Life Cycle Logistics

22 February 2011

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Outline

- USAMC Logistics Support Activity Mission
- What’s needed for Sustainment
- Acquisition Logistics – how we get there
- “Tools” that support the process
- Life Cycle Logistics chart/web site
LOGSA Mission

Provide logistics intelligence, life cycle support, and technical advice and assistance to the current and future force; Integrate force, readiness, authorization, and asset logistics information for worldwide equipment readiness, distribution pipeline performance analysis, and asset visibility for timely and predictive decision making.
What We Do:
- Own and Sustain the Army’s Logistics Information Warehouse (LIW)
- Provide a Consolidated View of Entire Logistics System Turning Data into Information, Intelligence and Knowledge
- Provide Lifecycle Support through Sustainment of ILS Policy and Engineering Models
- Provide Support to the SALE through Data Cleansing and Validation and Legacy System Interfaces

What We Manage:
- ETMs/IETMs
- Army Oil Analysis Program (AOAP)
- Army Air Clearance Authority (AACA)
- PS Magazine
- ILS Policy
- Readiness Integrated Data Base (RIDB)
- Vehicle Registration Program
- Unique Item Tracking (UIT)
- Army Portion of FEDLOG
- DODAACS, RICs, Army Project Codes Assignment
- Packaging and Containerization Policy and Testing
- Army Intermodal and Distribution Platform Program (AIDPMO)
- Sets, Kits, Outfits and Tools (SKOT) Library

The Magnitude:
- Over 5 Billion Data Records
- 10,000 Reference Tables
- 45 Million Transactions Daily

Worldwide Operations…
- Redstone Arsenal, AL
- Tobyhanna Army Depot, PA
- Pensacola, FL
- Ft. Belvoir, VA
- Balad, Iraq
- Arifjan, Kuwait
- CONUS & OCONUS
- AOAP Labs

Life Cycle Logistics
### Weapon system Field Feedback

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<th>IETM/Technical Publications</th>
<th>Repair Parts</th>
<th>Facilities</th>
<th>Support Equipment</th>
<th>Skilled Personnel</th>
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**Weapon system configuration**
Acquisition Logistics

• Building Blocks for the Sustainment Process:
  – Requirements Analysis
  – Support Development
Acquisition Logistics Support Development

Design Driven

Functional Requirements Identification

FMECA

RCM Analysis

(Support Alt & Trade-offs)
LORA

Task Analysis

Parts/Support Equip/Skills/Facilities

Logistics Product Data
• **GEIA-STD-0007, Logistics Product Data**
  - **GEIA-HB-0007, Guide to Logistics Product Data**
    - **GEIA-HB-0007-1, GEIA-STD-0007 Logistics Product Data Reports (Draft)**
    - **GEIA-HB-0007-2, Provisioning Guide for GEIA-STD-0007 (Draft)**

• **MIL-STD-XXX, Logistics Support Analysis**
  - “Re-Instatement of MIL-STD-1388-1A, Logistics Support Analysis“
  - Revise to address Acquisition Logistics Analysis Process that supports the Logistics Sustainment Products
  - First Step is Business Case Analysis - In process

• **Software Support Tools**
• Data Model

• Data Element Dictionary (594 Data Elements)

• XML Schema for Data Exchange of Logistics Product Data
  • Update/Change Process

• XML Schemas for Transaction Sets
  • Provisioning Data & Style Sheet (Meets CCSS/LMP Input Requirements)
  • Packaging & Style Sheet (Meets DD-2326 Packaging Requirements)

• Task Analysis

XML Schemas Provide Mechanism for Data Exchange/Delivery
• Overview of logistics analysis process and when Logistics Product Data is generated during the development process (DOD Lifecycle Model)

• Contracting for Logistics Product Data – How to use the data to develop the logistics sustainment products

• Appendices
  – Attribute Selection Sheet
  – LCN, ALC and UOC Guidance
  – Data Cross Reference List (LMI, GEIA-STD-0007, DEF STAN 00-60, MIL-STD-1388-2B)
  – US Navy Logistics Product Data Report Requirements
GEIA-HB-0007-1
Logistics product data Reports

• Maintenance Planning/Support
  – Maintenance Plan (LSA-024)
  – Maintenance Allocation Chart (LSA-004)
  – Maintenance Procedures for IETMs (LSA-019)
  – Authorization List Items (LSA-040)

• Support and Test Equipment
  – Support Equipment Recommendation Data (LSA-070)
  – Support Equipment Candidate List (LSA-071)
  – Calibration Maintenance Requirements Summary (LSA-076)
  – TMDE Registration (LSA-072)

• Supply Support (Repair Parts)
  – Provisioning Technical Documentation Lists (Long Lead, Post Conference, Common, Bulk Items, etc.) (LSA-036)
  – Design Change Notice Information (LSA-036)
  – Cataloging/Screening/Parts Breakout (LSA-032/LSA-154))
  – Indentured Parts List (LSA-030)
  – Bill of Materials List (LSA-080)
• **Manpower, Personnel & Training**
  - Qualitative & Quantitative Personnel Requirements Information (LSA-001)
  - Consolidated Manpower, Personnel and Training Report (LSA-075)

• **Packaging, Handling, Storage, and Transportation**
  - Packaging and Preservation Data (LSA-025)
  - Hazardous Material Report (LSA-078)

• **Facilities**
  - New/Modified Facilities Requirements (LSA-012)

• **Reliability and Maintainability**
  - FMECA Results (LSA-058)
# Software Support Tools

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<th>Production &amp; Deployment</th>
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**Logistics**

**Evaluation of Concepts**
- Repair versus Discard
- Testability Trades

**Support Drivers**
- Cost Drivers

**Warehouse Test Data**
- Trend Analysis

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- Trend Analysis

**Logistics Requirements Data Base**
- Failure Modes Effects and Criticality Analysis (FMECA)
- Task Analysis

**Provisioning List**
- Maintenance Allocation Chart
- Data Exchange

**Repair Parts and Special Tools List (RPSTL)**
- Bill of Materials

**Trend Analysis**
- Metric Tracking
- Logistics Resource Driver Information

**UNCLASSIFIED**

**USAMC LOGSA ~ SUPPORTING WARFIGHTERS GLOBALLY**

**Life Cycle Logistics**
Life Cycle Logistics Chart

• Logistics overlay to the Defense Acquisition Life Cycle Chart

• Highlights:
  – Program Management Documentation
  – System Engineering Requirements
  – Supportability Analysis Process
  – Integrated Logistics Support Products

• Interactive – Online Chart:

Every Box is Interactive
Design Influence

Materiel Solution Analysis  Technology Development  Engineering Manufacturing & Development  Production & Deployment  Operations & Support

INFLUENCE SYSTEM DESIGN

IDENTIFY SUPPORT REQUIREMENTS
Special Test Equipment for the OV-1 Mohawk

Unique to OV-1 Mohawk ONLY!
The NEED for Supportability Planning

TOW Missile Night Sight Cooling System Logistics Footprint

Original Cooling System
Summarized
Logistics Footprint
Air Canisters
Canister Carrying Cases
Batteries
Batteries Chargers
Generators
Air-Conditioners
Portable Facilities
Heavy Duty Vehicles
Numerous Soldiers for Support

New Cooling System
Logistics Footprint
2 Small Lightweight Boxes

Design Improvement
Reduced Logistics Burden and
Saved 250 Million Dollars (1983)
Summary

• Logistics Sustainment Based on Good Acquisition Logistics

• Acquisition Logistics “Tools” Available

• Addition of LSA Standards will improve process

• Integration with MBE will result in lower sustainment costs
RESPECT COURAGE INTEGRITY
LOYALTY DUTY HONOR SERVICE
THIS WE'LL DEFEND

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