DoD Parts Management Reengineering

Industry Day
McLean, VA
19 May 2009
Short History of Parts Management

- The days of MIL-STD-965
- Acquisition Reform
- ADUSD(LPP) Tasking to Reengineer Program
- Parts Management Reengineering Working Group (PMRWG)
- Parts Management Reengineering Implementation Process Team (PMRIPT)
- Parts Standardization and Management Committee (PSMC)
Reengineering Timeline

- HQ DLA requested relief from Parts Management Program (Jul 2003)
- ADUSD (Logistics Plans & Programs) directed DSPO to reengineer DoD Parts Management Program (Oct 2003)
- DSPO established PMRWG (Mar 2004)
- Briefed initial findings to TLCSM (Oct 2004)
Reengineering Timeline (Continued)

• Briefed preliminary recommendations to TLCSM (Jan 2005)
• PMRWG final report published (Oct 2005)
• TLCSM EC approved implementing PMRWG recommendations (Apr 2006)
• DSPO established PMRIPT (May 2006)
• MIL-STD-3018 was published (Oct 2007)
• Implementation “hand-off” from PMRIPT to PSMC (Oct 2007)
What Is Parts Management?

- Selecting parts during weapon system design
- Analyzing parts for reliability, availability, and quality
  - Mitigating DMSMS is critical
- Screening for common usage
- Reducing the number of unique parts
- Qualifying products
Benefits of Parts Management

- Cost avoidance
- Enhanced logistics readiness and interoperability
- Increased supportability and safety of systems and equipment
- Improved Warfighter support
- Reduced acquisition lead-time
- Benefits government and industry
Parts Management
Reengineering Participants

- Defense Standardization Program Office
- OSD Systems & Software Engineering
- Military Departments
- Defense Logistics Agency
- Missile Defense Agency
- National Aeronautics and Space Administration
- Parts Standardization & Management Committee
- DMSMS Working Group
- Government Industry Data Exchange Program
- Industry representatives
Industry Participants

- Aerospace Corporation
- ARINC
- BAE Systems
- BMPCOE
- Boeing
- ECCMA
- Electric Boat
- General Dynamics
- Honeywell
- IHS
- Inventory Locator Service
- Lansdale
- Lockheed Martin
- Manufacturing Technology Inc.
- MPC Products
- Northop Grumman
- Parker Aerospace
- PARTsolutions
- Raytheon
- XSB
Top Three PMRWG Recommendations

- Revitalize parts management within systems engineering
- Make parts management a policy and a contractual requirement
- Develop improved parts management tools and metrics
#1 Revitalize Parts Management Within Systems Engineering

- New parts management language in the Defense Acquisition Guide, Chapter 4, Systems Engineering
- Addressing parts management in:
  - Systems Engineering Plans (SEPs)
  - Risk assessment checklists
  - Other engineering guidance
- Emphasizing parts management in training course material for engineers
#2 Make Parts Management A Policy and Contractual Requirement

**MIL-STD-3018 (Parts Management)**

- Implements a Parts Management Program on acquisition contracts
- Requires a Parts Management Plan in response to Requests for Proposals
- Contains the required parts management elements
- Provides an order of preference for part selection

**DI-SDMP-81748 (Parts Management Plan)**
#3 Develop Improved Parts Management Tools

**The goal:** to provide current, accurate, consistent data for government and industry

- Integrate parts management data requirements with current initiatives
- This need drove the development of the Defense Parts Management Portal (DPMP)
- Provide additional tools as funding permits
Implementation Accomplishments

- Inserted parts management language into systems engineering guidance documents
- Updated Parts Management language in Defense Acquisition Guide, Chapters 4 and 5
- Deployed DAU course: CLL206, “Parts Management Executive Overview,” August 2008
- Developed and began testing the Defense Parts Management Portal (DPMP)
Remaining Implementation Tasks

- Coordinate directive parts management memorandum for AT&L signature
- Insert parts management language into DoDI 5000.02, *Operation of the Defense Acquisition System*
- Publish revised SD-19, “Parts Management Guide”
- Continue reviewing/revising related documents and training course material
- Complete testing and deployment of DPMP
- Develop a parts management practitioners course
- Develop a parts management plan builder on the Army LOGSA SYSPARS website
Ways to Support the DoD Effort

- Take the Parts Management Exec course (CLL 206)
  - Register for credit or simply “browse” for your info
  - Go to: www.dau.mil - click “Continuous Learning”
  - Designed to be self-taught in an hour and a half

- Participate in the DPMP
  - Each company will be invited to build a “bridge page”
  - The Portal’s effectiveness will depend on its users

- Participate in future meetings
  - DMSMS/STDZ Annual Conference, Sep 2009, Orlando
  - PSMC Fall Conference, Nov 2009, San Diego
Closing

Questions?
Comments?
Back Up Material
History of Parts Management

1977: MIL-STD-965, Parts Control Program
1983: SECDEF Weinberger Spare Parts Acq memo
1984: DEPSECDEF Taft DoD Parts Control memo
1994: SECDEF Perry Acquisition Reform memo
1996: MIL-HDBK-965, Parts Management Program
2000: MIL-HDBK-512, Parts Management
2004: Begin Re-engineering DoD Processes
Challenges

• Reengineer process with a clean slate
  – Reduce the Logistics Footprint

• Focus on DoD’s desired results
  – Operational availability
  – Operational reliability
  – Cost per unit of usage
  – Logistics Response Time
Challenges

- Systems Engineering Approach
  - Parts Selection Process
  - DMSMS Planning
  - Parts Management Plan
- Milestone Reviews
  - Ensure compliance
  - Measure effectiveness
Logistics Footprint

The size of the presence of logistics support required to deploy, sustain, and move a weapon system, including:

- Inventory/equipment/parts
- Personnel
- Facilities
- Transportation
- Real Estate
**PMRWG Findings**

- Footprint is growing
- Parts management can moderate growth
- Acquisition environment lacks adequate emphasis on parts management at the DoD level
  - discipline, motivation, incentives, and requirements
- Systems Engineering discipline currently lacks parts management focus
- Most DoD programs do not address DoD level parts management
- A performance-based mechanism to restore balance already exists (MIL-HDBK-512, SD-19)
PMRWG Conclusions

• Parts management needs to be a requirement
• Parts management needs a total system approach
• Parts management decision-makers need better tools
• Parts management can be accomplished within a performance-based environment
Final PMRWG Report

- Published final report (Oct 05)
- Executive version
- Available electronically at:

www.dsp.dla.mil/APP_UIL/content/documents/pmrwg_rpt.pdf
Implementation Phase

- DSPO Chartered Parts Management Reengineering Implementation Process Team (PMRIPT)
  - Kicked off in May 2006
  - Held 3-day meetings about every other month

- Organized PMRIPT into project teams to guide implementation of the top three recommendations:
  - Systems Engineering Team
  - Policy and Contracts Team
  - Tools Development Team

- Enlisted the Parts Standardization & Management Committee (PSMC) to support the reengineering effort
  - Long-standing Government/Industry Forum
  - Many PMRIPT members also belonged to PSMC
  - Chartered PSMC under DSPO Nov 2006
PMRIPT
Project Teams

• **Systems Engineering Team**
  – Work with Systems Engineering community to integrate parts management into systems engineering policy / process
  – Coordinate with DAU on incorporating parts management language into appropriate courses

• **Policy and Contracts Team**
  – Develop language for existing policy documents, and developing new documents
  – Draft contract templates and data item descriptions for parts management contractual requirements

• **Tools Development Team**
  – Interview key users to determine tools requirements
  – Coordinate with DMSMS community to build upon existing DMSMS capabilities to develop a single point of entry to parts management data
**MIL-STD-3018 Defines Parts Management...**

...as the practice of considering the:

- Application
- Standardization
- Technology (both new and aging)
- System reliability, maintainability and supportability
- Cost

when...
MIL-STD-3018 Defines Parts Management (continued)

- Selecting parts
- Addressing
  - Availability
  - Logistics support
  - DMSMS
  - Legacy issues

“throughout the life of the systems”