

U.S. ARMY MATERIEL COMMAND
LOGSA
SUPPORTING WARFIGHTERS GLOBALLY

Life Cycle Logistics

22 February 2011

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SUSTAINING THE ARMY THROUGH THE MATERIEL LENS...



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.



LOGSA



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 | Readiness Integrated Data Base (RIDB) | Packaging and Containerization Policy and Testing |
| Army Oil Analysis Program (AOAP) | Vehicle Registration Program | Army Intermodal and Distribution Platform Program (AIDPMO) |
| Army Air Clearance Authority (AACAA) | Unique Item Tracking (UIT) | Sets, Kits, Outfits and Tools (SKOT) Library |
| PS Magazine | Army Portion of FEDLOG | |
| ILS Policy | DODAACs, RICs, Army Project Codes Assignment | |

The Magnitude:

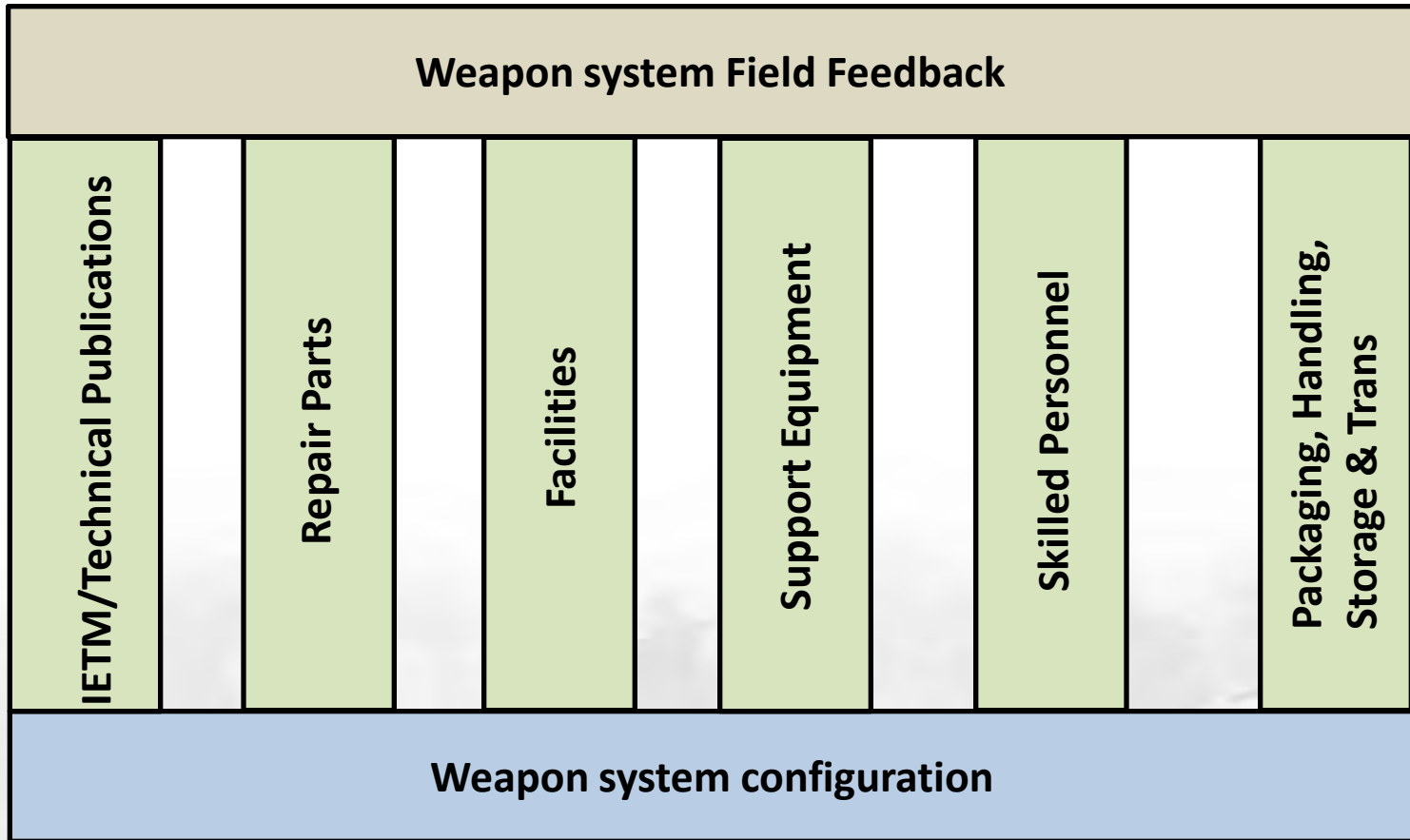
- | Over 5 Billion Data Records
- | 10,000 Reference Tables
- | 45 Million Transactions Daily

Worldwide Operations...

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



What's Needed in Sustainment?





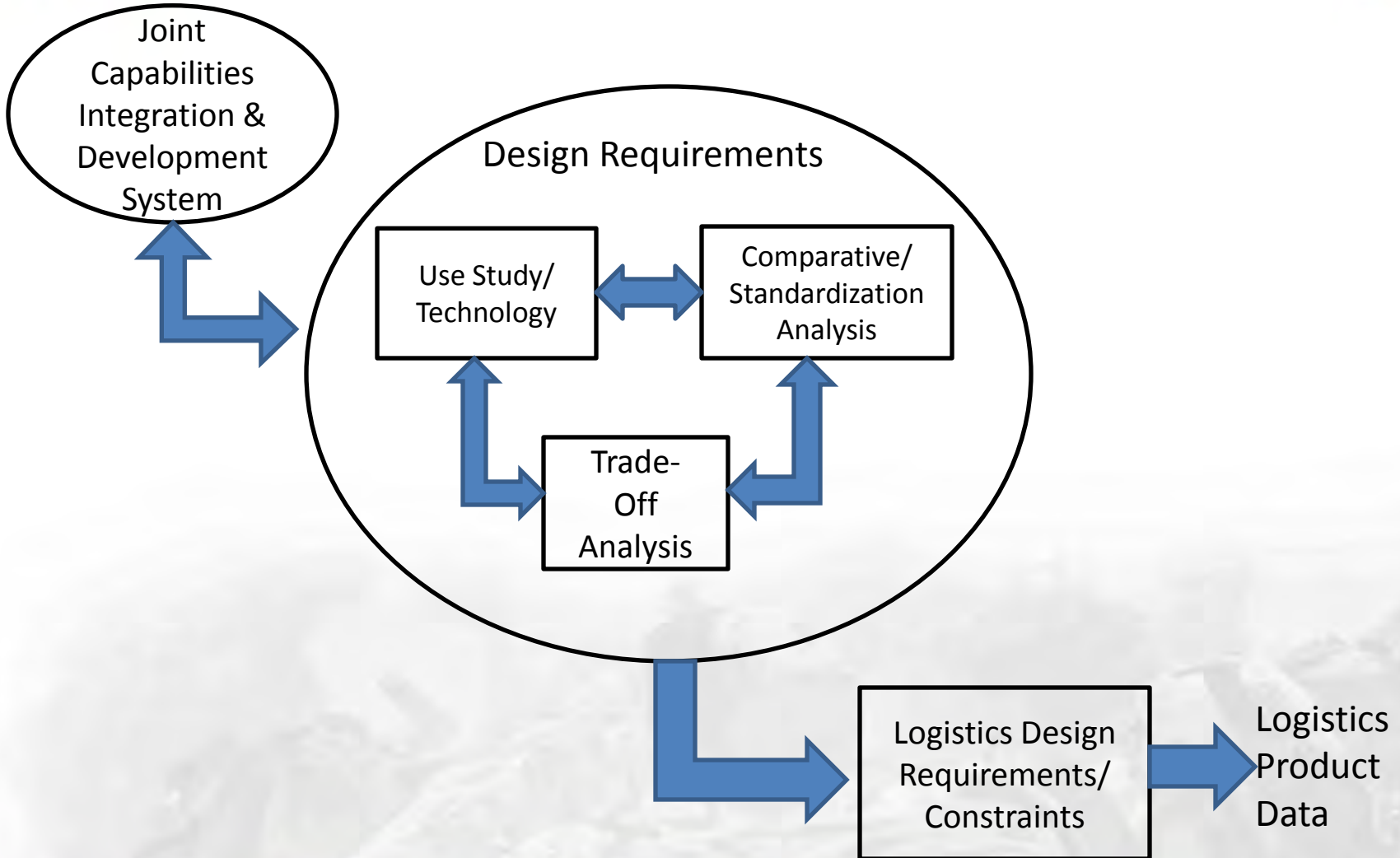
Acquisition Logistics



- **Building Blocks for the Sustainment Process:**
 - **Requirements Analysis**
 - **Support Development**

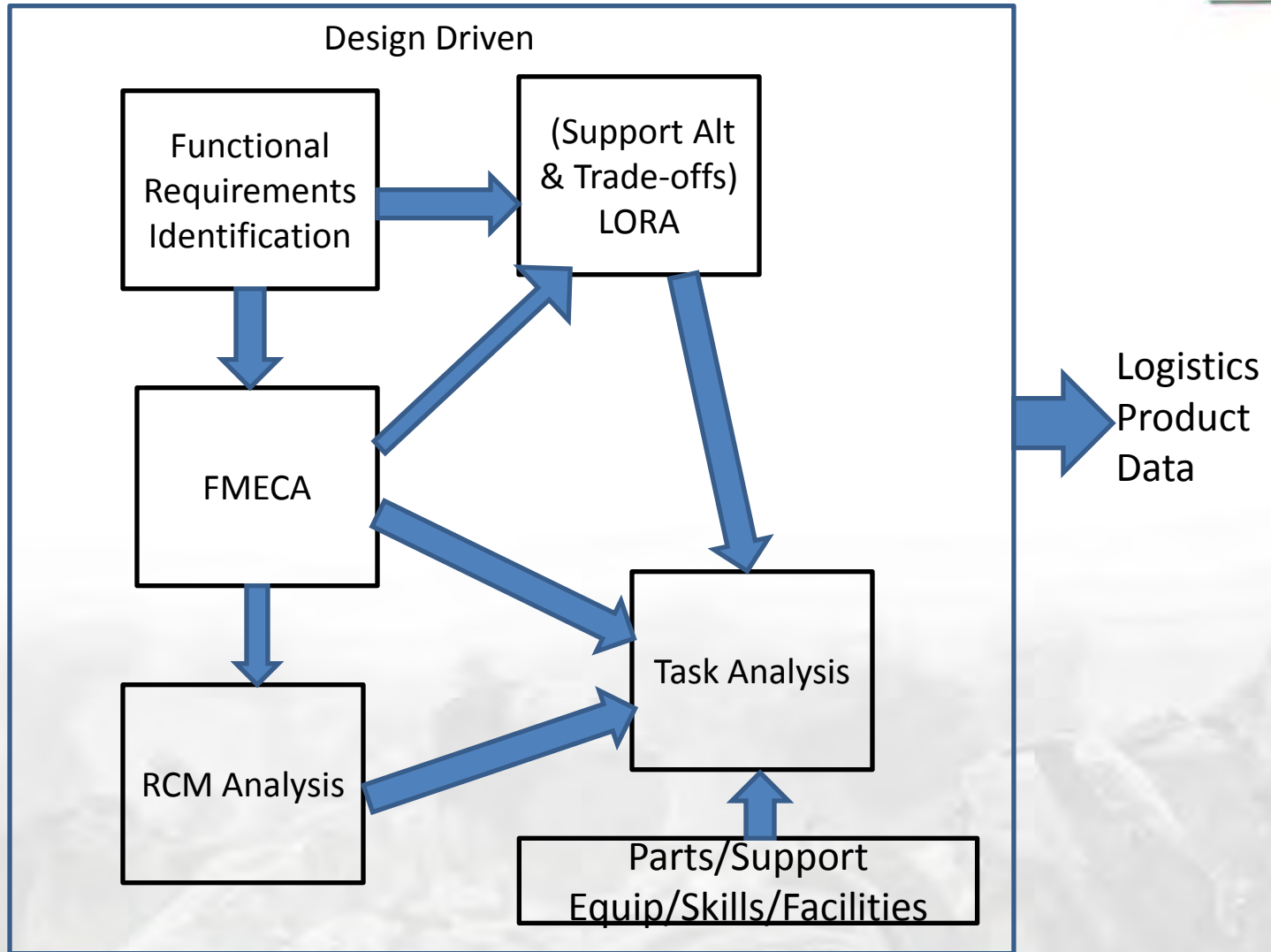


Acquisition Logistics Process Requirements Analysis





Acquisition Logistics Support Development





Acquisition Logistics "Tools"



- **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**



GEIA-STD-0007

Logistics Product Data



- 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



GEIA-HB-0007 Content



- 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)



GEIA-HB-0007-1

Logistics product data Reports



- **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



Material Solution Analysis	Technology Development	Engineering and Manufacturing Development	Production & Deployment	Operations & Support
	A	B	C	
Ensure Supportability Considerations	ILS Planning/ Analyzing Alternatives	Logistics System Development	Evaluate Post Production Support	Metrics Tracking – Recapitalization
<ul style="list-style-type: none"> Systems Engineering Plan (SEP) 	<ul style="list-style-type: none"> Acquisition Strategy Supportability Strategy SEP, TEMP, IUID Plan PBL Strategy/BCA 	<ul style="list-style-type: none"> Material Fielding Plan (MFP) Performance Based Agreement (PBA) AS, SS, SEP, TEMP Update 	<ul style="list-style-type: none"> AS, SS Update MFP Update PBA Update SEP, TEMP Update 	<ul style="list-style-type: none"> SS, PBA Update Diminishing Manufacturing Sources & Material Shortages (DMSMS) Plan
<ul style="list-style-type: none"> System Level of Repair Analysis Impact on Force Structure 	<ul style="list-style-type: none"> Evaluation of Concepts Repair versus Discard Testability Trades 	<ul style="list-style-type: none"> Maintenance Planning Supply Support Analysis 	<ul style="list-style-type: none"> Initial Field Feedback Support Plan Validation and Refinement 	<ul style="list-style-type: none"> Unit Cost Changes Availability of Manpower
<ul style="list-style-type: none"> Economic Analysis 	<ul style="list-style-type: none"> Life Cycle Cost Model Risk Analysis 	<ul style="list-style-type: none"> Spares Provisioning Operational Availability 	<ul style="list-style-type: none"> Warranty Analysis Reliability Growth Analysis 	<ul style="list-style-type: none"> Net Present Value Economic Analysis Trade-Off / Comparative Analysis
<ul style="list-style-type: none"> Logistics Requirements Data Base 	<ul style="list-style-type: none"> Failure Modes Effects and Criticality Analysis (FMECA) Task Analysis 	<ul style="list-style-type: none"> Provisioning List Maintenance Allocation Chart Data Exchange 	<ul style="list-style-type: none"> Repair Parts and Special Tools List (RPSTL) Bill of Materials 	<ul style="list-style-type: none"> Configuration Management Technical Manual Revisions
	<ul style="list-style-type: none"> Support Drivers Cost Drivers 	<ul style="list-style-type: none"> Warehouse Test Data 	<ul style="list-style-type: none"> Trend Analysis Warehouse Test Data 	<ul style="list-style-type: none"> Trend Analysis Metric Tracking Logistics Resource Driver Information



USAMC LOGSA ~ SUPPORTING WARFIGHTERS GLOBALLY



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:

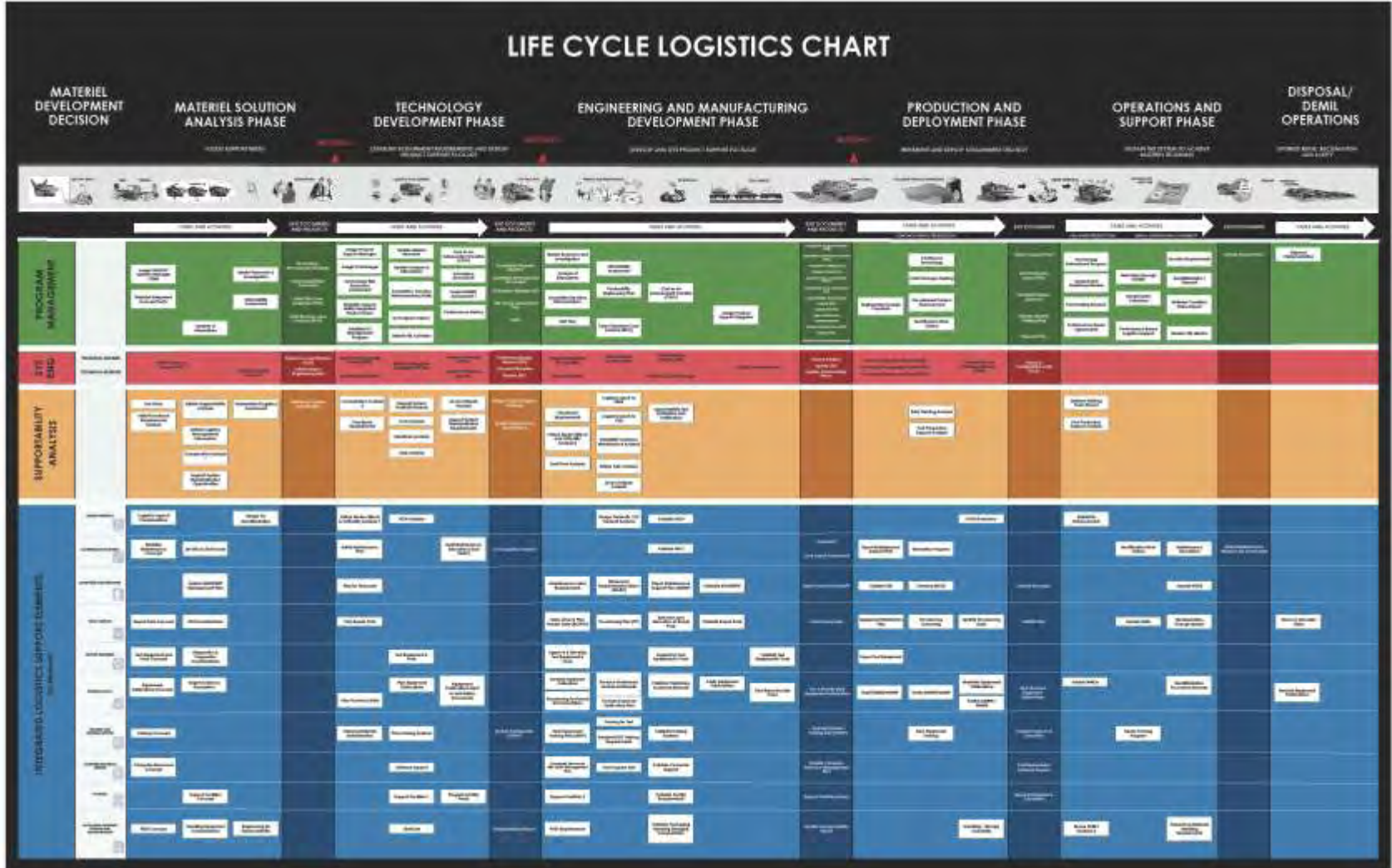
<https://acc.dau.mil/logsa/default.aspx>



Life Cycle Logistics Chart

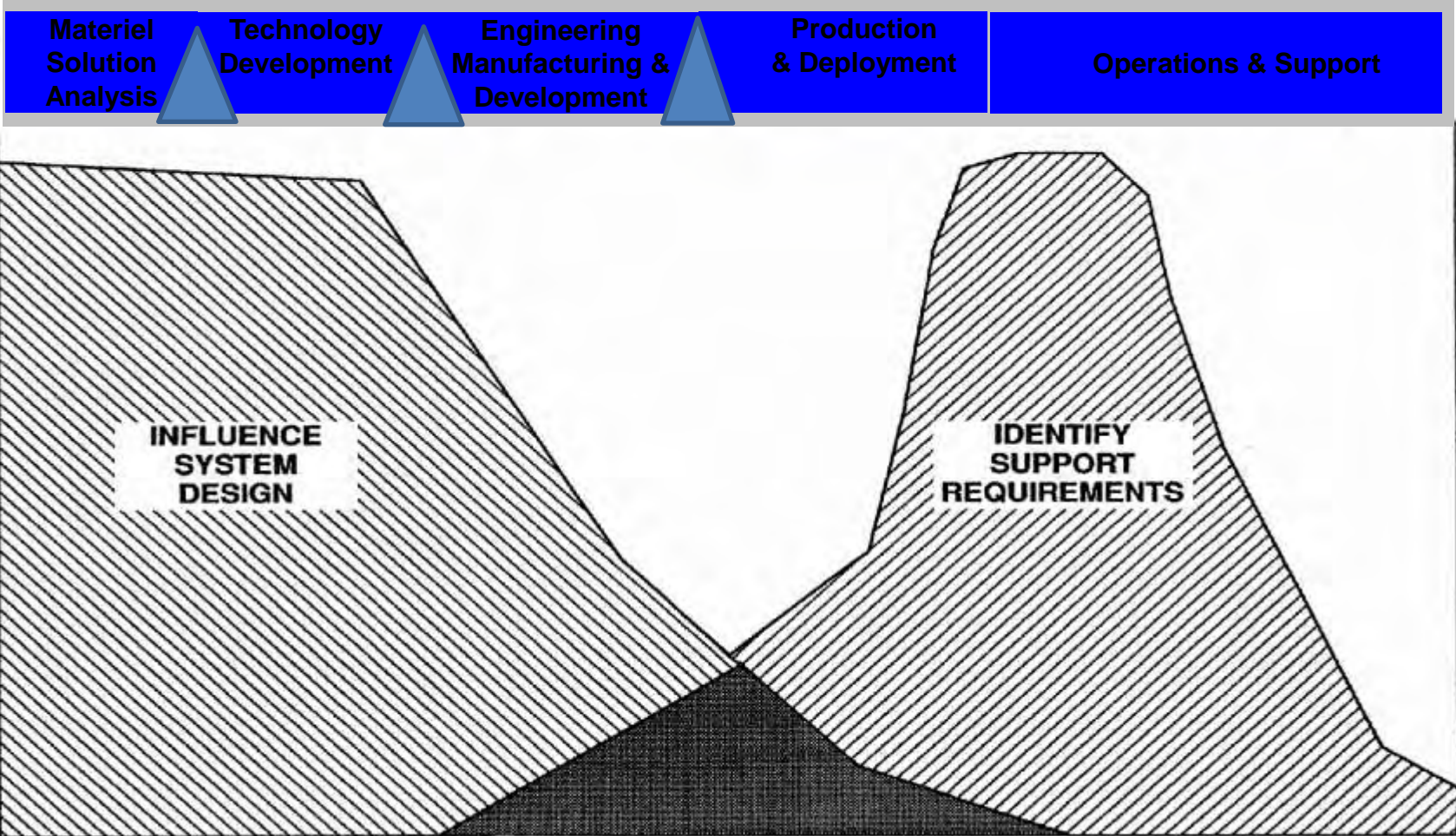


Every Box is Interactive





Design Influence





Special Test Equipment for the OV-1 Mohawk

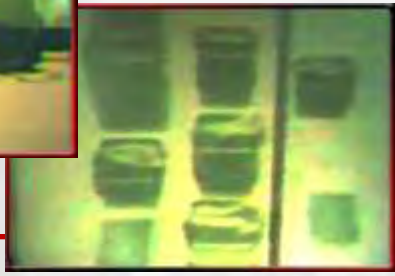


Unique to OV-1 Mohawk ONLY!



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

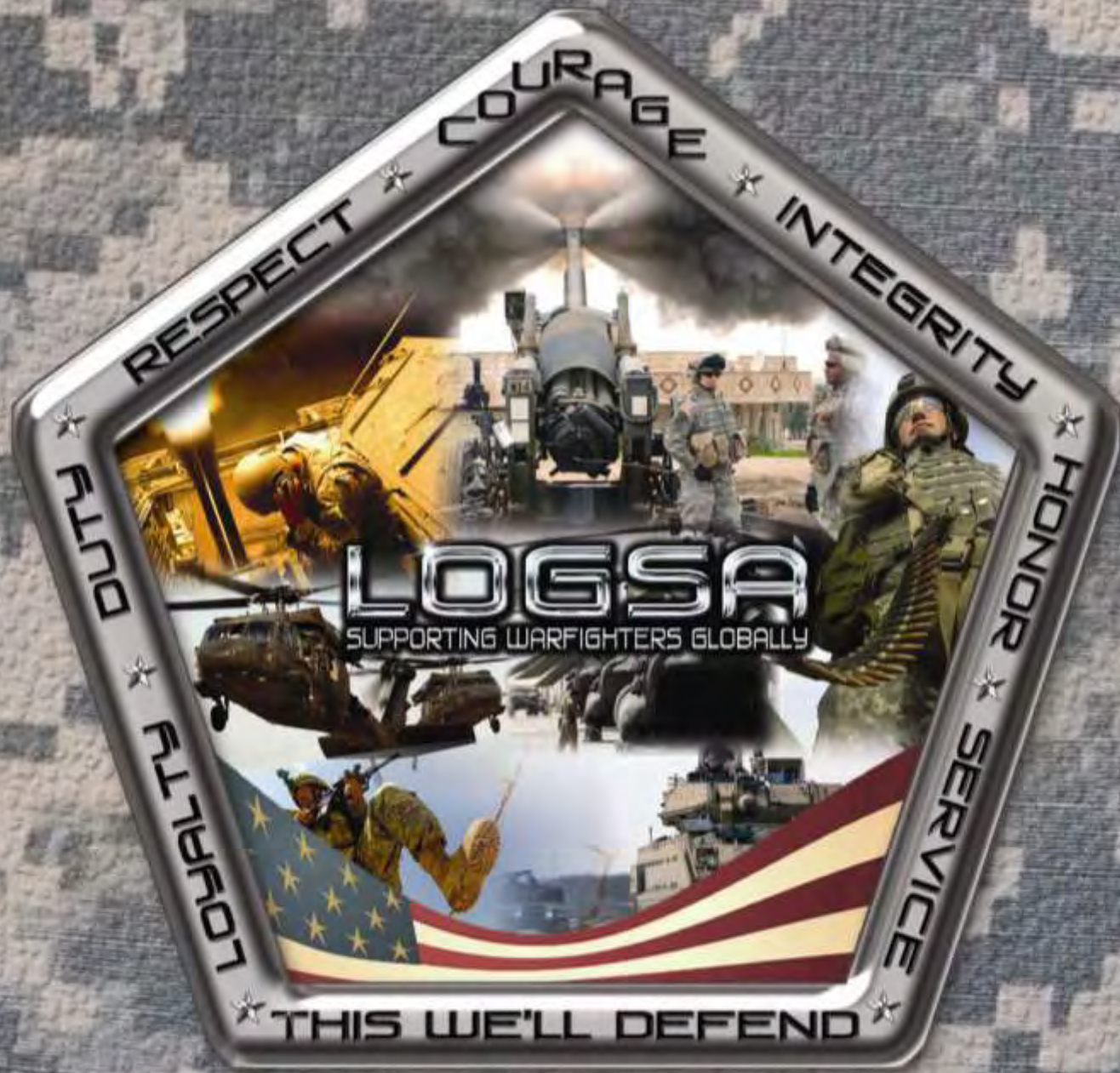
Design Improvement
Reduced Logistics Burden
and
Saved 250 Million Dollars
(1983)



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**



[HTTPS://WWW.LOGSA.ARMY.MIL](https://www.logsa.army.mil)