



Red River Army Depot... LOOKING BACK TO LOOKING FORWARD

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ISO 9001:2008, ISO 14001:2004 & OHSAS 18001:2007 Registered









- RRAD: History of RRAD (Peacetime to Wartime Surge)
- Lessons Learned
 - Lesson #1 HMMWV
 - Lesson #2 Benchmarking
 - Lesson #3 Personal Coach
 - Lesson #4 Key Learnings
 - BRAC
 - PARTNERING
 - SUSTAINING GAINS
 - FLEXIBILITY
- Closing Remarks



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Red River Industrial Complex



Location: North East Texas (Four States Area) Size: 14,330 Acres Industrial Space: 1179 Buildings, 7,744,822M Sq Ft Railroads: 52 miles Roads: 273 miles

FY05 Workforce: 2,662 FY09 Workforce: 3,902 (does not include contractors) FY10 Workforce: 3,633 (does not include contractors)

FY05 Revenue Stream: \$416M FY08 Revenue Stream: \$949M FY09 Revenue Stream: \$1.143B FY10 Revenue Stream: \$844.4M(Projected)

FY05 Major End Item Production: 5,800 FY08 Major End Item Production: 8,412 FY09 Major End Item Production: > 10,000 FY10 Major End Item Production: > 9,000 (Projected)



Over 300 Product Programs: Combat Platforms (Bradley Fighting Vehicle) Tactical Systems (Heavy Trucks, HMMWV)



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Core Missions







Lesson # 1: HMMWV Batch to Flow













- Personal Coach
- Top Six
 - Leadership Immersion
 - -N/10 Event Pace
 - -3% permanent lean cadre
 - Model Value Stream
 - -Monetizing the gains
 - Double Digit Returns









Lesson # 4: Never Focused on Improving the Attributes





Lesson # 5: Public and Private Partnering



Center of Industrial And Technical Excellence (CITE)



Bradley Fighting Vehicle





Tactical Wheeled Vehicles

Multiple Launch Rocket System

Small Emplacement

Excavator





Rubber Products Only DoD Capability



ISO 9001:2008, ISO 14001:2004 & OHSAS 18001:2007 Registered 2006 & 2009 DOD Depot Maintenance Excellence



Partnerships



OHSAS 18001:2007 Registered

Engineering, Logistics & Supply Chain Management Expertise

> Cutting Edge Technology

Original Equipment Manufacturer

World Wide Dealer/FSR Base

2006 & 2009 DOD Depot Maintenance Exocitance





- Deployable workforce
- -100% Inspection of all Retrograde vehicles
- Reset Vehicles in compliance with MEL
- Disassemble Vehicles outside MEL
- -10/20 standards plus 4D
- -Trailer Diversity
- -MRAP multi-variant issues











- MRAP Support
- Taji National Depot
- Forward Repair Activity
- STPE-I



- Inventory Management Specialist
- Afghanistan COR
- ASC/TACOM Staff Augmentation
- Bradley Reactive Armor Tile





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2006 & 2009 DOD Depot Maintenance Experience



Lesson # 7: Continue to Improve





HEMTT ✓ Productivity improved from 2003 hrs/vehicle

- to 1100 hrs/vehicle
- ✓ Increased output from 13 vehicles to 32 vehicles per month
- ✓ Decreased lead time from 120 days to 30 days



TRAILERS ✓ 872 Flatbed Trailers - before Lean 244mhrs/trailer. After - 136mhrs/trailer.

✓ RRAD total Trailer production was 20 – 25 assets per month.

After Lean 100 trailers per month.



HMMWV mixed model ✓ Increased production from 3 vehicles per month in 2004 to 32 vehicles per day since February 2006

 $\checkmark 2$ time Shingo Medallion winner and winner of the Robert T. Mason Award

✓ Cost avoidance of \$3.89M



UAH/HEAT ✓ UAH/HEAT 2009 Shingo Medallion winner ✓ UAH/HEAT saves lives of the warfighter





Bradley Power-train

- ✓ Reduced direct labor hours from 116 to 72.5 per unit
- ✓ Improved first pass yield from 86% to 97.64%
- \checkmark Increased output from 2 units to 7 units per day
- ✓ Reduced lead time from 7 days to 3 days per unit



PATRIOT MISSILE

- ✓ Reduced direct labor hours from 116 to 72.5 per unit
- ✓ Improved first pass yield from 86% to 97.64%
- ✓ Increased output from 2 units to 7 units per day
- ✓ Reduced lead time from 7 days to 3 days per unit

MRAP

- ✓ MRAP University
- ✓ Deployment of 700 employees to support warfighter
- ✓ Currently establish ing10/20 program
- ✓ Winner of RRAD's second Robert T. Mason Award



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Looking Back to Looking Forward

- A history of BRACs, entitlement, inflexibility
- A burning platform for lean transformation
- Now, an environment of shrinking budgets, competitiveness--no entitlements
- Be flexible and continuously improve
 - Continuous improvement redeployment
 - Deployable Depot
 - Partner with industry
 - Be agile and flexible to meet customer needs
 - Cost, Schedule, Quality



