Tactical Wheeled Vehicle Conference

Transforming the Public-Private Relationship

DEPOT PANEL

• MG MIKElenaERS
  TACOM LCMC - Commanding General

• Ms. JANET BEAN
  Integrated Logistics Support Center - Executive Director

• COL SCOTT KIDD
  PEO CS&CSS Tactical Vehicles - Project Manager

• COL DOUG EVANS
  Red River Army Depot - Depot Commander

• Dr. JOHN GRAY
  Letterkenny Army Depot - Deputy to the Commander
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Transforming LCMC Relationship

Joint Warfighter Reqmts
→ Concept Refinement
→ Technology Development
→ System Development and Demonstration
→ Production and Deployment
→ Sustainment and Upgrade
→ Removal from Inventory

RDT&E
→ PA
→ OPA

LIFE CYCLE MANAGEMENT REQUIRED A CHANGE IN HOW WE VIEWED THINGS

He who has the Gold Rules!
LIFE CYCLE MANAGEMENT IS NOT LINEAR

APPLY UPGRADES TO SYSTEMS BASED ON OPERATIONAL LESSONS AND TECHNOLOGY IMPROVEMENTS THROUGHOUT THE LIFE CYCLE
LIFE CYCLE MANAGEMENT INTEGRATION

Support Functions (Industrial Operations, Contracting, Legal, Testing, Staff Support)

Program Executive Offices (PEOs)
Research, Development, & Engineering Centers (RDECs)
Integrated Logistics Support Center (ILSC)

Joint Warfighter Reqmts

Concept Refinement
Technology Development
System Development and Demonstration
Production and Deployment
Sustainment and Upgrade
Removal from Inventory

RDT&E
PA
AWCF / OMA

WALLS ARE STILL THERE, BUT WE HAVE WINDOWS

PM is the Quarterback
THE DEPOT – INDUSTRY RELATIONSHIP

IT’S THE LAW:
50/50 (USC 2466):
50 percent of the funds for depot-level maintenance and repair workload

DEPOT CORE (USC 2464):
Core logistics capability that is Government-owned and Government-operated

DEPOT vs INDUSTRY

SHOULD NOT BE A DIVIDE THE BABY APPROACH

But that’s the way we always did it!
PARTNERING IS A BETTER IDEA . . . USUALLY
PARTNERSHIP VS COMPETITION

EXPLOIT STRENGTHS

ENGINEERING AND SYSTEM INTEGRATION
CUTTING EDGE TECHNOLOGY
SUPPLY CHAIN MANAGEMENT
WORLD WIDE DEALER NETWORKS
COMMERCIAL SCALE
TRAINED, DEPLOYABLE WORK FORCE
SECURITY & FORCE PROTECTION
INFRASTRUCTURE

LEAN ENTERPRISE
INDUSTRIAL BEST PRACTICES

FOCUS ON TOTAL ENTERPRISE PERFORMANCE
EXPLOIT STRENGTHS
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MS. JANET BEAN
Integrated Logistics Support Center - Executive Director

Integrating Supply Chain Solutions Across the Industrial Base
• The Organic Industrial Base
  ➢ What It Can Do
  ➢ What It Needs From Us

• A Better Road Map
  ➢ Breaking Down the Walls
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Organic Industrial Base Capabilities

• Engineering and Prototyping
  – Product design and development
  – Material testing
  – Manufacturing support

• Manufacturing
  – Precision Machining
  – Fabrication/Assembly
  – Casting/Forging
  – Heat Treatment/Plating/Finishes
  – Tool, Die, and Gage

• Maintenance and Overhaul
  – Systems/Subsystems Support
  – Optics/Electronics
  – Unique Processes
  – Testing

• Field Services
  – Forward Repair Facilities/Teams
  – Spare/Repair Parts
  – Receipt, Storage, and Issue of Equipment
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DoD Logistics Chain

Too Many Walls

PLUS

Two Competing Supply Chains

Prime Vendors
Sub Contractors
Other Vendors

ICPs
Maintenance Depots
Supply Centers
Distribution Centers

Retail Supply
Organizational maintenance

Tactical Operations

Organic Industrial Base Operations

Untapped Potential – Need a Supply Chain that Works for Them
“What Constitutes a Good Supply Chain?”*

- Complete, recognizable supply chain
- Supply Chain Metrics
- No Walls; Transparency
- Efficient, collaborative Information Systems
- “Factor In” the impact of uncertainties

Preliminary Findings From our LS6 Project

- No agility in year of execution
- Too many work arounds – system is compromised
- Data not easily acted upon
- Lack of information sharing undermines performance

The Bullwhip Effect

Causes of the Bullwhip Effect:
- Lack of Coordination & Collaboration Across the Enterprise
- Imbalance of JIT vs. JIC inventory stocking

Industrial Base Results: “G” Coded Vehicles, Missed Fieldings, Impact to Warfighter
Collaborative Planning and Forecasting For Replenishment

GOVERNMENT
- Demand History
- Monthly Demand Rate
- Stock on Hand

VENDOR
- Production
- Capacity
- Raw Material Orders
- External Business Factors

COLLABORATION EXAMPLES

Initiatives That Are Moving Us Forward

Customer Pay

ILSC + DLA + PM LTV + Depots + Industry = A Successful Collaborative Team
We Want to End Up Here!
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Supported Programs

- **HMMWV Recap (OPA)**
  - Recapitalizes HMMWV A0/A1 variants to R1s (M1097R1/M1025R1)

- **Improves Platform by**
  - Increasing payload on cargo variants
  - Provides 6.5L detuned engine, rebuilt transmission, new or rebuilt driveline components, upgraded brake and suspension components, 200AMP alternator
  - Inspect Repair Only As Needed (IROAN) select components

- **Locations**
  - Red River Army Depot (RRAD)
  - Letterkenny Army Depot (LEAD)
  - Maine Military Authority (MMA)

- **Production**
  - ~ 790/Month

- **HMMWV Reset (OMA)**
  - RESET, Non RECAP Variants
    - M1114, M1113 and A2 Variants

- **Improves Platform by:**
  - Standard 10/20+ 3D (Delayed Desert Damage) including MWOs

- **Location**
  - Red River Army Depot (RRAD)

- **Production**
  - Average per month: 195

*BL: $561.3 M worth of business in 07*
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Supported Programs

• ASV RESET (Pilot Program) (OMA)
  – 5 Vehicle Pilot Program (10/20 + 3D + MWO)
• Improves Platform by:
  – Major Component IRON
  – Upgrades transmission to Gen 4
  – Installs Frag Kit 1
  – Incorporates ECPs upgrades
    • Turret bolts, firing switch and parking brake inhibitor
• Location
  – Red River Army Depot (RRAD)

• HEMTT RESET (OMA)
  – No configuration changes
• Improves Platform by:
  – Complete rebuild with overhaul of all major assemblies
  – Enhanced OR
  – Returns Platform to Zero Miles
• Locations
  – Red River Army Depot (RRAD)

BL: $33.7 M worth of business in 07
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**Supported Programs**

- **M939 RESET (OMA)**
  - Improves Platform by:
    - 10/20+ 3D including MWOs
  - **Location**
    - Red River Army Depot (RRAD)
    - 1086 programmed

- **FMFV RESET (OMA)**
  - RESET, Condition Code = A
  - Improves Platform by:
    - Complete rebuild with overhaul of all major components
  - **Location**
    - Red River Army Depot (RRAD)
    - 300 Vehicles programmed

- **M870/M872 Trailer RESET (OMA)**
  - RESET, No configuration changes
  - Improves made:
    - 10/20+ 3D including MWOs
  - **Location**
    - M870/M872 - Sierra Army Depot (SIAD) and Red River Army Depot (RRAD)
Manpower/Facilities Support:
- Five of the Army's Depots provided manpower, facilitization efforts to rapidly produce over 16,000 retrofit kits to support Theater Operations.
  - Effort complete

Manufacturing Support:
- Depot System is manufacturing Objective Gunner Protection Kits to support Up-Armored HMMWV's GPK Upgrade Program.

Partnerships:
- Ensured partnerships with commercial manufacturers provide capabilities in support of Surge Operations.

BL: When the tide comes in, all ships rise!
(How do you position for low tide?)
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COLONEL DOUGLAS EVANS
Red River Army Depot - Depot Commander

ISO 9001:2000 Certified

Partnering & Lean
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Public-Private Partnerships Work

Improves operational efficiencies
Sustains critical skills & capabilities
Lowers cost of products and services

Diversified, Trained, & Deployable Workforce
Existing Infrastructure
Competitive Labor Rates
-Secure-Force Protection In Place

Engineering, Logistics & Supply Chain Management Expertise
Cutting Edge Technology
Original Equipment Manufacturer
World Wide Dealer/FSR Base

Unclassified
Direct Army Program to RRAD for Reset & Recap

RRAD is Prime
- Program Management
- Technical & Engineering Support
- Quality
- Manages Sub-Contracts for Engines, Transmissions, & other Outsourced Work
- Direct Labor for Reset & Recap

Customer Pay Contract to AM General
- Supply Chain Management
  - Procures & Stores Parts
  - Configures Parts to Work Station Sets
  - Delivers Parts and Work Station Sets to the Production Shop Floor

Benefits to the Army
- Parts Are Stored Off Site – No Warehouse Space Required on RRAD
- No Production Line Stoppage for Parts Shortages in Over 400 Days
- Production Line Efficiency Maintained

Unclassified
P3 with BAE Systems Mobility and Protection Systems

BAE Systems is Prime
- Program Management
- Technical & Engineering Support
- Provides Qualified Cabs (GFM from SIAD)
- Manages CFM Sub-Contracts for Axels, Engines, Transmissions, Cranes, & other Major Components
- Provides Supply Chain Management Support to RRAD

RRAD is Sub-Contractor
- Provides Facilities, Tools, & Equipment
- Expedites Parts and Stocks Bins
- Performs Direct Labor for Reset

DCMA on Site at RRAD

Benefits to the Army
- Establishes Depot Capability at RRAD
- Sustains Critical Skills & Capabilities
- Provides Cadre of Skilled Personnel for Deployment
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Family of Heavy Tactical Vehicles (FHTV)

- **P3 with Oshkosh Truck Corporation (OTC)**
  - Performance Based Logistics (PBL) Contract
    - HEMTT
    - HET
    - PLS
  - **OTC Is Prime**
    - Program Management
    - Technical & Engineering Support
    - Quality Oversight
    - Supply Chain Management
      - Procures and Stores Parts
      - Configures Parts to Work Station Sets
      - Delivers Parts and Work Station Sets to the Production Shop Floor

- **RRAD Is Sub-Contractor**
  - Facilities, Tools, & Equipment
  - Direct Labor

- **Benefits to the Army**
  - Standardized SOW Between RRAD & OTC – Transparent to War Fighter
  - OEM Warranty via OTC worldwide service centers & dealerships
  - Configuration Management
Six Sigma Charter Team Established Feb 07
- Caterpillar Corporate
- Caterpillar Holt
- RRAD
- TACOM

Objectives
- Establish Mid-Range Caterpillar Engine Repair Capability at RRAD
- Compliance with Established Caterpillar Certified Processes & Procedures
- Direct Labor Performed by RRAD
- Develop P3 with Caterpillar
  - Supply Chain Management to Obtain Certified Caterpillar Parts
  - Warranty Claims & Service by Caterpillar Dealerships and Service Centers (worldwide)

Pilot Overhaul On Going
- Data Will Drive Business Case Analysis for Future Work

Benefits to the Army
- Utilize Caterpillar Proven Experience from Commercial Engine Sector
- Data Collection for Determination of Maintenance Requirements
- Warranty Claims & Service by Caterpillar Dealerships and Service Centers (worldwide)
P3 with Textron Marine & Land Systems

- **Textron is Prime**
  - Provides Access to TDP
  - Provides Technical, Quality, & Engineering Support to RRAD
  - Provides Supply Chain Management to RRAD

- **RRAD is Sub-Contractor**
  - Provides Facilities, Tools, & Equipment
  - Performs Direct Labor for Reset

- **Pilot Overhaul On-Going**
  - Establish Baseline SOW
  - Develop Standard Processes by Work Station
  - Develop Business Case Analysis for Future Work

- **Benefits to the Army**
  - Establishes Depot Capability at RRAD
  - Sustains Critical Skills & Capabilities
  - Provides Cadre of Skilled Personnel for Deployment
LEADERSHIP.....Cultivate management
TEAMING..........Empowering employees
COMMUNICATION........Information is power
EMPLOYEE SUPPORT......Employees are our #1 resource
STRATEGIC THINKING......Thinking outside the box
ORGANIZATION CLIMATE..........Culture change

BUILDING IT AS IF OUR LIVES DEPEND ON IT: THEIRS DO.

STEPS TO SUCCESS

20/20 VISION

CRITICAL FACTORS

SAFETY: FOCUS ON OUR PEOPLE
GOAL: VPP STAR STATUS & 0.75 ACCIDENTS / 100 MAN YEARS

LEAN/SIX SIGMA: FOCUS ON THE FUTURE
GOAL: WORLD CLASS

ENVIRONMENTAL: FOCUS ON THE ENVIRONMENT
GOAL: ISO 14001 CERTIFICATION

QUALITY: FOCUS ON THE SOLDIER
GOAL: ZERO DEFECTS

PARTNERSHIPS / MARKETING: FOCUS ON OUR SUCCESS
GOAL: BE THE PREFERRED SOURCE FOR THE WAR FIGHTER

PRODUCTION: FOCUS ON OUR CUSTOMER
GOAL: 100% COMPLETE AND ON TIME DELIVERY

IMPROVING

THE DEPOT'S PRODUCTS & SERVICES

PEOPLE

70 Active Contracts with industry

FY07 P3 Revenue
>$170M

FY08 P3 Revenue goal $225M
DR. JOHN GRAY

Letterkenny Army Depot - Deputy to the Commander

Partnering & Lean
Partnership - a relationship resembling a legal partnership and usually involving close cooperation between parties having specific legal rights and responsibilities

SHIP PARTS

Supplier Partnership  Provider Partnership
Customer Pay - Integrated Supply Chain Partnership

- Achievable With New Business Practices
  - Not unlike “Prime Vendor”
  - Modeled after industry practice
  - Strength of industry in Supply Chain management
- Reduction of Inventory and Storage Costs
- Better Forecasting and Demand Collaboration
- Cost Per Vehicle is Down
- Strong and common supply chain between OEM and Life cycle Maintenance Activity
### Core Competency

<table>
<thead>
<tr>
<th>Industry</th>
<th>Military Depots</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Supply chain management</td>
<td>• Artisan technicians</td>
</tr>
<tr>
<td>• Obsolescence management</td>
<td>• Established repair capability</td>
</tr>
<tr>
<td>• Engineering management</td>
<td>• Diversity of capability</td>
</tr>
<tr>
<td>• Program management</td>
<td>• Infrastructure</td>
</tr>
<tr>
<td></td>
<td>• Integral to defense maintenance systems</td>
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**Unclassified**
Partnerships of the Future

- Shared Information
- Integrated enterprise
- Focus on total enterprise performance
- No clear boundary
Partnerships are the Future

75% of everything depots do is on contract

Merging the strengths of military industrial base with what you do best grows business; both ours and yours
What are your Questions?
Transforming the Public-Private Relationship

DEPOT PANEL

• **MG MIKE LENAERS**  
  TACOM LCMC - Commanding General  
  Phone: (586) 574-5131

• **Ms. JANET BEAN**  
  Integrated Logistics Support Center - Executive Director  
  email: Janet.Bean@us.army.mil  
  Phone: (586) 574-6090

• **COL SCOTT KIDD**  
  PEO CS&CSS Tactical Vehicles - Project Manager  
  email: Scott.R.Kidd@us.army.mil  
  Phone: (586) 574-5569

• **COL DOUG EVANS**  
  Red River Army Depot - Depot Commander  
  email: douglas.j.evans@us.army.mil  
  Phone: (903) 334-3111

• **Dr. JOHN GRAY**  
  Letterkenny Army Depot - Deputy to the Commander  
  email: john.gray5@us.army.mil  
  Phone: (717) 267-8306

Unclassified