COL James Romero
Project Manager
Joint Attack Munition Systems (JAMS)
8 April 2016
Program Executive Office Missiles and Space

MISSION
To Develop, Field, and Sustain Missile and Space Systems for the U.S. Army, Joint and Coalition Warfighters that Provide a Decisive Battlefield Advantage

What We Do:
- Centralized Management for All Army Tactical and Air Defense Missile Programs and Selected Army Space Programs
- Full Life-Cycle Management of Assigned Systems
- World Wide Support of Fielded Weapon Systems
- Key Link Between the User and Tech Base

What We Manage:
- Eight Project Offices
- 3 Pre-MDAP, 14 ACAT I, 6 ACAT II and 11 ACAT III Programs
- International Cooperative Development Programs

VISION
To be a Highly Efficient, Effective, Agile, and Innovative Warfighter - Focused Organization for Developing and Sustaining Missile and Space Systems

Workforce:
Government ~1100
Support Contractors ~750

FY16 Appropriated Budget
~ 3.4B

FMS: Total Case Value $43.2B, 39 Countries

To Support the Warfighter
Program Executive Office Missiles and Space Portfolio

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<td>HELLFIRE</td>
<td>IFPC Inc 2-I</td>
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<td>NASAMS</td>
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<td>Avenger</td>
<td>Precision Fires Manager (PFM)</td>
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<tr>
<td>Small Guided Munitions</td>
<td>STINGER</td>
<td>Containerized Weapon System (CWS)</td>
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<td>STINGER</td>
<td>Containerized Weapon System (CWS)</td>
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PEO Missiles and Space Portfolio

Any Warfighter - Anywhere - All The Time

Any Warfighter - Anywhere - All The Time

UNCLASSIFIED

MDD
Materiel Solution Analysis

A
Technology Maturation & Risk Reduction

AoA
Preliminary Design Review

LRPF (Pre-MDAP)
LTAMDS (Pre-MDAP)

IFPC Inc 2-I (Pre-MDAP)

Critical Design Review

IOT&E
LRIP

GMLRS AW
GMLRS Unitary
Hydra 70 (2.75 Rockets)
Javelin
Laser Hellfire
PAC-3
PAC-3 MSE
TOW-2

GMLRS DPCM
HIMARS
JLENS
Longbow Hellfire
Patriot (PAC-2 Class)
Stinger RMP

ACAT I
Aviation, Rockets & Small Guided Munitions (ARSGM)

AMDPSC - Air and Missile Defense Planning and Control System
ATACMS - Army Tactical Missile System
Avenger SLEP - Avenger Service Life Extension Program
C-RAM Intercept LPWS - Counter Rocket, Artillery & Mortar Intercept
Land-based Phalanx Weapons System
FAAC C2 - Forward Area Air Defense Command and Control
GMLRS AW - Guided Multiple Launch Rocket System Alternate Warhead
GMLRS DPCM - GMLRS Dual Purpose Improved Conventional Munition
HIMARS - High Mobility Artillery Rocket System
IAMD - Integrated Air and Missile Defense
IFPC Inc 2-I - Indirect Fire Protection Capability Increment 2-Intercept
ITAS - Improved Target Acquisition System
JAGM - Joint Air to Ground Missile
JLENS - Joint Land Attack Cruise Missile Defense Elevated Netted Sensor
JTAGS - Joint Tactical Ground Station
LCMR - Lightweight Counter Mortar Radar
LRPF - Long Range Precision Fires
LTAMDS - Lower Tier Air & Missile Defense Sensor
PAC-3 - Patriot Advanced Capability - 3
PAC-3 MSE - PAC-3 Missile Segment Enhancement
RAM Warn - Rocket, Artillery, and Mortar Warn
RRRP - Range Radar Replacement Program
SLEP - Service Life Extension Program
Stinger RMP - Stinger Reprogrammable Microprocessor
TOW-2 - Tube-launched, Optically-tracked, Wire-guided-2

ACAT II

AMDPSC
AN/TPQ-53

JAGM

IAMD

RRRP

AN/TPQ-50
RAM Warn

ACAT III

Any Warfighter - Anywhere - All The Time

FAAD C2
Sentinel A3
Sentinel A4 Mod

ACAT III

ATACMS SLEP
Avenger SLEP
C-RAM Intercept LPWS
JTAGS Mod
M270A1 Mod

ACAT II

Stinger Block 1 (SLEP)

ACAT Listing
FY18
PEO MS

Pre MDAP
3
ACAT ID
3
ACAT IC
11
ACAT II
6
ACAT III
11
TOTAL
34

NOTES:

1 Part of the multi-variant GMLRS program that has its ACAT assigned at the top level.

MDA - DAE
MDA - AAE
MDA - PEO MS
FY16 Funding by Project Office

Base & OCO $M

- **PFRMS, 464.0, 14%**
- **MDSS, 27.9, 1%**
- **PEO HQ, 5.3, 0%**
- **LTP0, 1,172.7, 35%**
- **CCWS, 326.6, 10%**
- **CMDS, 254.2, 8%**
- **C-RAM, 509.7, 15%**
- **IAMD, 243.0, 7%**
- **JAMS, 349.7, 10%**

*Includes Base RDT&E, Procurement, OMA, and OCO

**Total: $3,353.0M**
FY16 Appropriation and PB17 Comparison

**Base & OCO $M**

**FY16 Appropriation**
- RDTE, 831.4, 25%
- OMA, 301.5, 9%
- PROC, 2,220.1, 66%

**FY17 President’s Budget**
- RDTE, 831.1, 18%
- OMA, 645.8, 14%
- PROC, 3,120.9, 68%

* Total: $3,353.0M
* Total: $4,597.8M

*RDTE before SBIR/STTR reduction*
Program Executive Office, Missiles and Space
Global Reach

Any Warfighter - Anywhere - All The Time

- Hellfire
- Hydra Rockets
- Javelin
- MLRS/HIMARS
- Patriot System
- Q-36/37/49/53 Radars
- Sentinel Radar
- Stinger/Avenger
- TOW
- FAADC2/AMDWS
- C-RAM

39 Countries - 462 Active FMS Cases
$43.2B Case Value

As of: 7 January 2016
PAO 387-2015
PEO MS Funding ($M)

FY17 OCO
OMA = $442.4M
PROC = $775.788M ($455.8M HELLFIRE)

RDTE: Decrease in FY20 due to IAMD.
PROC: Increase in OCO in FY17 (ERI and Hellfire). Increasing due to IAMD, JAGM, and IFPC2.
OMA: Increase in OCO in FY17.
PEO Missiles and Space FY16 Priorities

Win In A Complex World

#1 Support Combat Operations and Homeland Defense
#2 Develop, deliver & sustain best value products & services to a changing Army, Joint & International Partners
#3 Align and leverage investments in capabilities and technology development that includes electronic warfare and cyber protection
#4 Continue to improve efficiency, effectiveness & agility

Aviation Domain
1. Execute JAGM EMD Program
2. Continue APKWS II integration to Army Forces
3. Sustain product line inventory at a level to support demands
4. Support Joint and Multinational HELLFIRE integration efforts

Fires Domain
1. Execute IBCS MS C
2. Execute Patriot Modernization in support of AMD Strategy
3. Establish LRPF and LTAMDC PoRs
4. Execute IFPC MS B
5. Execute C-RAM Intercept MR and fielding
6. Continue to plan and prepare for the AMDPCS and IBCS Convergence

Maneuver Domain
1. Continue to support operational needs with Quick Reaction Capabilities
2. Execute Javelin Modernization Effort
3. Integrate IBAS 3rd Gen FLIR
4. Sustain Industrial Base Efficiently

Ballistic Missile Defense (BMD) & Space Domain
1. Execute JTAGS P3I
2. Synchronize efforts across BMD and Space portfolios
3. Centrally Manage TH and AN/TPY-2 Army Service Cells

Foundational Construct: Cultivate a professional acquisition workforce
#1 Priority
Support to the Warfighter

**FIRE SUPPORT**

<table>
<thead>
<tr>
<th>ATACMS</th>
<th>GMLRS Rockets</th>
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<tbody>
<tr>
<td>588 Expended</td>
<td>3,326 Unitary Rockets Expended</td>
</tr>
<tr>
<td>HIMARS</td>
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<tr>
<td>27 Launchers Deployed to SWA</td>
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</tr>
</tbody>
</table>

**AVIATION**

Over 580,230 2.75” Rockets Expended

| HELLFIRE | HYDRA 70 | VIPER STRIKE |

**CLOSE COMBAT**

Over 10,995 TOW Missiles Expended

| TOW-ITAS     | TOW 2B | TOW BB |

Over 2,130 Missiles Expended

| JAVELIN |

**AIR AND MISSILE DEFENSE**

<table>
<thead>
<tr>
<th>C-RAM</th>
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<tbody>
<tr>
<td>Sense &amp; Warn (S&amp;W) Deployed at 7 OFS FOBs; Intercept at 1 of the FOBs S&amp;W at 3 OIR and 1 TFS Locations; Intercept At 2 OIR Sites</td>
</tr>
<tr>
<td>C-RAM Intercept To IFPC/Avenger BNs (8 of 40 LPWS Fielded)</td>
</tr>
<tr>
<td>RAM Warn to BCTs (18 of 61 Fielded)</td>
</tr>
<tr>
<td>9 Counterfire Radars Deployed (Q-36/37/53)</td>
</tr>
<tr>
<td>PATRIOT</td>
</tr>
<tr>
<td>~50% Fire Units Forward Deployed</td>
</tr>
<tr>
<td>JTAGS</td>
</tr>
<tr>
<td>5 Fielded</td>
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<tr>
<td>SENTINEL</td>
</tr>
<tr>
<td>Sense &amp; Warn In-Theater and Homeland Defense</td>
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</tbody>
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**AMDPCS Family of Systems**

7 ADA BDEs, 3 AAMDCs 138 ADAMs

**STINGER**

Homeland Defense

**AVENGER**
Challenges and Opportunities for the Next 3-5 Years

- Funding Uncertainty and Stability
- Maintaining Missile and Radar System Developmental Expertise
- Integrated Air and Missile Defense
- Significant Operational Requirements; Need for Improved C-RAM, Counter UAS, Cruise Missile Defense, Long Range Precision Fires; Ramping up HELLFIRE production in parallel w/JAGM
- Executing Stockpile Reliability and Inventory Strategies
- Aligning Long Term S&T Strategy with Army’s Modernization Strategy
- Maintaining a Viable Missile and Radar Industrial Base
- Understanding Cyber Threats/Vulnerabilities and Developing/Implementing Effective Countermeasures for Networked Systems
- Implementing the Army’s Common Operating Environment
- Generating FMS Volume & Leveraging FMS Efforts
- Continuing Better Buying Power and Cost Savings Efforts
Questions?

Any Warfighter - Anywhere - All The Time