiel Command  
AMC**
 **TRADOC**

### ARMY SERVICE COMPONENT COMMANDS

**USARAF****USARPAC****USARCEN****USASOC****USANORTH****SDDC****USARSOUTH****USAREUR****USASMDC****ARCYBER**

### DIRECT REPORTING UNITS

**USACE****MDW****USMA****ATEC****INSCOM****USAASC****USAWC****MEDCOM****HRC****USACIDC****CHRA****ANC**





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# ORGANIZATIONAL ENVIRONMENT



## HEADQUARTERS DEPARTMENT OF THE ARMY





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# STRATEGIC ENVIRONMENT AND OUR ALIGNMENT

## Modernization Priorities



**Next Generation  
Combat Vehicle**

**Future Vertical  
Lift**

**Long Range  
Precision Fires**

**Air and Missile  
Defense**

**Army  
Network**

**Soldier  
Lethality**

## 2020 Strategic Campaign

To provide the Army the Long Range Precision Fires and Air and Missile Defense capabilities required to win in a Multi-Domain battlespace, PEO MS developed and is providing Warfighters integrated offensive and defensive fires capabilities that include, but not limited to six of the Army signature modernization programs:



**PrSM**

**IBCS**

**M-SHORAD**

**IFPC**

**LTAMDS**

**Long Range  
Hypersonic  
Weapons  
(LRHW)**

**Mid-Range  
Capability (MRC)**

**Directed Energy  
(DE)  
MSHORAD**

**IFPC High Power  
Microwaves  
(HPM)**

**IFPC High  
Energy Laser  
(HEL)**

Achieve interoperability and integration across defensive and offensive fires capabilities

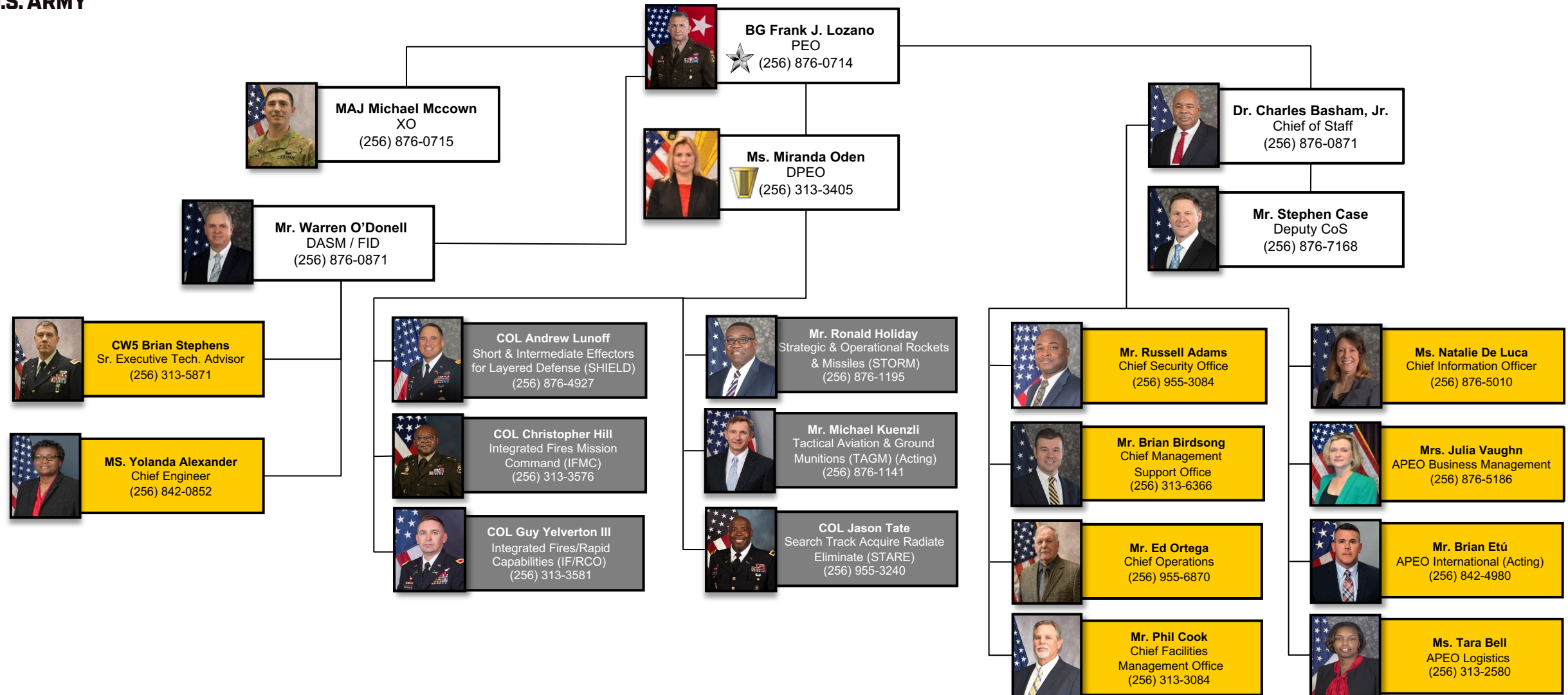
Foster an environment that seeks innovative solutions across industry, academia, and warfighters

Support the Fires Enterprise with an aligned organization that is agile, versatile, efficient, and responsive

Provide indispensable value to the warfighter, DoD, Congress, and our allies/partners



# ORGANIZATION CHART







# Integrated Air and Missile Defense Battle Command System (IBCS)



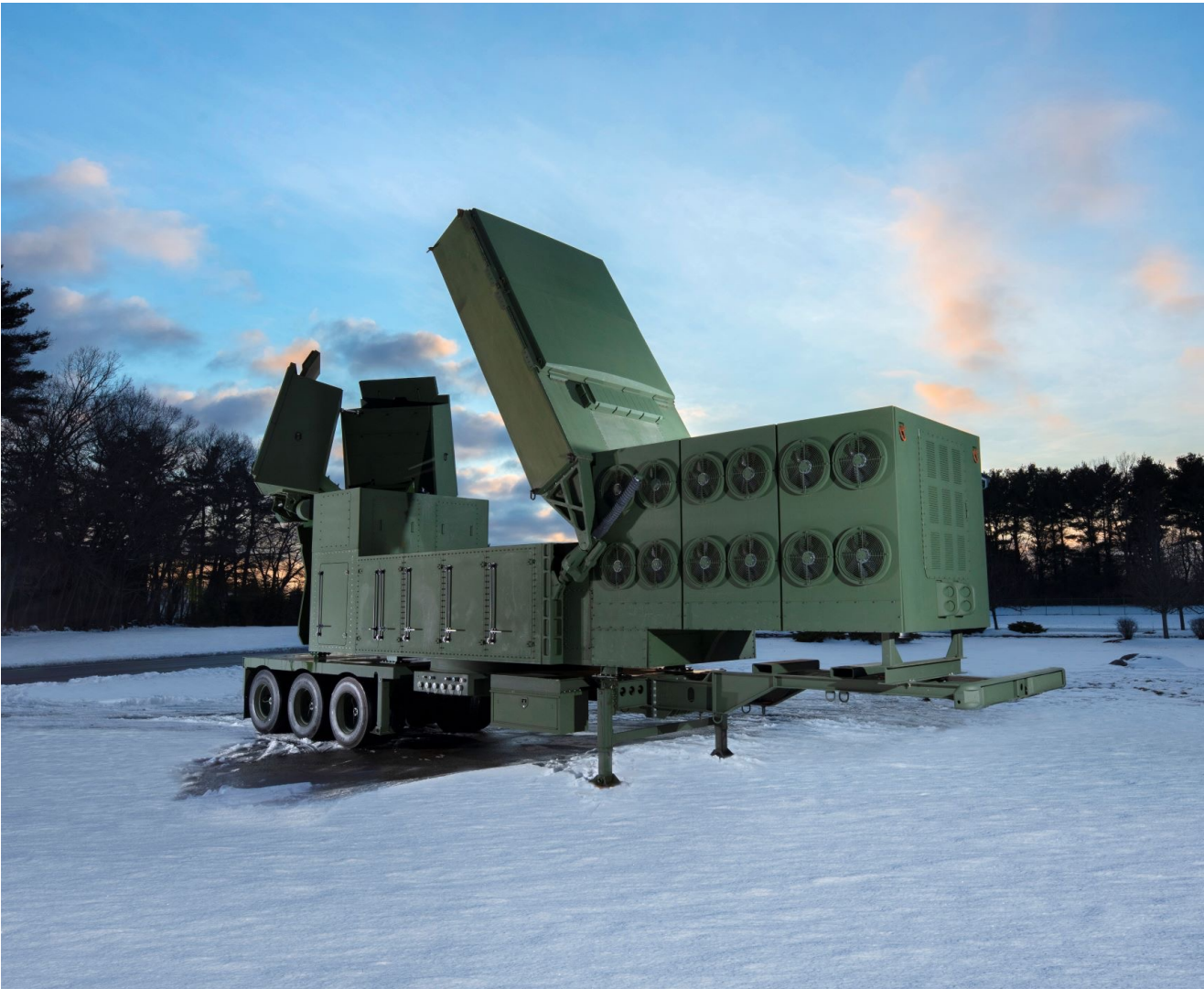
## System Description/Capabilities:

- Integrated Fire Control across 150 km battlespace for legacy and future AMD sensors and shooters.
- Enables Scalable and Tailorable Force Packages.
- Joint integration at all Army AMD echelons.
- Reduces training requirements and Logistics footprint.
- Completely Open Architecture system.





# LOWER TIER AIR AND MISSILE DEFENSE SENSOR (LTAMDS)



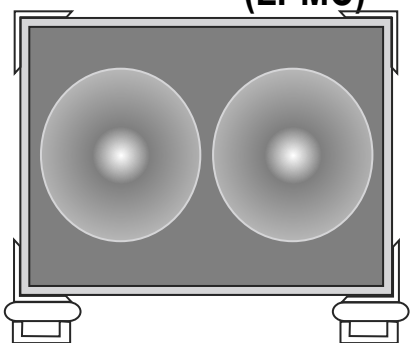
## System Description/Capabilities:

- Provides a significant increase in range and coverage capability over current PATRIOT Radar
- A Multi-Function Fire Control Radar providing a lower tier sensor to the Army Integrated Air and Missile Defense Battle Command System (IBCS)
- Tracks and engages Air Breathing Threats (ABT) and Tactical Ballistic Missiles (TBM)
- Precision Track (Fire Control Quality) / Surveillance
- ABT Non-Cooperative Target Recognition (NCTR)
- Acquire, track, and control PATRIOT Family of Interceptors.



# PRECISION STRIKE MISSILE (PRSM) INCREMENT 1: BASELINE MISSILE

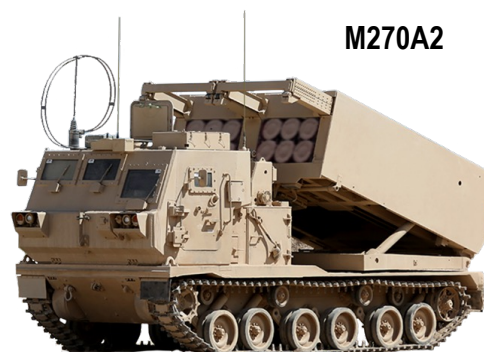
**New Launch Pod Missile Container (LPMC)**



**Two Missiles Per Pod**

- Doubles volume/rate-of-fire
- Halves logistics footprint
- Replaces Army Tactical Missile System (ATACMS)

**Compatible with Current Launchers**



**M270A2**



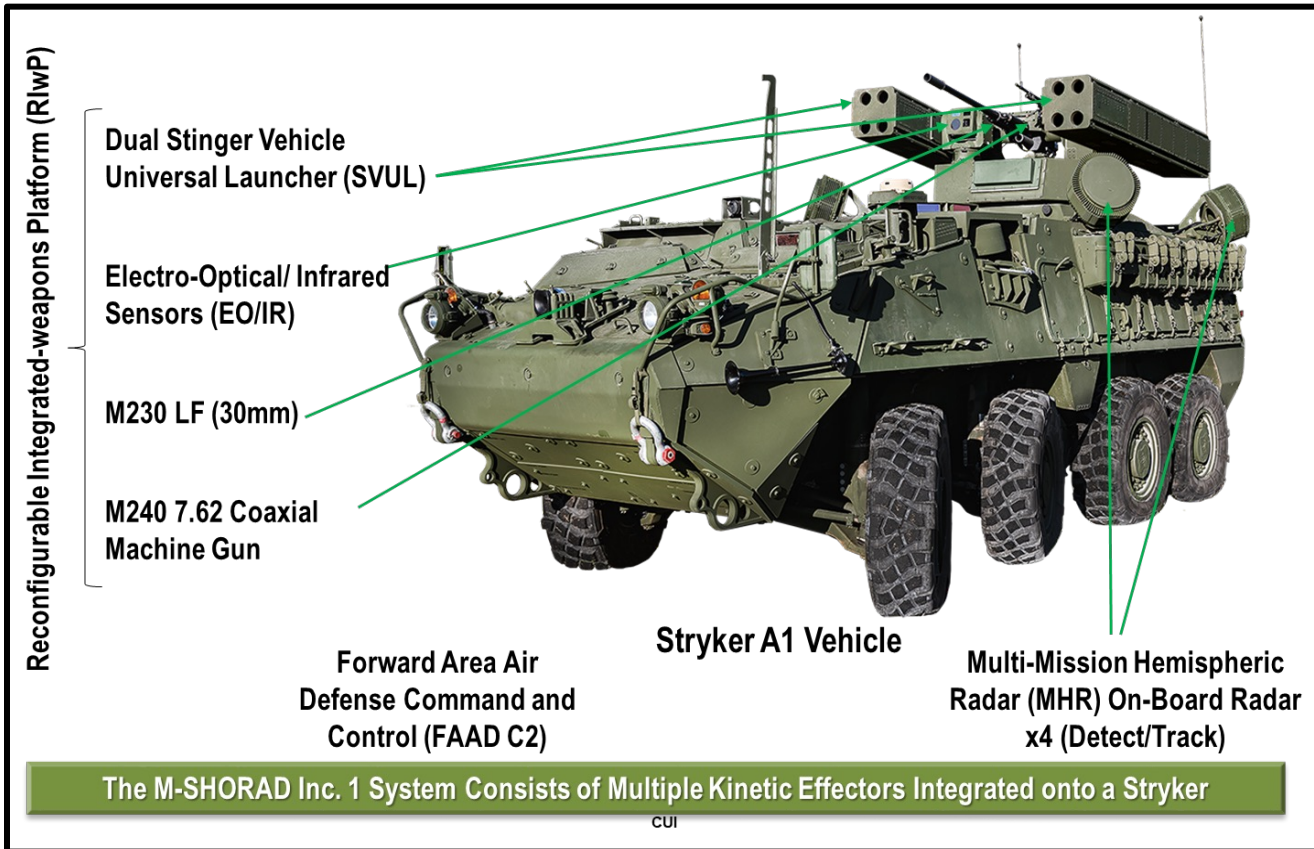
**High Mobility Artillery Rocket System (HIMARS) M142**

## **System Description/Capabilities:**

- 400+km ballistic missile with a cluster munition compliant payload
- Attacks critical and time sensitive area and point targets
- Maintains or improves accuracy in GPS degraded environments; plan for M-Code GPS integration
- An Insensitive Munition compliant system
- Launcher compatibility with MLRS M270A2 and M142 High Mobility Artillery Rocket System (HIMARS)
- Technology upgrades via Open Systems Approach
- Cyber survivability requirements identified in validated CDD



# MANEUVER-SHORT RANGE AIR DEFENSE (M-SHORAD) Increment 1



## System Description/Capabilities:

- Uses an incremental acquisition approach to provide short range air defense capability at the Division
- Utilizes a mix of guns, missiles, and an onboard sensor -- integrated on a Stryker platform
- Protects maneuver forces by defeating, destroying, or neutralizing threat rotary-wing (RW), fixed-wing (FW), and unmanned aircraft systems (UAS) capabilities





# M-SHORAD INCREMENT 3 NEXT GENERATION SHORT RANGE INTERCEPTOR



## System Description/Capabilities:

- Next Generation Short Range Interceptor is a new Soldier-portable missile that provides Short Range Air Defense for maneuver units. It supports M-SHORAD Inc 1 platforms and other future increments as determined by the Army
- Includes improved 30 mm ammo for Inc. 1 platforms providing added defense against threat Groups 1&2 UAS and self-defense capability against ground targets.



# **INDIRECT FIRE PROTECTION CAPABILITY INCREMENT 2 (IFPC INC 2)**



## Existing US Components (Must Use)

- Radar: Sentinel
- Mission Command/Commander and Control: IBCS

## Vendor Supplied

- Launcher
- All-up Round Magazine for Interceptor
- \* All components Integrated w/IBCS

## System Description/Capabilities:

- A mobile, ground-based weapon system designed to defeat Cruise Missiles (CM), Group 2/3 Unmanned Aircraft Systems (UAS), Rockets, Artillery, and Mortars (RAM) and Other aerial threats.
- Uses Sentinel radar and IBCS for mission command functionality.
- Features a modular open system architecture to integrate future kinetic effectors to defeat Super Sonic CM, Large Caliber Rockets, and other Advanced threats.

