



# PM Medium Tactical Vehicles



Product Manager  
LTC Shane Fullmer

**MISSION**

**ACAT IC**

The life cycle management of medium tactical wheeled vehicles enabling the modular, joint, expeditionary force.

Distribution Statement A: Approved for public release: Distribution is unlimited



# FMTV Program Background

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- ***ACAT IC Program***
- ***Milestone C – 1995***
- ***As of 30 Nov 09, 43,584 trucks and 9,723 trailers have been fielded***
- ***Contract Status:***
  - ***Completing deliveries on 4<sup>th</sup> Production Contract (BAE) in Dec 10***
  - ***Follow on Production Contract Awarded to Oshkosh on 26 Aug 09***



# FMTV Program Overview

FY09				FY10				FY11				FY12				FY13				FY14				FY15			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
RESEARCH, DEVELOPMENT, TEST & EVALUATION																											
Technology Insertion																											
PROCUREMENT																											
Current Production																											
△ Competitive Rebuy RFP Release																											
△ Competitive Rebuy Award																											
												Competitive Rebuy & Follow-on Production															
																		Pilot RECAP									
OMA																											
SSTS																											
RESET																											



# FMTV Fleet Overview



M1078  
2.5 Ton LMTV Cargo



M1083  
5 Ton MTV Standard Cargo



M1084  
5 Ton MTV Standard Cargo w/MHE



M1086  
5 Ton MTV Long Cargo w/MHE



M1087  
2.5 Ton MTV Exp Van



M1088  
5 Ton MTV Tractor



M1089  
8.5 Ton MTV Wrecker



M1095  
5 Ton MTV Trailer



M1157  
10 Ton MTV Dump



LSAC








HIMARS

- 17 Truck Variants in 2 1/2 & 5 Ton Payload Class
- Expanded Application of FMTV Platform to Support Army Emerging Requirements
  - HIMARS, LHS, 10-Ton Dump, MEADS
- LVAD Variant Air Drop Certified
- 85% Commonality of Parts; 80% Commonality of Parts with MRAP Caiman
- Companion Trailers Double Hauling Capacity

- Unit Resupply
- Unit Mobility
- Ammunition Resupply
- Weapons Platform
- Troop Transport



# FMTV History/Future

1994 - 1999	1999 - 2004	2004 - 2008	2008 - 2010	2010 - 2015
<b>FMTV A0</b>  <ul style="list-style-type: none"> <li>14 variants (2.5 and 5 ton)</li> <li>Central Tire Inflation System</li> <li>7 speed automatic transmission</li> <li>C-130 transportable</li> <li>85% commonality of parts</li> <li>22 year corrosion</li> </ul> <p>Note: Full Rate Production decision Aug 95</p>	<b>FMTV A1</b>  <ul style="list-style-type: none"> <li>Anti-lock Braking System</li> <li>Class V Interactive Electronic Technical Manual (IETM)</li> <li>100% improved Reliability/MR</li> <li>Open systems architecture</li> <li>HIMARS</li> </ul>	<b>FMTV A1R</b>  <ul style="list-style-type: none"> <li>EPA compliant</li> <li>Improved reliability/MR</li> <li>Expansible Van</li> <li>Air conditioning (A/C)</li> <li>Low Velocity Air Drop/ 10 ton dump/Load Handling System</li> <li>260 Amp alternator</li> </ul>	<b>FMTV A1P2</b>  <ul style="list-style-type: none"> <li>Long Term Armoring Strategy (LTAS) Armoring Solution</li> <li>Increased Load Carrying, 19K Axle</li> <li>Enhanced A/C</li> <li>Air/Hydraulic Brake System</li> <li>B-kit armor</li> </ul>	<b>Future</b>  <ul style="list-style-type: none"> <li>Suspension upgrades</li> <li>Electronic Stability Control (ESC)</li> <li>Alternate transmission/powertrain updates</li> <li>Increased fuel economy</li> <li>Optimized maintenance ratio</li> </ul>

GWOT SUPPORT

## FMTV Armor Development

**Radian Armor Crew Kit (RACK)**



- Adds ballistic and mine blast protection
- Bolt on over existing cab
- Incorporates environmental control system for air conditioning
- 1855 Armor Kits were applied to existing AO/A1 Variant vehicles

**Low Signature Armored Cab (LSAC)**



- Purpose built cab which replaces the standard FMTV cab
- Either fully integrated on production line or interchanged with standard cab in approx. 8 hrs.
- 3,480 LSAC Cabs were applied to existing AO/A1/A1R Variant vehicles

**Long Term Armor Strategy (LTAS)**



- Modular concept consisting of a standard or "A-cab" designed to accept armor referred to as a "B-kit"
- Replacing aging RACK and LSAC equipped FMTVs in Theater
- Improved Armor Protection



# FMTV A1P2 (LTAS)



*Power Train:*  
*Caterpillar 330 hp C7 Engine*  
*Allison Gen IV Automatic Transmission*

*Objective Gunner Protection Kit (OGPK) with M1114 Weapon Station*

*Compatible with full C4ISR Electronics Suite*

*5.0 Ton Payload*

*B-Kit (Armor) Installed*

*Rear-Hinged Doors*

*First Responder Tool Compatible*

*Heavy-Duty Cab Tilt and Leveling System*

*Frame C-Channel Reinforcements*

*Blow Away Fenders*

*Heavy Duty Axle with Air/Hydraulic Brake System*



# Long Term Armor Strategy (LTAS)

## System Description

### Mission:

- To provide a vehicle configuration which is able to adapt armor based on the threat, mission or technology and provide a greater level of protection than current AoA configurations.

### Characteristics:

- Factory installed, armor capable cabs, which include A/C, provide the structure for soldier-installed armor kits. Major vehicle performance characteristics are not degraded with armor kits installed.
- The A-Cab armor kit concept allows for future armor upgrades to advanced light weight materials (ie, ceramics, composites, etc.).
- Requirement: 1996 TWV Crew Protection Kit (CPK) ORD, CARDS Reference Number 16060, approved by HQDA G3

## Fielding

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**Design & Test Phase: 21 Cargo & Variant Vehicles – Complete  
3 Remaining Variants – On-going**

**# Vehicles Fielded: 522 (30 Nov 09) No. on contract: 15,347**

### Distribution:

**Active Guard & Reserve Units – CONUS &**

**OCONUS**

**OEF – Support**



## Schedule

### Key Milestones

- LTAS FOT complete Nov 07 ✓
- LTAS PVT complete Dec 07 ✓
- Ballistic testing complete Dec 07 ✓
- SER Apr 08 ✓
- Safety Confirmation Apr 08 ✓
- First LTAS vehicle delivered to Gov't Mar 09 ✓
- Commence LTAS Variants testing Mar 09 ✓
- Initial fielding to Ft. Polk May 09 ✓
- Complete all Variant testing Apr 10 ✓

## Performance/Risk

### Risk:

- Delay in variant deliveries for test cause production to start prior to test completion; BAE difficulty in cutting in test changes.
- Logistics products in support of fielding

<i>Risk</i>	<i>Performance</i>	<i>Schedule</i>	<i>Cost</i>
<i>Risk Level</i>	Low	Med/High	Low



# Summary

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- ***17 FMTV Variants (2.5 & 5 ton payload class)***
- ***Companion trailers capable of doubling payload.***
- ***Current Challenges***
  - *LTAS Production*
  - *Increase in Armor Protection*
  - *Weight Reduction*
  - *Resolve Contracting Issues*
- ***Future Challenges***
  - *RESET/RECAP of TPE trucks and trailers*
  - *Suspension Mods*
  - *Increased Fuel Economy*
  - *Embedded Vehicular diagnostics (CBM)*