Transforming Logistics Through Performance-Based Logistics

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“Amateurs talk about strategy; Professionals talk about logistics.”

former General R.H. Barrows
Commandant, USMC
Our History

- Unparalleled industrial capabilities
- Highly trained and motivated workforce
- First fully automated logistics system
- Envied by our allies; Feared by our adversaries

*World class in mass logistics.*
Post Cold War

• $109B in inventory (1989)
• 60-day response time
• 42 Maintenance Depots
• 788M cubic feet of storage space

• $67B in inventory
• 32-day response time
• 20 Maintenance Depots
• 323M cubic feet of storage space

Ready to Project and Sustain a Smaller “Cold War”
The Changing Game

• Immediately Employable Force Option
• Preemptive Capability
• Net-Centric Warfare
• Focused Joint Logistics
Logistics Implications (QDR Direction)

• Project and sustain the force with minimal footprint

• Implement performance-based logistics to improve readiness for major weapon systems and availability of commodities

• Reduce cycle times to industry standards
Transforming Logistics

“Little Cold War”
• $90B/year operating costs
• 80’s readiness
• $67B in inventory
• 16-day CWT
• 788M cubic feet of storage space

Global War on Terror
• $70B/year operating costs
• High 90’s readiness
• $50B in inventory
• 2-day reliable delivery
• 300M cubic feet of storage space
Transforming Logistics

• Reduce immediate risk
  – Increase readiness

• Reengineer the “Pipeline of Freedom”
  – To commercial standards through commercial practices

• Accelerate the “Arsenal of Democracy”
  – Buy our way out
Reengineer the Pipeline of Freedom: The Future Logistics Enterprise

- Available weapon systems
- Reliable delivery
- Accurate information
- Reduced Cost

Delivering Cost-Effective Capability Today!!

DoD’s near-term plan to transform logistics.
## Weapon System Support Challenges

### Operational Challenges
- Availability of parts
- High maintenance levels
- Retention/turnover of maintenance personnel
- Large maintenance/supply footprint

### Structural Challenges
- Equipment designed to 75-85% availability
- Disjointed acquisition and logistics processes and accountability
- $67B per year in cost; no link to output
- Disjointed, functional support structure
- 16-day CWT for high priority parts
- 50% of cost tied to maintenance; vast majority at O&I level
- Aging organic depot infrastructure

### Implications for Transformation
- Will not support rapid force projection
- Large footprint (people and equipment)
- Complex, disjointed logistics chains
- Limited asset visibility

### Mid-Term Solutions
- Total Life Cycle Systems Management
- Performance-Based Logistics
- Depot Partnering
- Conditioned-Based Maintenance

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**Integrated strategy to achieve end-to-end accountability for weapon system support that meets transformation goals and requirements.**
JROC: Focusing on Capability

- Capability based
- Net-centric driven
- Mobility/footprint are military capabilities
- Reliability/maintainability are military performance parameters
THE 5000 MODEL

- Process entry at Milestones A, B, or C
- Entrance criteria met before entering phase
- Evolutionary Acquisition or Single Step to Full Capability

User Needs & Technology Opportunities

- Pre-Systems Acquisition
- Systems Acquisition
- Sustainment

ICD: Initial Capabilities Document
CDD: Capabilities Development Document
CPD: Capabilities Production Document
IOC: Initial Operating Capability
FOC: Full Operating Capability
LRIP: Low-Rate Initial Production
OT&E: Operational Test and Evaluation
FRP: Full Rate Production

Emphasis on Evolutionary Acquisition
**Total Systems Approach.** The PM shall be the single point of accountability for accomplishment of program objectives for total life cycle systems management, including sustainment.

**Performance-Based Logistics.** PMs shall develop and implement performance-based logistics strategies that optimize total system availability while minimizing cost and logistics footprint. Sustainment strategies shall include the best use of public and private sector capabilities through government/industry partnering initiatives, in accordance with statutory requirements.
Spectrum of PBL Strategies

PBL strategies will vary along this spectrum depending on:
• Age of System (Phase in Life Cycle)
• Existing Support Infrastructure
• Organic & Commercial Capabilities
• Legislative and Regulatory Constraints

Examples:
• Total System Support Responsibility (TSSR)
• Industry Partnering
• Service Level Agreements
• Performance-based Agile Logistics Support (PALS)
• Prime Vendor Support (PVS)
• Contractor Delivery System (CDS)
• Performance Plans
• MOU with Warfighter

One Size Does Not Fit All

PBL is **NOT** CLS
Public-Private Partnering

**Warfighter**
- Improved logistical support
- Improved responsiveness
- Increased reliability
- Technology infusion
- Obsolescence

**Organic Depots**
- Enhanced operating efficiency
- New investment
- Access to technical innovation
- Preserve skilled workforce

**Commercial Firms**
- Access to proven capabilities
- Minimize cycle time
- Avoid investment in duplicative capabilities
- Long-term agreements
Future System Sustainment

Real-Time System Status (CBM+)

Industry/Government

Performance-Based Logistics

Weapon System Management

Force Provider

Partnerships

Ensure system is sustained at optimum level

Provide continuous, reliable, affordable support

Visibility into cost/risk decisions across life cycle

Providing operational availability; not parts.
Total Life Cycle Systems Management
Desired End State

Program Managers responsible for the overall management of the weapon system life cycle to include:

- Timely acquisition of weapon systems meeting warfighter performance requirements
- Integration of sustainability and maintainability during acquisition process
- Weapon system sustainment to meet or exceed warfighter performance requirements at best value to DoD (and appropriate visibility)
Current Status

- Policy and workforce development in place
- Migration ongoing
- $15B in savings already taken from PBBE 04
- Best in class readiness during OIF

PBL Implementation

[Bar chart showing cumulative PBL programs from 2002 to 2005*]

* Projected PBLs Based on Approved Service Plans
## Why PBL?

<table>
<thead>
<tr>
<th>Administration Objectives</th>
<th>PBL Tenet</th>
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<tbody>
<tr>
<td>Commercial Sourcing</td>
<td>Moving weapon support to industry via business case analyses; avoids lengthy A-76 process</td>
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<tr>
<td>Capability Based</td>
<td>PBLs based on operational readiness (output)</td>
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<td>Lighter, more agile forces</td>
<td>Industry and PM’s incentivized to design out logistics</td>
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<td>Shorten Cycle Times by 50%</td>
<td>Industry provided support achieving best practice standards (48 hours)</td>
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<td>Financial Management Reform</td>
<td>Clear accountability for cost/performance</td>
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*Accelerate transformation of our $70B/year weapon support business.*
Programs Contributing to GWOT*

*Partnership/PBL programs readiness exceeded traditional support; several achieved historically high availability!
GWOT PBL Results

Mission Capable Rates

Availability on Demand
Weapon System Sustainment Roadmap

- PM accountable for life cycle
- JROC established sustainment requirements
- Enabling Depot legislation
- Revised Maintenance Policy
- Industry Supply Chains
- Reengineered Training

Today
- Suppressed Readiness
- Marginal reliability
- Fractionated Accountability
- $67B/year
- Huge footprint

PBL Implementations

- Financial Reform (PR05)
- Single-line Accounting
- Life Cycle Cost Management
- Operational requirements synchronized with PBBS

Number of Partnerships (1998 & 2002)

- Joint Strike Fighter
- Future Combat System
- Advanced Amphibious Assault Vehicle

- Warfighter-driven readiness
- Ultra-reliability
- Clear PM accountability
- Minimal Footprint

2000 2005 2015
• Pursue PBL aggressively
  – All legacy weapons transition to PBL by 2005 if justified by business case analysis

• Issue standard guidance
  – Seek consistent approach rather than approach that varies widely by service

• Move toward single manager
  – Combat commanders control funds; once allocated to weapon system program manager should manage funds

• Seek funding flexibility
  – Need single “color of money”

• Need flexibility to accommodate funding shifts

• Seek multiyear contracting authority
Long-Term: Accelerate Modernization of Highly Reliable Systems

• Reduce footprint as a military requirement

• Streamline the acquisition process

• Achieve Focused Logistics

• Achieve net-centric operations
The “Future” is being determined NOW!

Designing OUT Logistics
Reducing Footprint NOW!

LEGACY

2000

F-18
AV-8
F-16
APACHE
ACR W/ABRAMS

40%

36%

50%

2010

TLCSM

F-35 (JSF)
COMANCHE
ACR W/ABRAMS

Achieving Transformation Through Life Cycle Management
F/A-18 E/F USN/Industry Partnership

**U.S. NAVY**
- Configuration Control
- System Safety
- Organizational and Intermediate Maintenance (Ashore/Afloat)
- GFE and E/F, C/D Common Spares
- GFE Support Equipment
- Component Repair

**INDUSTRY**
- Material Management
  - E/F Unique Reparables
  - All E/F Consumables
  - Transportation
  - Retail and NADEP Support
- Reliability Improvement
- Configuration Management
- Component Repair
- Obsolescence Management
- Design
- Technical

**Leverage commercial and DoD best practices**

- Industry/Gov't distribution
- Seamless support to warfighter
- Web-based asset visibility

- Deployed 6 months early to meet OEF/OIF requirements
- 99% Range and Depth of Spares Deployed to OIF
- 70%-89% of demands met in 48 hours
- 97.1% successful launch rate
The End Game

“On my signal ...
unleash hell....”

Ubiquitous, cost-effective capability to project and sustain power.
Put Another Way . . .

. . . Warheads on Foreheads!