

Army Materiel Command

Lead Materiel Integrator and Condition-Based Maintenance Plus (CBM+)

Reducing and Stabilizing
the Lifecycle in
Uncertain Times



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Overview

- Lifecycle Supportability Challenges
 - Shrinking budgets
 - Increasing global threats
 - Technology outpacing processes
- Lead Materiel Integrator
- Condition-Based Maintenance

1. Collection

2. Transmission

- Get data to DW from field

3. Warehousing

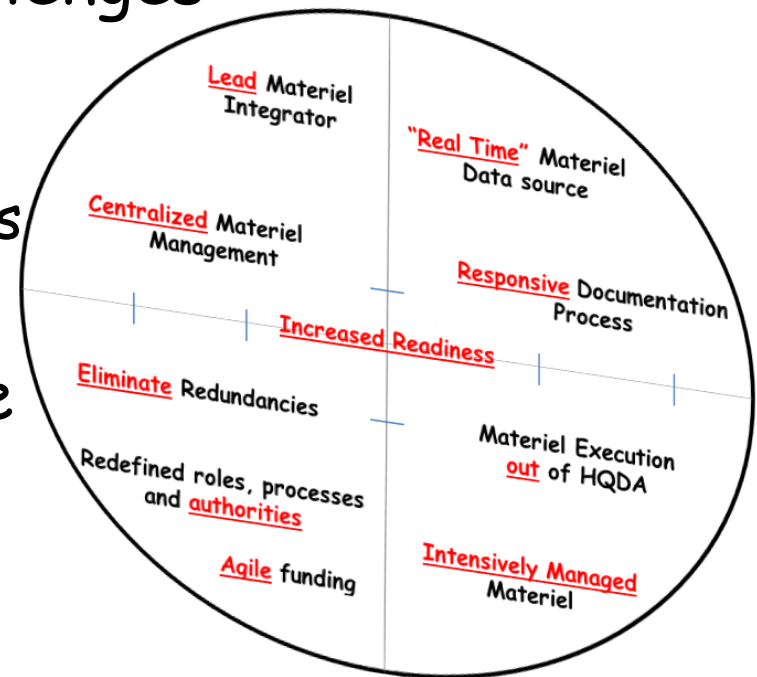
- LOGSA CBM+ Data Warehouse

4. Analysis

- Materiel defect?
- Design defect?
- Policy or procedure change?

5. Action/Decision

- Maintenance TTPs or Inspection Remediation
- Part Re-engineering
- Safety of Use Message or Airworthiness Release
- Supply Optimization



The World has Changed,
So Must Our Paradigms



Managing the Managers

Readiness Enterprise

Demand Signal Integrator

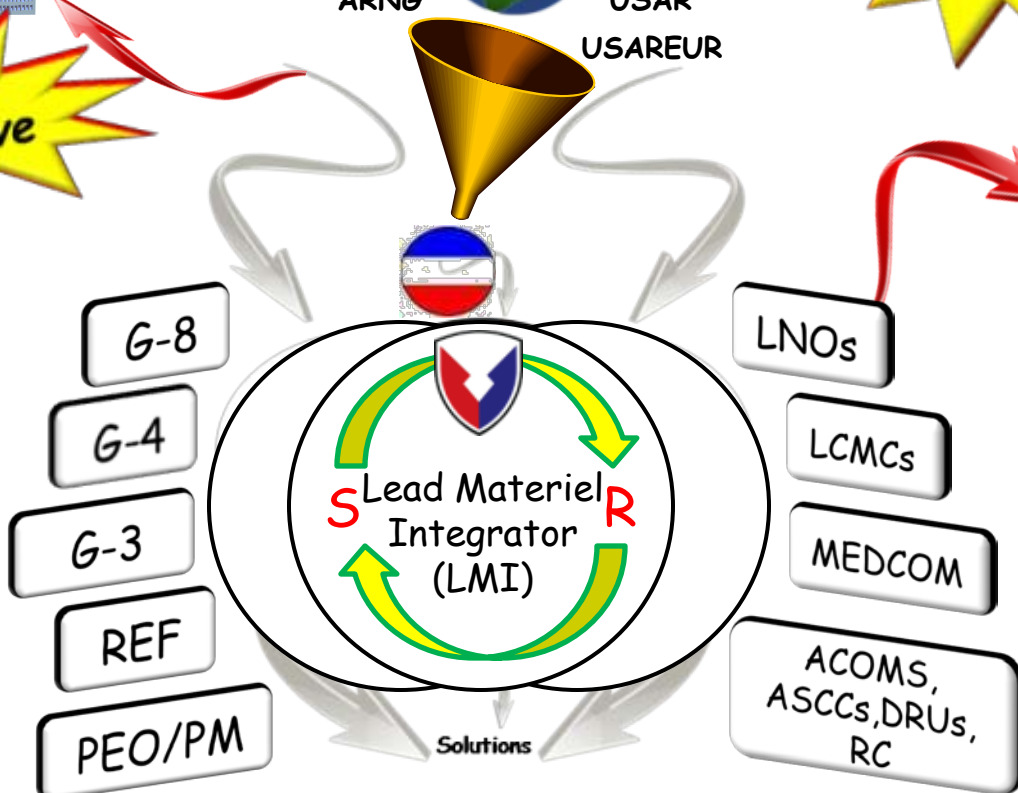
- Priorities
- Policy
- Resources
- Programs
- Strategy



- ONS
- USARPAC
- TRADOC
- ARNG
- FORSCOM
- USAFK
- USASOC
- USAR
- USAREUR



- ✓ Synchronized Materiel Integration
- ✓ Protecting dwell
- ✓ Aligning core competencies



- USFOR-A (OEF)
- INGB
- Ft. Bliss/AETF
- Ft. Bragg - 82nd ABN
- USASOC
- XVII Abn Corps
- 101st AAD
- 4th ID
- 10th MT
- 21st TSC
- USAREUR
- 1st Army
- 3 ACR/4 CAB
- ARNORTH
- III Corps
- EUSA
- CTSF/FDT
- USF-I
- I Corps
- SBCT's 1, 4 and 7
- FORSCOM
- USARC
- TRADOC
- 7 Sus
- 49th QM GP
- USARAK
- 1st CAV/41st FIB
- 1st ID
- ASC
- 25th ID
- USARPAC
- 3rd ID
- 1 MEB
- 162 ITB

UIC Level (DARPL)

Goal = Integrated Process

Proactive and Efficient Management

Managing the Materiel

Lead Materiel Integrator develops materiel sourcing solutions IAW Army priorities to support integrated demand signals

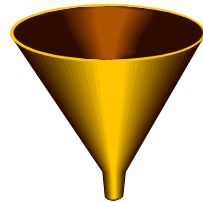
AMC-Lead Materiel Integrator

Readiness Enterprise

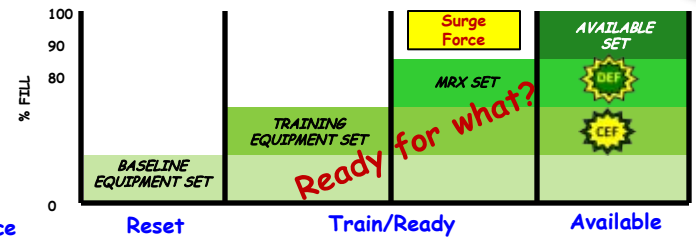
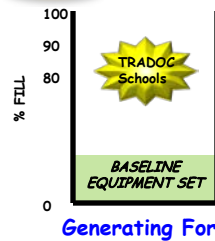
Demand Signal Integrator



- Priorities
- Policy
- Resources
- Programs
- Strategy



Demand Signal



80% MTOE

90-% + Assigned Mission

Optimizing Resources to Enhance Readiness



LMI Benefits

- Near-term benefits:
 - Expands support from specific units to all Army units
 - Transparent decision-making
 - Improved strategic forecasting
 - Unity of effort
 - Reduced Army Staff execution burden
- Foundation for further improvements
 - Readiness, transportation costs and manpower
 - Divestiture of redundant systems

Achieved without increasing personnel end-strength



CBM+ Overview

1. Collection

CURRENT



1100+
aircraft



Key CBM+ Enablers

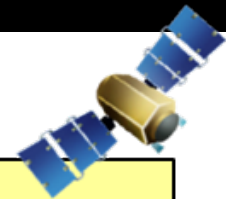
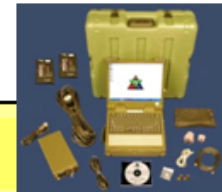
- Health Management (Digital Source Collectors)
 - ✓ Embedded Sensors
 - ✓ Diagnostics
 - ✓ Prognostics
- Maintenance Aids (MSD, PMA IETMs)
- Digital Logbooks
- Data Storage



FUTURE

2. Transmission

- Take the data - in any format - anyway we can get it...
- Working the data strategy and standardizing formats



3. Warehousing

- Logistics Support Activity (LOGSA) CBM+ Data Warehouse now in place
- Integrating the different existing warehouses into a single system



4. Analysis

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5. Action/Decision

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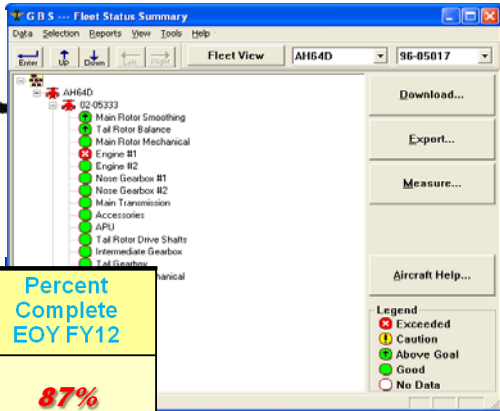


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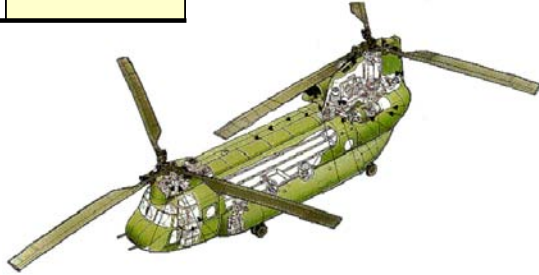
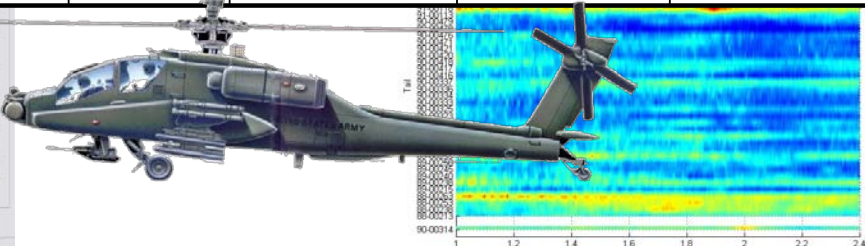
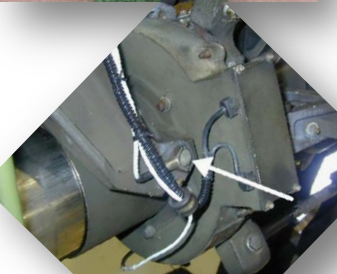


Vibration Adjustment --- AH64D | 96-05017 | 06/23/2008 17:37:40 | FLIGHT

Vibration Values	Rotor Smoothing Solution		Vibration Plot		Track	Trend
	Blade 1	Blade 2	Blade 3	Blade 4		
Wh (Grams)	ON	ON	ON	ON	+ Add	- Remove
Pl (Plats)	ON	ON	ON	ON	+ Lengthen	
Tab 8:10 (Degrees)	ON	- 1.5				
Tab 6:10 (Degrees)	ON	ON				
Tab 4:10 (Degrees)	ON	ON				



Aircraft Type	Total # of Aircraft	DSC Equipped		Percent Complete	Percent Complete EOY FY11	Percent Complete EOY FY12
AH-64 A *	110	0	563	78%	87%	87%
AH-64 D	614	563				
CH-47 D	461	118	176	38%	44%	60%
CH-47 F **		0				
MH-47 G		58				
UH-60 A	1862	459	1244	67%	80%	88%
UH-60 L		475				
UH-60 M		285				
MH-60 L		15				
MH-60M		10				
MH-6	51	15		29%	59%	59%
OH-58 D	336	123		37%	84%	100%
TOTAL	3434	2121	EOY FY11/2641	62%	76%	86%





CBM+ Focus: Benefits for Warfighters

To Battlefield Commanders, CBM+ is:

- Ability to Meet Mission Requirements With Proactively Driven Maintenance
- Ability to Optimize Competing Demands of Warfighting & Planned Maintenance



To The Warfighter, CBM+ is:

- Maintenance Instructions Based on Actual Condition and Usage
- Greatly Enhanced Diagnostics and Troubleshooting
- Fewer Maintenance Manhours
- Physical Inspections Are Reduced or Eliminated