Precision Fires Rocket and Missile Systems Brief to PSA

Recipients of the 2009 Secretary of Defense Performance-Based Logistics Award

Recipients of the 2008 William J. Perry Award

COL David Rice
PFRMS, Project Manager

Any Warfighter - Anywhere - All The Time

Agenda

- Alternate Warhead Program Update
- Pentagon Processes
- Competition

GMLRS – Unitary Rocket Usage

1,533 Total Rockets Fired As Of 3 Mar 2010

Who Shoots GMLRS-U:

• US Army	719	46.90%
• USMC	117	7.63%
• UK	697	45.47%

US Army Missions

Who Requests GMLRS-U:

• Army	490	68.15%
• Marines	123	17.11%
• Other	106	14.74%

How GMLRS-U is Employed:

• Troops In Contact	183	25.45%
• Pre-Planned	536	74.55%

Environments GMLRS-U is Employed:

• Troops In Contact	688	95.96%
• Pre-Planned	29	4.04%

Capability Gap: Persistent, responsive, all-weather, rapidly-deployable, long-range, surface-to-surface, precision-strike capability.

Description

- GPS-Augmented Inertial Guidance
- 200lb-Class HE Warhead
- Multi-Fuze Selection (Point Detonating, Delay, Proximity)
- 15-70km Range

Current Targets

- Precisely Located / Mensurated Point targets
- Congested / Complex Urban Targets
- Targets in Areas Where Collateral Damage is of Concern

Effectiveness / Reliability

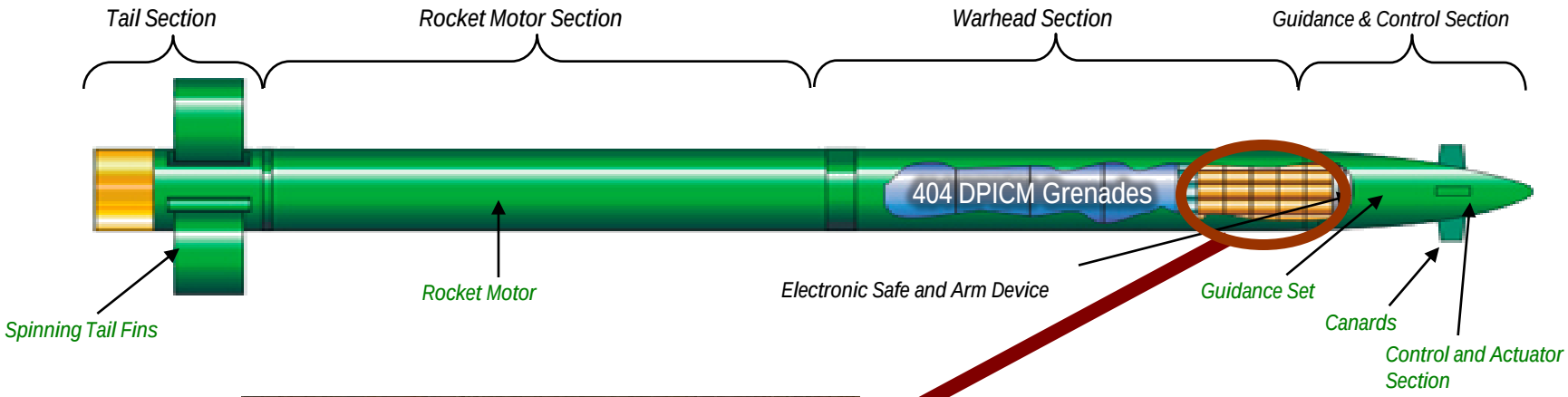
- BDA Shows High Level of Effectiveness
- Rare Reports of Minor Collateral Damage
- Reliability of US Army Missions: 98.47%

Launcher Theater Accomplishments

- All FAL variants (M270, M270A1, M270B1 and M142) have supported OCO operations
  - 25 M142 HIMARS:
    - 12 Army OIF
    - 7 Army OEF
    - 6 USMC OEF
  - 4 M270B1s
    - 4 UK OEF

- Launchers deployed in Theater continue to perform above Army Standards
  - Operational readiness exceeds 97%
  - Reliability is over 350 hours between System Abort Failures
  - No maintenance issues
- M142 and M270A1 launchers returning from both Theaters are in excellent condition requiring minimal Reset

GMLRS-AW Background: GMLRS DPICM

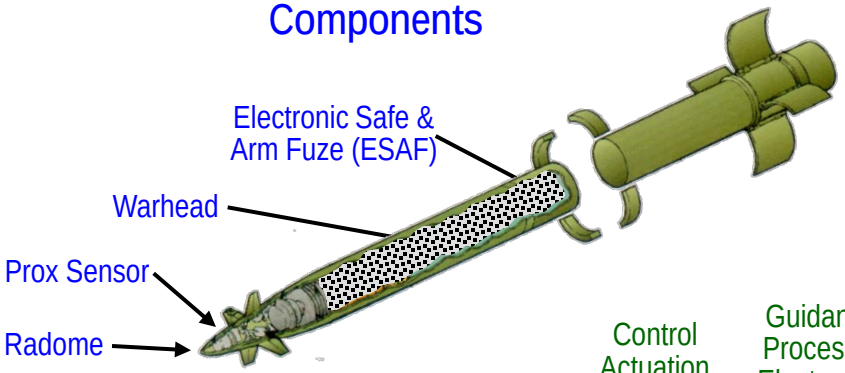


The Problem : Unexploded Ordnance (UXO)

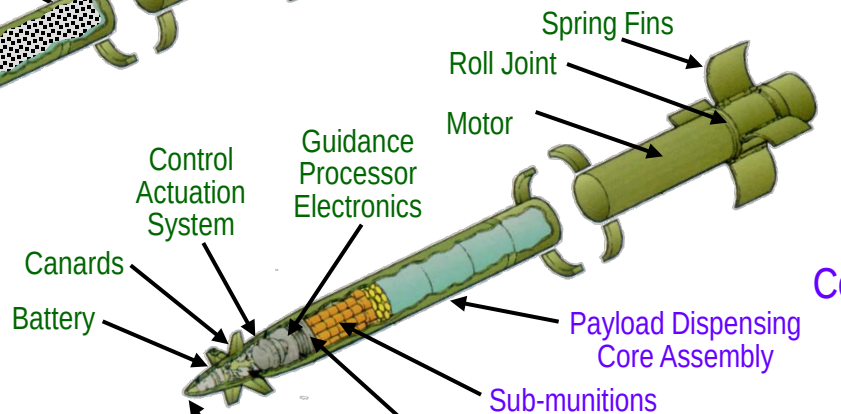
DPICM averages 2% UXO, 20-60 km; 4% UXO outside these ranges

GMLRS System Description

Unitary Unique Components



GMLRS Common Components

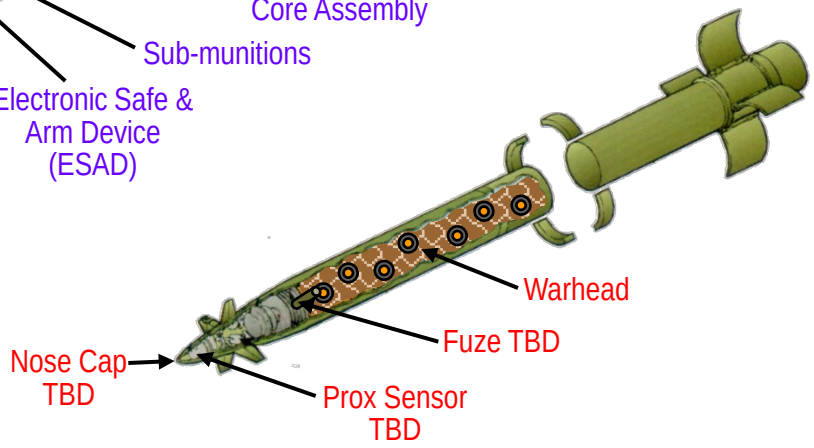


HIMARS

DPICM Unique Components

M270A1

Alternative Warhead Unique Components

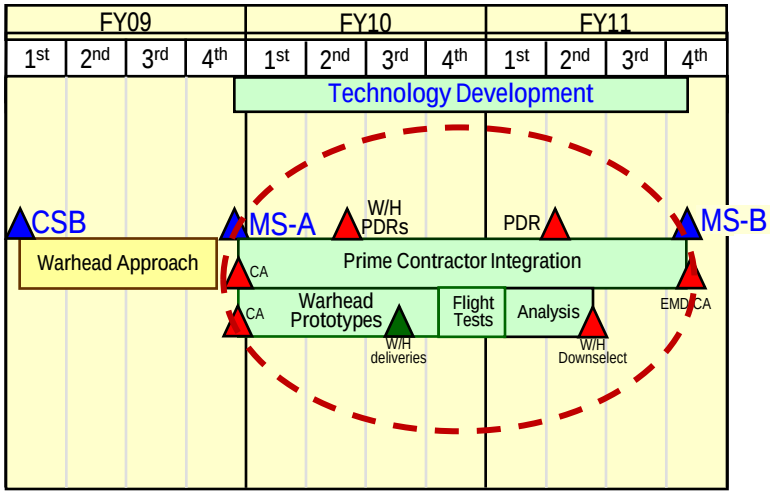


GMLRS Alternate Warhead (AW)

Capabilities

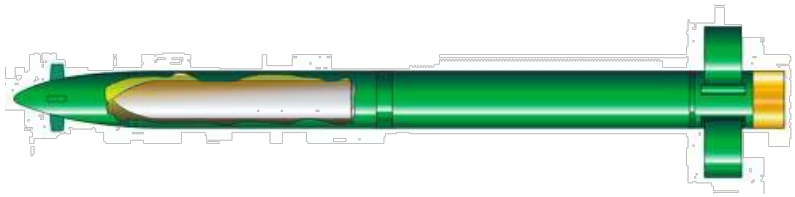
- *Maximum Range: 60-70+ Km*
- *Minimum Range: 10-15 Km*
- *Fuze Selection (TBD)*
- *Same Target Set / Environment as DPICM*
- *GPS-Augmented Inertial Guidance*

Schedule



Capability Gap

- *The organization has limited ability to range the Div/Corps/JTF AO with current delivery systems and munitions to conduct shaping operations*
- *The organization has limited precision attack/munitions capability to 70km and no long range precision attack/munitions capabilities to attack HPT/HVT targets to the depth of the Div/Corps/JTF AO*



Status

- *Cluster Munition Policy, 19 Jun 08*
- *New 2366a Certification Process*
- *New Acquisition Law Signed*
- *AoA Study Guidance*
- *Approved ADM, 11 Sept 2009*

Persistent, responsive, all-weather, rapidly-deployed, long-range, surface-to-surface, area and point precision-strike capability

Any Warfighter, Anywhere, All The Time

GMLRS-AW
Candidate Warhead Concepts

Description Of Concept

Unitary warhead with tungsten fragments and explosively formed penetrators. PBXN-109 explosive fill. Dispense initiated with current proximity sensor and Electronic Safe & Arm Fuze (ESAF).

Conventionally shaped enhanced fragmentation warhead, Insensitive Munitions (IM) design, drop-in replacement matching DPICM requirements. Integration into the GMLRS system utilizes common metal parts and fuzing.

Steel Kinetic Energy (KE) rods packaged in multiple tiers. Payload dispensed by skin severance system and rocket spin-up during terminal phase. Dispense initiated by Electronic Safe & Arm Device (ESAD).

GMLRS-AW Performance Parameters

- Meets DPICM ORD requirements in servicing targets
- Produce <1% residual cluster munition UXO
- Compatible with the M270A1 and HIMARS Launchers

Thoughts On Competition

DEPARTMENT OF THE ARMY
WASHINGTON DC 20310-0103

SAAL-PP Control No. 09-0060

MEMORANDUM FOR COMMANDER, UNITED STATES ARMY AVIATION AND MISSILE COMMAND, REDSTONE ARSENAL, AL 35898-5000

SUBJECT: Class Justification and Approval (CJ&A) for Other Than Full and Open Competition for continued Full Rate Production of the Guided Multiple Launch Rocket System (GMLRS) Unitary and Related Efforts

1. Based on the enclosed justification, I have approved the procurement of continued full rate production of the GMLRS Unitary for Fiscal Year 2010 through 2012 (FY10-12) and related efforts in the amount of $1,245,115,002, subject to the availability of funds, and provided that the supplies and services described herein have otherwise been authorized for acquisition.

2. You are further directed not to award the planned FY11-FY12 contracts until after you have successfully provided annual in process reviews to the Deputy Assistant Secretary of the Army for Procurement (SAAL-ZP), the Deputy for Acquisition and Systems Management (SAAL-ZS), and the Deputy for Acquisition Policy and Logistics (SAAL-ZL) documenting your progress toward awarding future GMLRS requirements on a competitive basis. Success will be determined by issuance of a decision memorandum cosigned by the three principal deputies. Furthermore, on or about 30 May 2010, you are to provide to the principal deputies identified above a "Road to Competition" business case analysis which will document actions taken to validate sub-contractor claims to proprietary data rights, and present a plan for competition including requirements for acquisition and validation of data, and impacts on program cost and schedule. Lastly, you are directed to advise this office of any changes to the GMLRS–Alternate Warhead production plan which may impact production quantities authorized by this J&A.

3. Retain the original copy of this memorandum in the contract file.

Dean G. Popps

Encl

Dean G. Popps
Acting Assistant Secretary of the Army
(Acquisition, Logistics and Technology)

Done at the request of USMC needs