Overview of Program Executive Office
Combat Support & Combat Service Support
2010 NDIA
Tactical Wheeled Vehicle (TWV)
Conference

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8-9 February 2010
The War is “NOW”

The Future is still unclear!!!
Mission & Vision


The Right People... The Right Product... At the Right Time... From the Right Source... At the Right Price

Equip Our Joint Warfighters with the World’s Best Capability… Today and Tomorrow… Using the DoD’s Best Acquisition Workforce

ARFORGEN: ARmy FORce GENERation
Overview of Portfolio Guidance

- **Army Level Guidance**
  - Support to the War
    - Deploy Ready Units
    - ONS/JUONS
    - Modifications to TWVs as requested by COCOM
  - Force Structure / Modularity Design
    - Large growth in TWV requirements
  - Balance the Army by 2011
    - Fill out the MTOEs
    - Correct Readiness

- **TWV Guidance**
  - TWV Strategy – The Four Tenets:
    - Emphasize the *mixed fleet approach* that spans the Iron Triangle of Protection, Payload and Performance
    - Move the Army to a fleet of TWVs that have *scalable protection* (integrated A-cabs and add-on armor kits)
    - Take maximum advantage of existing platforms through Recap, Reset and Product Improvement
    - Integration of MRAP into the fleet mix
  - TWV Investment Strategy
    - Balance the quantity, quality and sustainment of Army equipment throughout its life cycle to meet combat, training, generating force and homeland defense requirements with appropriate capabilities
Senior Leader Intent

- Develop a Tactical Wheeled Vehicle Investment Strategy as soon as possible
- Ensure the Strategy provides guidance for FY10-11 execution of funding and sets the stage for POM 12-17 development
- Ensure Strategy provides guidance enabling the Materiel Enterprise to develop and execute a Fleet Management Strategy
- Migrate this process (Strategy and Execution) to other commodities
Fleet Management Process

Baseline the Fleet

- Requirement
- On Hand Qty
- Fleet Age/Usage
- Condition

Critical Data:
- Age
- % deployed
- Mileage
- Beyond usage limits

Army Investment Strategy

- Army objectives for each fleet
- Intended areas of risk

Critical Data:
- Price of new
- Price/scope of RESET
- Price/scope of RECAP

Projected Fleet Status

Budget Analysis

Industrial Base Impacts

Investment COA’s

Levers:
- % AAO Fill
- Acceptable Average Fleet Age
- Fleet Quality
- % Armored (A Kit/B Kit ratio)

Critical Data:
- Projected Average Age
- Effective EUL
- Supportability / Obsolescence
- Fleet mix/% Armored

Critical Data:
- OEM MSRs
- Depot capacity
- Executability

New Production Plan

RECAP/Modernization Plan: 0 miles/0 years, capability improvements, OPA

Reset Plan: Return to pre-mission condition, OMA

Divestiture Plan

Pilot Process for POM 12-17

Intended as annual process consistent with budget cycle

PROJECTED FLEET STATUS
Our Challenge

- **Long term**
  - Develop a comprehensive Tactical Wheeled vehicle strategy that is linked to the Strategic Planning Guidance, rooted in the anticipated operational environments the Army is likely to face and supports the various COCOM OPLANS.
  - Must integrate operational/tactical, acquisition, programmatic, sustainment and equipping/structure strategies.
  - The Tactical fleet must be looked at within brigades/units and across brigades and units as we equip consistent with Army Force Generation Model (ARFORGEN)

- **Near term**
  - Determine immediate requirement to sustain and modernize the current the tactical wheeled vehicle fleet and develop acquisition and programmatic strategies to support the requirements

- **Conundrum**
  - The Near-term strategy should be based on the Long term strategy … can we afford to wait?
has to be Prepared for….

- Changes in Environment
  - Responsive to Natural Disaster, Regional Conflict
  - Quality Product with Accelerated Deliveries and Quantities
  - Create Contracts with Maximum Flexibility
  - Time = Seconds/Minutes/Hours NOT Days/Months/Years

- Changes in Technology
  - Ability to Keep Step with Technology Advances
  - The Army is serious about designing with Future Growth in Mind - Headroom - Improve Capability, Survivability, Network Communication and Reduce Burden on Soldier and Operating Costs

- Changes in Mission
  - Add on Armor’s Burden on Vehicles, Payload Effects and System Reliability
  - Use the Feedback Information from Rotations to Influence Design and Joint Efforts
1. Near term – Focus on supporting GWOT while at the same time preparing for the future

2. Long term – Focus on the fleet of tactical wheeled vehicles

3. Assumptions for Validation
   - The Army has and will continue to have a requirement for Tactical wheeled vehicles across a wide variety of operational environments, including complex urban terrain, across the full range of military operations.
   - We are likely to face an asymmetric threat similar to those we are encountering today; therefore, the capability provided by current combat systems will have a role in future conflicts.
   - The current Tactical wheeled vehicles will have a useful role in the Army inventory for the foreseeable future while at the same time recognizing there are capability gaps which must be addressed (e.g. Light Tactical Vehicles)
ACTIVE COMPONENT
36 MONTH
DEPLOYMENT CYCLE

ARFORGEN

Avail
Alert
Swell
Deployed
RESET & Training

Ready

Unit Capability

Army
Transformation
Modularize
Modernize
Sustain
Support the Fight
FLEET AGE
OPTEMPO

É ARFORGEN
The Army and USMC TWV strategy will be flexible
Current wartime experiences will inform the Strategy
Tenets of TWV Strategy
- Take maximum advantage of existing platforms
  - Recap, Reset, Product Improvements
- Plan integration of MRAP into the fleet mix
- Emphasize a **mixed fleet approach** that spans the “Iron Triangle” of Protection, Payload and Performance
- Move the Army to a fleet of TWVs that have **scalable protection** (integrated A-kit cabs and add-on armor B-kits)
- Transition to Joint Light Tactical Vehicle (JLTV) as it is ready

**TWV Investment Strategy is nested within this Strategy**
- A Kit / B Kit Development
- Plug and Play Capability
- Modularity
- Flexibility

Giving the Commander in the Field the Ability to Adapt to Changes...to Mission...to Environment...to Technology!
“Shifting the Line”
- Geometry (standoff, shape)
- Materials (improved armor recipes)
- Mass (total vehicle weight)

TRADEOFFS
- Mobility
- Transportability
- Protection
- Cost

How much will JLTV “shift the line”?
- Same protection / lower weight
- Improved protection / same weight

How much does it cost to “shift the line”?

Is there military utility in vehicles below MRAP threshold?

LTV Protection Challenge
Network Integration Kit (NIK)

- Multi-Band Antenna (MBA) (2)
- Power Amplifier Group
- HMMWV Integration A-Kit
- Low Pass (LPF) (1)
- Integrated Computer System (ICS)
- Multi-Band Filter (MBF) (2)
- Joint Tactical Radio System Ground Mobile Radio Group

BDE, BN CDR & PLT LDR

CO CDR

Legacy C4I

- Defense Advanced GPS Receiver (DAGR)
- VIC 3 Vehicle Intercom System (VIS)
- Enhanced Position Location Reporting System (EPLRS)
- Blue Force Tracker (BFT) 2 Antenna
- Single Channel Ground & Aviation Radio System (SINCGARS)

Theater Provided Equipment (TPE)

- Counter Remote Control Improvised Explosive Devices (RCEID)
- Electronic Warfare CREW V3
- Remote Weapon System (RWS) / Common Remotely Operated Weapon (CROWS)
- Boomerang
- RHINO
- Force XXI Battle Command Brigade & Below (FBCB2)
Our Plan for Future Acquisitions

- **New**
  - JLTV
  - MRAP ATV

- **Continuous Improvement**
  - M915A5
  - PLS A1
  - HEMTT A4
  - HMMWV RECAP
  - FMTV A1P2
  - HET A1
  - MRAP

- **Sustain**
  - RESET
  - RECAP
  - Two-Level Maintenance

**Building Blocks for Sustainment**
Change in How We Do Business

- More Efficient Use of Limited Resources
- Correlate Business Strategies with Industrial (Commercial and Organic) Base Planning
- Continue to Pursue Industry/Organic Base Partnerships that Leverage Core Competencies
- Incorporate Lessons Learned and Good Business Practices
- Leverage Innovation in Government, Industry, and Academia
- Continue to RESET/RECAP the Current Fleet while Developing Future Vehicles
- Maintaining Government/Industry Communication in a Competition Environment

We Must Continue to Manage Tactical Fleet Consistent with ARFORGEN Model
Expedited Modernization Initiative Procedure (EMIP)
Qualification

- Technology Readiness Level (TRL) 7
  - Actual Prototype System Demonstrated In Military-operational Environment
- Available For Production Within 6 Months
- Technologies New To Army (Not Already Demonstrated In Its Current Configuration)

Submit Technology Application Ideas (TAIs) And Demonstration Plan In MS Word Format To PM JCSS Mailbox: trucktech@conus.army.mil

Next EMIP Demonstration Week

- 26-30 Apr 10 At SANG (Tentative)
- TAI Submission - Cutoff Date Is 12 Feb 10


- Total # of TAIs submitted to date: 592
- Total # of Demos to date: 316
  - 19 Demos conducted at Ft. Eustis
  - 21 Demos conducted at SANGB
  - 125 Demos conducted at Detroit Arsenal, Warren
  - 151 Demos conducted at Yuma
How EMIP benefits the Army… The Fire-Fighting Story

EMIP informs the Army about emerging component technology that may address capability gaps… MARKET RESEARCH (NOT SOURCE SELECTION)

The results of every EMIP demo are captured in the Advanced Collaborative Environment (ACE) and are available to multiple Army organizations.
We Are Living In Demanding Times; After Years Of Ramping Up Production To Unprecedented Rates, We Have Entered The Perfect Storm... *Budget Decline, Recovering Economy, Persistent Conflict, ...*

- Seeking Bold Innovative Design Solutions From The Beginning To Accommodate Change In Threat, Mission, Technology & Resources
- Sustain And Continue Improvement Processes...Fact and Data Based Decisions
- Breaking New Ground In The Rapid Expansion Of Our Systems Through Reset and Recap in support of the ARFORGEN
- We Need To Take Immediate Actions To Resolve Our Critical Strategic Issues and be prepared for the future

**Partner Together to Reach Higher and Achieve More to Meet the Challenges of Today’s Rapidly Changing Requirements**