The lifecycle management of light battlefield distribution systems enabling the Modular, Joint and Expeditionary Ground Forces.

Distribution A: Approved for Public Release; distribution unlimited
Purpose: To talk about where we’ve been, where we are and where we are going with in the context of “Reset Rebuild and Re-buy”

Agenda

- HMMWV Evolution
- The Weight Tape
- HMMWV RECAP
- HMMWV Production
- Light Tactical Trailer Production
- Challenges
HMMWV Evolution

A0 Series (1984-93)
- 6.2L Diesel Engine
- 3 Spd Transmission
- 2,500 – 3,632 lb. Payload
- GVW: 7,700 lb.

A1 Series (1991-95)
- Improved Driveline
- Improved Suspension
- 2,500 – 3,632 lb. Payload
- GVW: 10,000 lb.

A2 Series (1994-Present)
- 6.5L Diesel Engine
- 4 Spd Electronic Trans
- 3,520 - 4,400 lb. Payload
- GVW: 10,300 lb.

ECV = Expanded Capacity Vehicle

ECV2 (2010-?)
- Improved 6.5L Turbo Diesel Engine
- New Trans
- Improved Suspension/Frame
- Increased/Improved Armor Capability
- 1,800 – 4,550 lb. Payload
- GVW: ~18,000 lb.

ECV (1993-Present)
- 6.5L Turbo Diesel Engine
- Suspension Upgrade
- Armor Capable
- 1,800 – 5,100 lb. Payload
- GVW: 12,100 lb.
- Current Op: >16,500 lb.

Exceed Wheel Rating

* ECV2 payload definition changed to exclude BII and two soldiers

Block upgrades to increase payload and versatility

Final chance to buy-back 3Ps!
Program Intent: Extend useful life of fleet at fraction of new production cost

Current Program (Since FY04) – Convert early models to M1097R1 and M1025R1 models respectively providing:
- Models Eligible: M998/A1, M1025/A1, M1026/A1, M1037, M1038/A1, M1097/A1
- more payload capacity (drivetrain and suspension upgrades)
- extending economic useful life for 15 years

Up-armed HMMWVs (UAH) RECAP Pilot Program – Convert UAHs to current production configuration models with enhanced reliability components

Executed at
- Red River Army Depot - 16,745 complete to date
- Letterkenny Army Depot - 14,058 complete to date
- Maine Military Authority - 1210 complete to date

Vehicle Hand-Offs Completed Total: 30,683
- Conduct UAH pilot at RRAD and LEAD 2QFY09
- Program funded until July 09

Monthly average 800 per month
HMMWV Production

- Fielding to CONUS after SWA Requirement filled: ~14,000 fielded to date (CONUS)
- Production rate: 80/day average
- Introduction model: M1167 (TOW Variant)
- Reliability & Safety Enhancements, to include: Armor coverage, Load range E wheel/tire assembly, Electrical upgrades, Lightweight doors, Suspension upgrades, LED lights, Mending Plate improvements, Fire Suppression System upgrades......

February 2009
Reliability Enhancements
Vehicle (REV)

February 2009

Diagram of vehicle with labels:
- Enhanced steering geometry
- Power steering pump
- Improved steering performance
- Sheppard steering gear
- Reduced steering effort
- Geared fan drive (GFD)
- Radiator, shroud & oil cooler
- Improved cooling & engine performance, reduced noise emission
- "Wheel" - 24 bolt
- Tires
- M1114 Springs
- Geared hub assembly
- Improved reliability

- Rear differential cooler
- Rear differential
- Air lift brackets
- Cross members
- Body harness
- Shock absorbers
- Control arms
- Improved bushings & ball joints
- Parking brake
- Dedicated park brake system, for improved grade parking performance

- 3-piece frame rails improvement
- Pitman arm
- Idler arm
- Center link
- Cross brace assembly

THE ARMY TRUCK TEAM ~ "You Call, We Haul"
**ECV2 – Rebalancing the 3P’s**

**Electrical**
- New Power Management System (Solid State)
- New J1939 Multiplex Gauges
- Electronic Accelerator Pedal
- New Instrument Panel
- Embedded Diagnostics
- Under Hood Batteries
- 12V Dual Power Points
- Electronic High Idle
- New Head Lights
- LED Lighting
- Allison TCM
- New ECM

**Chassis**
- ABS/ATC
- New Suspension
- 18,000 lbs GVW
- Higher Capacity Drive Train
- Improved Services Brakes (4 Piston Caliper)
- New Tire/Wheel Assembly (22.5” Rim / 40” Tire)
- New Frame (3 pc – pending patent application) Welded

**Body & Cab**
- Compatible with Current HMMWV Systems
- Increased Cab Space (14+ Cu Ft)
- Integral Armor (Armor Ready)
- Armor Kit
- FSS

**Options**
- Electric Winch (18,000 lb)
- Deep Water Forging
- New HVAC System
- Stability Control*
- CTIS

**Powertrain**
- New Exhaust
- Charge Air Cooler
- High Capacity T-case
- RER Quick Disconnects
- New Air Induction System
- New Transmission (Allison)
- GEP Optimizer 6500 Turbo Engine
- High Capacity Power Steering Pump
- New Engine Cooling System (Vertical Mount)

* P3I Item

**February 2009**
Over 15,000 LTTs fielded to date
New production contracts awarded in Aug 08 (2 Contractors)
Production rate: 1600/month max
Re-buying to fill requirements
LTV Challenges
Global War on Terrorism Support

- Frag Kit #6
- Frag Kit #7
- Fire Suppression System Upgrades

February 2009
Communication, Communication, Communication

- Every Part: IMPORTANT
- Requirements
  - Question requirements that may not make sense
  - Do NOT deviate – A Soldier's mission or life may depend on it
- Goal - Improve Supplier Quality
  - Participated in AM General Supplier Symposium Jul 08
  - Participate with AM General in high risk-supplier visits
  - Conduct periodic meetings with contractor/DCMA
  - Assigned Gov’t QA Specialist to focus on OEM’s supplier quality assurance
  - Using lessons-learned from supplier issues to focus Gov’t and OEM efforts

  Example: Welding Issues
  - Conducting increase weld audits; Result: Major rewrite of procedure
  - Conducted Gov’t in-house basic welding class
Other Challenges

- Armored Ambulance
- FCS Spin Out 1
- Configuration Management