

OPTIMIZING THE SUPPORT OF DOD WEAPONS AND EQUIPMENT



DoD Maintenance Symposium Nov 2007





AGENDA

- Transforming the Army
- Changes in Logistics
- Maintenance Support for ARFORGEN
- Logistics Automation Transformation
- 360° Logistics Readiness
- Continuous Process Improvement





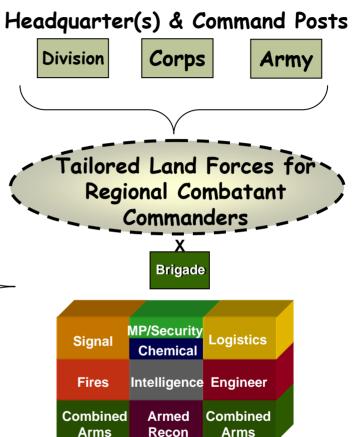






Transformation The Army Modular Force





. . . and modular multi-functional Support Brigades









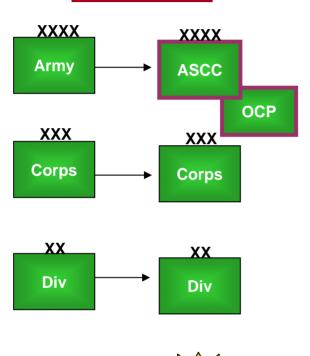
Combat Support (ME)





Transformation The New Look

OPERATIONS

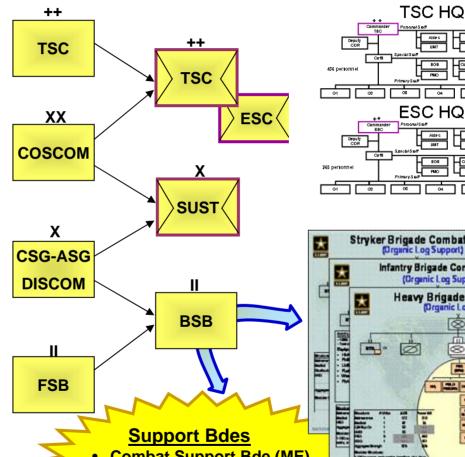


Note: Includes all Active and Reserve Components

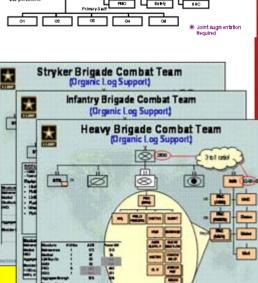
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Bde

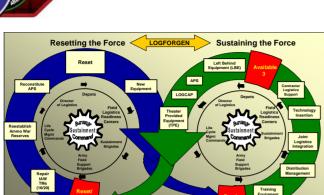
LOGISTICS



- **Combat Support Bde (ME)**
- **Battlefield Surveillance Bde**
- Fires Bde
- **Combat Aviation Bde**



BOOTS ON THE GROUND



Logistics Synchronizer and Integrator for ARFORGEN

AMC Management

Brigade Equipment

Repair Requirements

- National
- Local
- Unit
- Resource Allocation
- Workload Allocation / Balancing
- Enforcer of:
 - Common and Consistent Standards

UNIT EQUIPMENT FROM IRAQ/AFGHANISTAN/EUROPE/KOREA

Program Manager

- OEM
- RESET
- Configuration Management
- Procurement

Depots / Nat Maint Contractors Repair

- RECAP
- Automatic Return Items
- Maior Overhaul

DOL Repair

- Below Depot Repair
- Repair and Return
- Special Repair Authority

FLRC Repair

- Augments DOL's
- Flexible Size and Mission

MATES / UTES Repair

- Primarily Field Level
- Reimbursable

Unit Repair

LL TO DUTY

H.S.ARMY

BOOTS ON THE GROUND

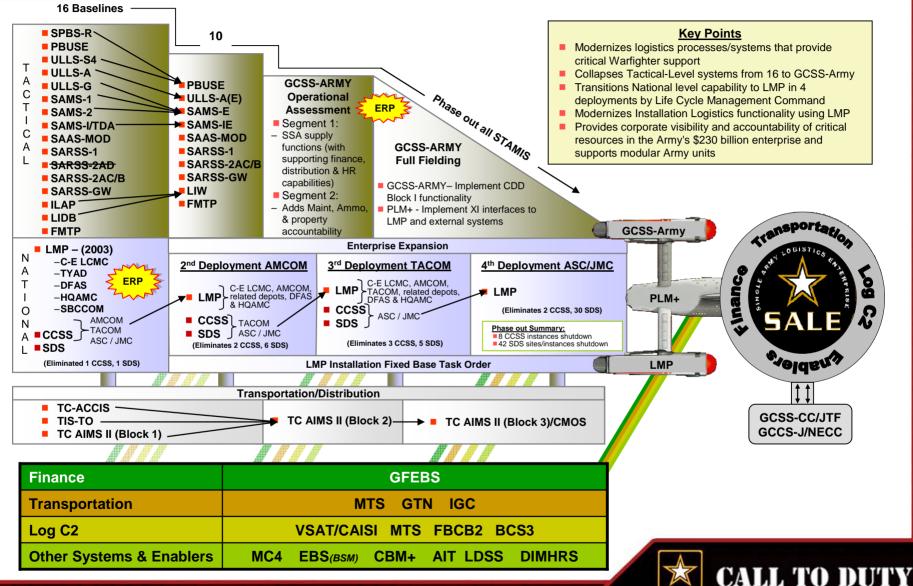
LEFT BEHIND EQUIPMENT

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BOOTS ON THE GROUND



Army Logistics Automation Transition Plan Path to One Single Army Logistics Enterprise (SALE)



Unclassified



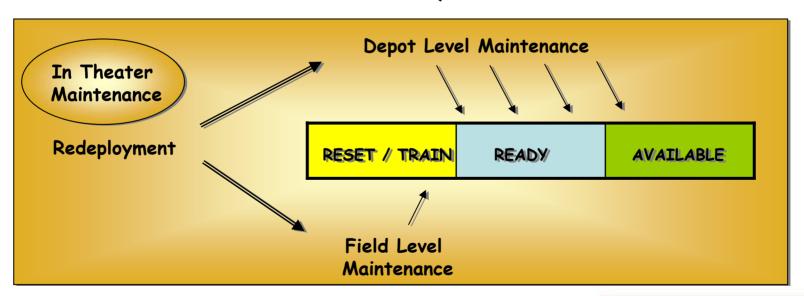
Continuous Process Improvement

Improved visibility

Data-informed Investment Decisions

360 DEGREE READINESS INITIATIVE

SYNCHRONIZING ALL MAJOR PROCESSES IN THE END-TO-END WEAPON SYSTEM VALUE CHAIN AND ALIGNING THE PRODUCTIVE OUTPUT WITH THE WARFIGHTER'S REQUIREMENTS.





Unclassified



360° Logistics Readiness

<u>Definition</u>: 360° Logistics Readiness is the capability to see, assess, and synchronize the Army's Corporate Enterprise Assets in support of Warfighting Operating Forces.

"360° Logistics Readiness - Synchronizing Materiel Readiness to Generate and Sustain Combat Power"



Drill Down: (Lagging) f(Time)

·Battle Loss to Attrition and subsequent replacement Drill Down: (Lagging) USR Data

 Validation of Performance

Drill Down: (Lagging) Visibility

% Prop Accountability % Asset Visibility

360° Degree Readiness (CL VII)

Objectives:

- · Is the equipment where it needs to be and serviceable to meet the mission?
- Is the sustaining base resourced and prioritized correctly?
- · Is the sustaining base performing as planned to support the National Military Strategy, ARFORGEN, and Grow the Army requirements?

Drill Down: (Leading) Planned Production · Avail. "A" and "F" stocks for RESET and Redistribution

BATTLE LOSS REPLACEMENT

RETROGRADE

360° LOGISTICS READINESS

UNIT

READINESS

SUSTAINMENT BASE PRODUCTION

Generating Force **OPERATIONAL**

REQUIREMENTS V.S SUSTAINMENT

ASSET

VISIBILITY

RESOURCES

Drill Down: (Lagging)

Planned vs. Actual

Year of Execution

Operating Force

Drill Down: (Leading)

Requirements:

- ARFORGEN
- · Battle Damage/ Loss
- · Grow the Army

Sustaining Base

- Industrial Base SS PFG Depot/Contractors
- · RESET
- · Acquisition EE PEG Production Schedule

Goal: The capability to see, assess, and synchronize the Army's Corporate Enterprise Assets in support of Warfighting Operating Forces.

CALL TO DUTY **BOOTS ON THE GROUND**

Synchronizing Materiel Readiness to Generate and Sustain Combat Power

Continuous Process Improvement



2007 SHINGO PRIZE FOR EXCELLENCE IN MANUFACTURING



"The Nobel Prize of Manufacturing"

Red River Army Depot

<u>High Mobility Multipurpose Wheeled Vehicle</u> Recap (Gold)

- Increased production from 3 vehicles per month in 2004 to 32 vehicles per day
- Produced 65 additional vehicles at no additional cost in FY06
- Cost avoidance of \$3.89M

Bradley Power-train (Silver)

- Reduced man-hours from 56.5 to 32.5 per unit
- Increased output from 2 units to 6 units per day
- Reduced lead time from 7 days to 3 days per unit

Heavy Expanded Mobility Tactical Truck (Silver)

Productivity improved from 1530 hrs per vehicle to 1011 hrs per vehicle

Increased output from 2 vehicles per week to 2 vehicles per day

Decreased lead time from 120 days to 30 days

Ft Rucker Avn Ctr Logistics Cmd

TH-67 Creek C20J Engines (Bronze)

- Reduced cycle lead time from 294 to 213 hours
- Reduced shop backlog from 30 engines to 0
- Reduced engines faults from 105 to 72



Anniston Army Depot

<u>Field Artillery Ammunition Support Vehicle</u> (Silver)

- Increased total units produced from 52 to 88
- Decreased overtime hours by 99.4 hrs to 59.52 hrs
- Decreased direct labor hours from 341 to 294 hrs

M1 Abrams Turbine Engines (Bronze)

- Reduced assembly time from 364 to 232 minutes
- Consistent 100% on-time delivery
- Cost Savings of \$18.4M

Tobyhanna Army Depot

AN/TPQ-36 Firefinder Antenna (Gold)



- Reduced Repair Cycle Time from 514 to 429 days
- Reduced Work In Process from 16 to 11
- Increased production from 1 to 15 systems

Corpus Christi Army Depot

H-60 Pavehawk (Bronze)

- Reduced Turn Around Time from 180 to 109 days
- Reduced direct labor hours by 3,324/aircraft
- Reduced the per unit loss from \$490k to \$133k

Letterkenny Army Depot

High-Mobility Multipurpose Wheeled Vehicle Recap (Silver)

- Increased throughput to 17 vehicles per day
- Reduced direct labor hours from 274 to 150
- Produced 27 additional vehicles at no additional cost, a \$5.2M customer benefit.

Power Generators (Bronze)

- Increased output from 118 to 500 per month
- Labor savings since April 2006 is 83, 349 man hours and \$2.9M



Rock Island Arsenal

Forward Repair System (Gold)

- Reduced Flow Time from 265 to 62 days
- Reduced Work In Process from 32 to 13 units
- Cost savings/avoidance of \$4.8 M



Shop Equipment Contact Maintenance (Silver)

- Reduced flow time from 82 to 41 days
- Reduced work in process from 40 to 15 units
- Cost Savings/Avoidance of \$4.9M





earned by Army programs since 2005 when extended to Public Sector

Unclassified



One Thing Remains Constant



The Soldier the Centerpiece of the Army
Living the Warrior Ethos on duty protecting the Nation
and the society they serve.

For all that YOU do for our Soldiers...

Thank You!!





Back-up





Forward Repair Activities (Current – Not Emerging Capabilities)

Ground Equipment

- TACOM Forward Repair Activities Kuwait
 - 50 CIVs from our Depots & Arsenals
 - Component repairs
- Team Armor Partnership supports M1A2SEP and M2A3 peculiar components - Balad
- Tactical Wheeled Vehicle Support Center
 - 2 CIVs and 151 contractors at Balad
- Repairs & services for tactical vehicles, **CE and MHE: AoA & Veh Enhancements**
- TWV Refurbishment Centers Arifjan, Kuwait
- (Light, Medium, Heavy, and Linehaul trucks)
- Small Arms Supt Ctr Balad, BIAP & Bagram
- STRYKER FRA Iraq & Qatar (PM Funded)
- TACOM Reset Assessment Team
- Tire Assembly Repair Programs Qatar. Kuwait, Iraq & Afghanistan
- REF/COTS, RCV, & Robotics support AF & IQ
- Mobile Parts Hospitals Ku, IQ, AF





Aviation

- Aviation Classification Repair Activity Depot (227 Mil/ 159 Ktrs) ARNG unit subject to DUALT time.
- Theater Aviation Supply Support **Activity (11 contractors)**
- Mast Mounted Sight / EETF for OH58D (3 contractors)
- Theater Aviation Single Manager (40 Mil/CIVs/contractors)



Forward

- Electronic Sustainment Support Ctrs
 - ~550 CIVs & contractors in Afghanistan, Kuwait and Iraq
- Tobyhanna FRAs Supports STAMIS, TIER II, CGS and Fire Finder - IQ/AF
- Intelligence Electronic Warfare **Supports Tactical IEW and** selected PM systems- KU/IQ/AF
- Mobile Subscriber Equipment -Supports & CHS-II - Baghdad
- Software Engineering Center -Provides software technical support at Arifjan (for Paladin, M1SEP, FOX, etc)
- Tactical Generator Environment Control Unit FRA – Arifian
- SINCGARS Circuit Card Ctr -Arifjan



UND

Providing Strategic Value by Leveraging the National Industrial Base; Essential to Maintaining Operational Tempo – Key to Executing Reset Strategy



Army Logistics Automation Transition Plan Acronym Listing

AIT	Automatic Identification Technology	MC4	Medical Communications for Combat Casualty Care	
AMCOM	Aviation and Missile Command	MTS	Movement Tracking System	
ASC	Army Sustainment Command	NECC	Net-Enabled Command Capability	
BCS3	Battle Command Sustainment Support System	PBUSE	Property Book Unit Supply Enhanced	
C2	Command and Control	PLM+	Product Lifecycle Management Plus	
CAISI	Combat Service Support Automated Information Systems Interface	SAAS-MOD	Standard Army Ammunition System Modernization	
CBM+	Condition-Based Maintenance	SALE	Single Army Logistics Enterprise	
CCSS	Commodity Command Standard System	SAMS-1	Standard Army Maintenance System - 1	
CDD	Capability Development Document	SAMS-2	Standard Army Maintenance System - 2	
C-E LCMC	Communications-Electronics Lifecycle Management Command	SAMS-E	Standard Army Maintenance System - Enhanced	
CMOS	Cargo Movement Operations System	SAMS-IE	Standard Army Maintenance System - Installation Enhanced	
DFAS	Defense Finance and Accounting Service	SAMS-I/TDA	Standard Army Maintenance System - Installation/Table of Distribution Allowances	
DIMHRS	Defense Integrated Military Human Resources System	SARSS-1	Standard Army Retail Supply System - 1	
E2E	End-to-End	SARSS-2AC/B	Standard Army Retail Supply System - 2AC/B (Corps Level)	
EBS(BSM)	Enterprise Business System (Business System Modernization)	SARSS-2AD	Standard Army Retail Supply System - 2AD (Partial)	
ERP	Enterprise Resource Planning	SARSS-GW	Standard Army Retail Supply System - Gateway	
FBCB2	Force XXI Battle Command, Brigade and Below	SDS	Standard Depot System	
FMTP	Financial Management Tactical Platform	SPBS-R	Standard Property Book System-Redesign	
GCCS-J	Global Command & Control System - Joint	SSA	Supply Support Activity	
GCSS-ARMY (F/T)	Global Combat Support system - Army	STAMIS	Standard Army management Information System	
GCSS-CC/JTF	Global Combat Support System - Combatant Command/Joint Task Force	TACOM	Tank and Automotive Command	
GFEBS	General Fund Enterprise Business System	TC AIMS II	Transportation Coordinators-Automated Information for Movements System II	
GTN	Global Transportation Network	TC-ACCIS	Transportation Coordinator Automated Command and Control Information Systems	
HQAMC	Headquarters Army Materiel Command	TIS-TO	Transportation Information Systems-Theatre Operations	
HR	Human Resources	TYAD	Tobyhanna Army Depot	
IGC	Integrated Data Environment/Global Transportation Network Convergence	ULLS-A	Unit Level Logistics System - Aviation	
ILAP	Integrated Logistics Analysis Program	ULLS-A(E)	Unit Level Logistics System - Aviation (Enhanced)	
JMC	Joint Munitions Command	ULLS-G	Unit Level Logistics System - Ground	
LDSS	Logistics Decision Support System	ULLS-S4	Unit Level Logistics System - S4	
LIDB	Logistics Integrated Data Base	VSAT	Very Small Aperture Terminal	
LIW	Logistics Integrated Warehouse	ХІ	Exchange Infrastructure	
LMP	Logistics Modernization Program			





The Path to a Single Army Logistics Enterprise

Property Accountability	ULLS-S4 SPBS-R PBUSE ULLS-A ULLS-G	ULLS-54 PBUSE ULLS-A ULLS-G	PBUSE ULLS-AE	• Modernization Investment • Funded in POM
Maintenance	SAMS-1 SAMS-2 SAMS-I/TDA	SAMS-1 SAMS-2 SAMS-I/TDA	SAMS-E	SALE
Databases	ILAP/LIDB FMTP	LIW FMTP	LIW FMTP* (Incr 2)	LMP PLM+ GCSS-Army
Ammunition	SAAS-MOD SAAS-MMC	SAAS-MOD SAAS-MMC	SAAS-MOD	
Supply	SARSS-1 SARSS-2AD SARSS-2AC/B SARSS-GW	SARSS-1 SARSS-2AC/B SARSS-GW	SARSS-1 SARSS-CTASC	

Legacy Systems: Bridging S

■ 16 systems

- Antiquated
- Stovepiped

· War-related,
Immediate Needs

 Funded in Supplementals

Bridging Systems:

1980s

PBUSE

1970s

- Fielded to 100% of TOE Army; 63% to TDA Army
- ULLS-AE
 - Fielded to 57% of TOE Army (TOE: Completion 2nd QTR, FY09; TDA: Completion End of FY09)

2000s

- SAMS-E
 - Fielded to 35% of TOE Army (TOE: Completion End of FY09)

1990s

- TCAIMS II
 - Fielded to 59% of Current Authorizations (TOE/TDA: Completion End of FY12)
- VSAT
 - Fielded to 40% of TOE Army (TOE/TDA: Completion End of FY12)



2010s