AMMUNITION ENTERPRISE
EXCELLENCE

Ready for Tomorrow?

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Panel Members

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- Pat Serao, ARDEC
- Mark DeYoung, ATK
- Pierre Chao, Defense-Industrial Initiatives Center
- Jody Parker, Lockheed Martin
- Judy Solgaard, American Ordnance
The Ammunition Enterprise implementation of Enterprise Excellence is a disciplined, structured approach for process and product optimization that is focused on the effectiveness and efficiency of the organization.

Effectiveness x Efficiency = Enterprise Excellence
Instilling discipline across the board
Permeate six sigma/lean into our business – both Service and Production Processes

- Kicked off a Ammunition Enterprise six sigma/lean enterprise executive black belt program
- Using Lean/Six Sigma principles in the establishment of Ammunition Enterprise wide processes
- Encouraging contractors to use Lean/Six Sigma tools
Enterprise Excellence

Effectiveness

Quality Management System
- Infrastructure
- Process Documentation
- Management
- Implementation
- ISO-9000

Voice of the Customer
- IPPD
- Product to Process Link
- Performance Requirements
- Process Requirements

Six-Sigma Project Selection
- Focused QSS-R
- Payback
- Infrastructure Support
- Enterprise Map
- DMAIC Process

Six-Sigma Process Control
- Process Mapping
- Process FMEA
- Statistical Process Control
- Measurement Systems Evaluation
- Process Capability

Six-Sigma Process Improvement
- Descriptive Statistics
- Inferential Statistics
- Analysis of Variance
- Linear Contrasts
- Design of Experiments

Efficiency

Process Metrics
- Yield
- Scrap
- Rework
- RTR
- Cost
- Cycle Time

Lean Metrics
- $A_0$
- MTBF
- MTTR
- Cycle Times
- TAKT Times
- Unit Cost

Lean Workload Balancing
- Routing Analysis
- Work Cells
- Standardized Activities
- Line Balancing

Lean Process
- Work Cells
- Standardized Activities
- One Piece Flow
- Automation

Process Optimization
Develop Ammunition

- Program Management/Planning/Control
- Contracting
- System Engineering
- Test and Evaluation
- PPBES
- Milestone Review Process

Acquisition Of Ammunition

- Acquisition Strategy / Planning
- Contracting
- Program Management/Planning/Control
- Review/Certification if TDP if Applicable
- PPBES
- Pre-production Engineering
- Price & Availability
- IM Strategy (legacy systems)

Production Of Ammunition

- Production/Systems Engineering (if Applicable)
- Design and Process Improvement
- Production Testing
- Production Monitoring
- Configuration Management
- Acceptance
- Program Management/Planning/Control
- Manufacturing
- Quality Assurance
- First Destination Shipping
- Contract Modification
- Safety and Environmental

Stockpile Management

- Program Management/Planning/Control
- Surveillance Program / QDR Suspensions
- Inventory Control/Accountability
- Receipt and Issue
- Distribution and Requisitioning
- Out loading
- Retrograde
- Transportation
- Maintenance of Storage Facilities
- Safety/Security
- Pre-positioning
- Malfunction Investigation
- PPBES
Maintenance of Stockpile

Demilitarization Of Ammunition
- Program Management/Planning/Control
- Commercial Sale
- Develop Demil Technologies and Procedures
- R³
- Contracting
- Disposal
- Recode to Stock

Sales
- FMS
- Presidential Drawdown
- Direct Sales
- GFM

Organic Issue
- Requisition
- Training
- Combat
- Testing

Maintenance Required
- Unserviceable
- Recap
- Modernization

Program Management/Planning/Control
Maintenance Planning
Parts Procurement
Contracting
Acceptance
Safety security environmental
Execute Program
Management Control

Yes
No

Expended
3/4

E

No
Summary

• Ammunition Enterprise serious about continuous improvement

• Utilizing Lean/Six Sigma structured approach

• Expect all of ammunition enterprise to include industry partners commitment to this journey
Question 1

What makes up a “perfect contractor” to you?
Question 2

What benefits has your Lean/Six Sigma program had over other improvement programs you have tried in the past?
Question 3

How have you and your customers benefited from your Lean/Six Sigma program?
Question 4

How will the Army use Lean/Six Sigma as a factor in Best Value contracting if at all?
Question 5

Is there a financial advantage to fully implementing Lean/Six Sigma tools in a business?
Question 6

How do you verify and track the gains made from implementation of Lean/Six Sigma within your organization?
Question 7

What price premium are you willing to pay to ensure a quality product?
If you were interested in starting a continuous improvement program tomorrow what are the first three things you would do?
The other Service's perception is our enterprise is not consistently making quality ammunition. Based on your experience can a robust Lean/Six Sigma program turn the tide on the quality of our products? How?
Questions from the Floor
Back up Charts
Enterprise Excellence

Ammunition Enterprise Commitment

The PEO Ammunition, JMC and ARDEC are leading the way in implementing Enterprise Excellence in the Ammunition Enterprise:

- Executive Champions 147
- Green Belt Six Sigma Lean 638
- Black Belts Six Sigma Lean 189
- Total Productivity Maintenance 41
- Current Process Improvement Projects
  Approximately 200 within the Ammunition Enterprise