

# ***Headquarters U.S. Air Force***

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***Integrity - Service - Excellence***

## ***AF Logistics Transformation eLog21***



**Mr. Grover L. Dunn**  
Director, Innovation and Transformation  
DCS, Installations and Logistics  
Headquarters, Air Force

**U.S. AIR FORCE**

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**28 Oct 03**



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# *AEF...The Foundation for AF Transformation*



**We must fundamentally transform our Combat and Support capabilities by leveraging information and process improvements across the Air Force enterprise to achieve significant operational efficiencies and drive down support costs.**

- *“AEF is the heart and soul of the system. AEF is NOT a hobby...it IS the system.”*

Gen John P. Jumper, June 2002

- *“AEF is the most important thing we are working on in the Air Force.”*

Gen Robert H. Foglesong, July 2002

- Must move from garrison force to agile AEF
- Need to adopt an expeditionary mindset across our Air Force
- Must define, refine, organize, deploy, and employ as an AEF

***The natural state of our AF when we are “doing business” is not home station activities, but deployed operations***



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# Why We Need to Transform AF Logistics



- Logistics must evolve with global operational doctrine & CONOPS
- We must/can do SIGNIFICANTLY better
  - Operational Performance
  - Affordability
- Improvements limited by current business and IT architecture
  - Must change the underlying model / foundation
- Requires revolution in thinking and action
  - Cross organization/functional, enterprise wide integration
  - Benchmarks and tools readily available

***We've reached the fork in the logistics road!***

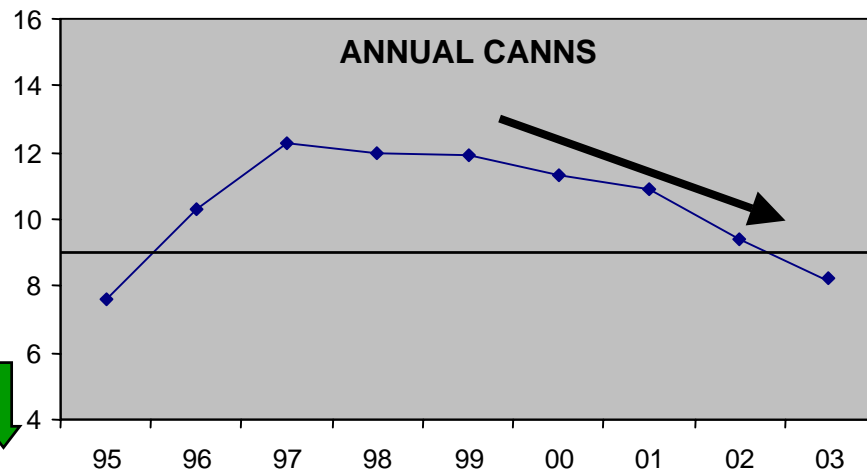
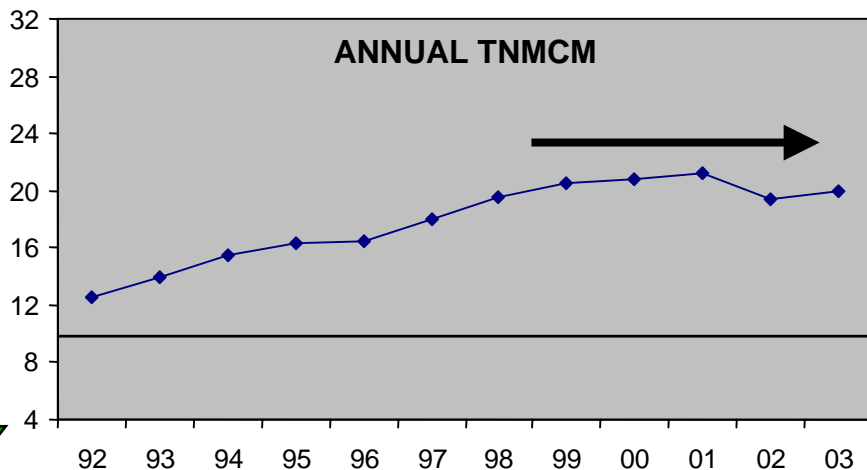
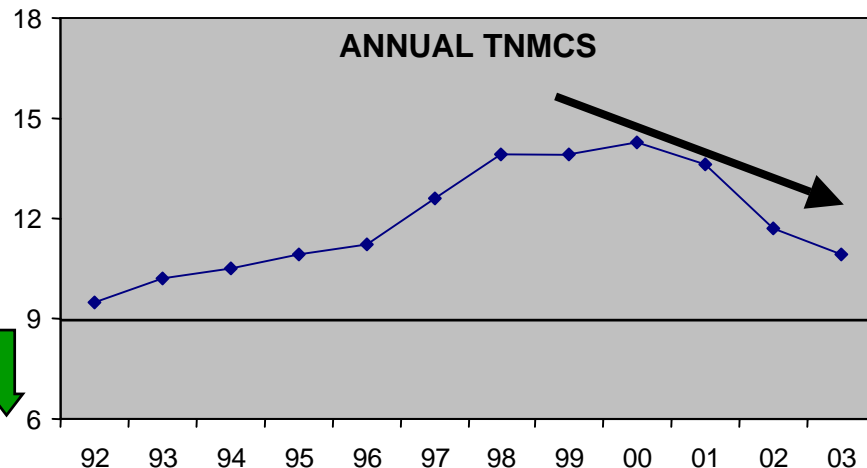
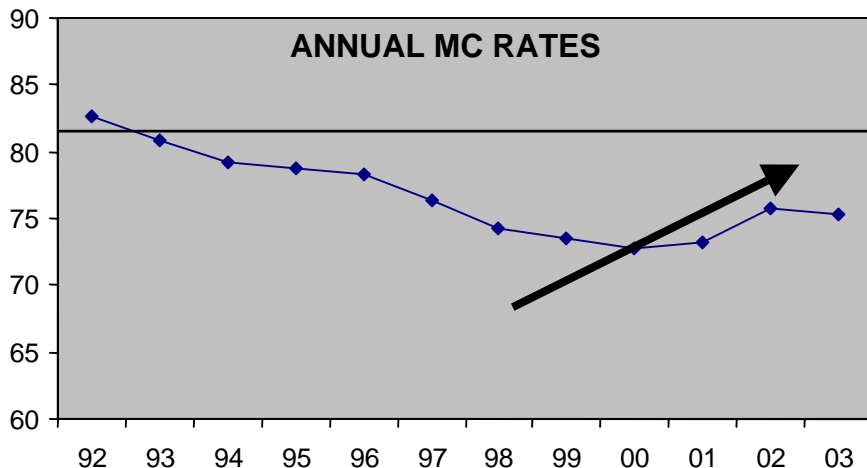
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# Aggregate Annual Rates



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SOURCE: MERLIN

**Fleet Support Improving**

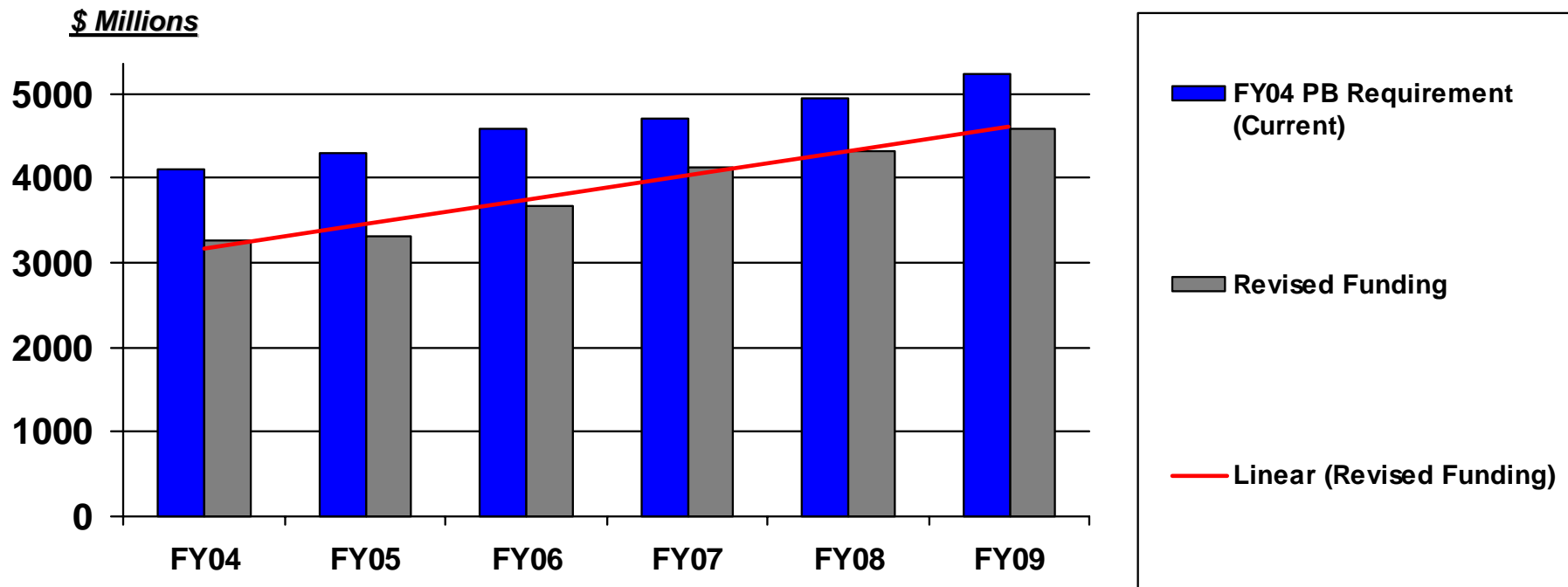
As of 31 Aug 03

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# DPEM Funding Issues: Total Force





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# ***Our Transformation Approach***



- **Focus on processes needed to support an Expeditionary AF in a Joint Warfighting environment -- IT enables not drives processes**
- **Use architecture based approach to integrate Joint/DoD and AF initiatives**
- **Established two over-arching aggressive stretch goals to drive change**
  - **Availability & Cost are the bottomline for logistics**
- **Defined eLog21 initiatives consistent w/operational architecture**
  - **Integrated existing initiatives Spares Campaign, DMRT, et al**
- **eLog21 approved at CORONA – Senior AF leadership support critical**
- **Full Time dedicated AF Team in-place**
- **Governance structure established**
- **Implemented Portfolio Management Process**
- **Robust Campaign/Change Management Plan**

***PROGRESS BUT MUCH MORE TO DO***

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# Future AF Logistics Expeditionary CONOPs

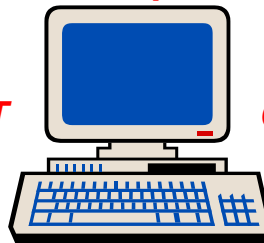


NO TRANSITION  
PEACE TO WAR

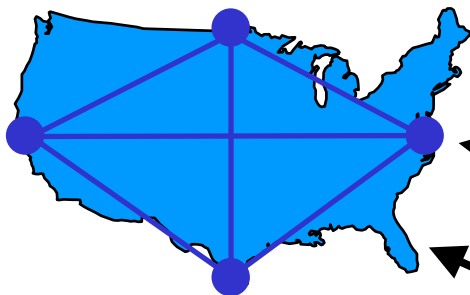
LOG C<sup>2</sup> SYSTEM – Operational Support Centers

DECISION SUPPORT TOOLS

GLOBAL ASSET VISIBILITY & SOURCING



Rear A4



CONUS VIRTUAL SUPPLIER NETWORK

Lateral Support

CIRFs

FORWARD SUPPORT NETWORK

Retrograde

Forward A4



Real Time, Global Expeditionary Network

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# *Using Overarching Goals to Drive Change*



- Everything we do and dollars we spend must be measured in terms of meeting availability and cost goals
  - 20% increase in aircraft availability within the next three years
  - Zero O&S cost growth over the FY04-09 FYDP
  - Subordinate goals must tie to overall targets
- Everyone in AF logistics must be held accountable for meeting their share of the goals
  - Rewards must be tied to goal achievement
- Keep it simple and direct

***Bring the team together—unleash the power***

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# Overarching Goals for eLOG21 - Availability



## TAI (Total Aircraft Inventory)

PAA	Actual Depot	Program Depot
		NMCM
	NMCM	TNMCS
AA Target	TNMCS	
	MC	MC

	Programmed	Actual	Interim Goal*	Stretch Goal**
TAI	100			
Depot	10	12	+9%	+20%
PAA	90			
NMCM	9	11		
TNMCS	9	11		
AA Target @ 80%	72	66	72	79

Baseline = FY02

\* End FY04

\*\* End FY06

**20% Increase in Availability in 3 Years**



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# Overarching Goals for eLOG21 - Affordability



## FY03 Overall Aircraft O&S Costs (Budgeted Amts)

DPEM	\$2,796,083K
DLR	\$4,862,180K
Fuel	\$2,125,119K
Supplies	\$865,237K
Sust Eng	\$205,489K
CLS	\$2,436,791K
Other	\$5,066,660K
Mil Pers	\$9,161,289K
<b>Total \$27,518,847K</b>	

(Source: AFTOC - AFCAA)

Cost (\$K)

30,000,000

29,500,000

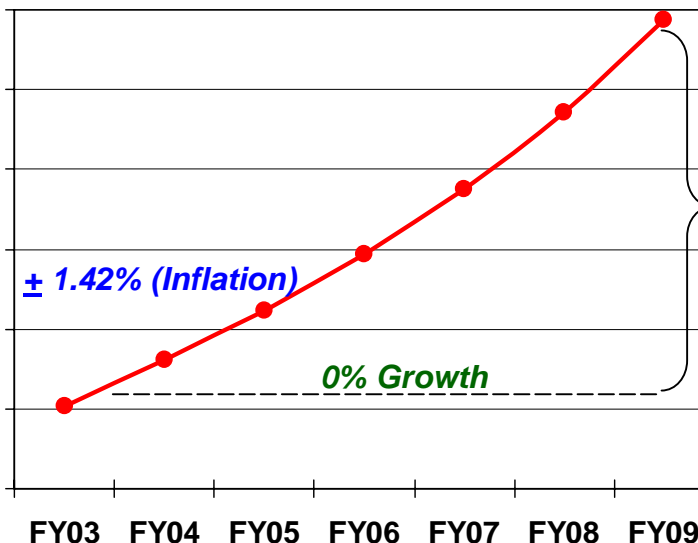
29,000,000

28,500,000

28,000,000

27,500,000

27,000,000



8.9%  
Reduction

Time

## Zero Cost Growth FY 04 - 09

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# eLog21 Campaign Plan Initiatives



## ARCHITECTURE & GOVERNANCE

Logistics Enterprise Architecture (LogEA)

Portfolio Management

AF Data Strategy

Balanced Score Card (BSC)

### Product Support and Engineering

- TLCSM
- CBM+
- SNT
- Demand Mgmt
- OSSE Tools

### Supply Chain Management

- VICP
- FSS
- APS
- PSCM
  - Strategic Sourcing
  - Commodity Councils
- Supplier Mgmt Tools
- Strategic Distribution
- BOM
- WSSCM

### Expeditionary Ops and C2

- ACS C2
- *Closed Loop*
- SC COP/ES-S
- Decision Tools

### Maintenance

- Field MX & Regional MX
- Re-engineering Depot MX
- Depot Shops Improvement
- AF Lean MX Enterprise

## ENABLING PROCESSES

ACS/Assured Connectivity

Change Management

Future Financials

Workforce



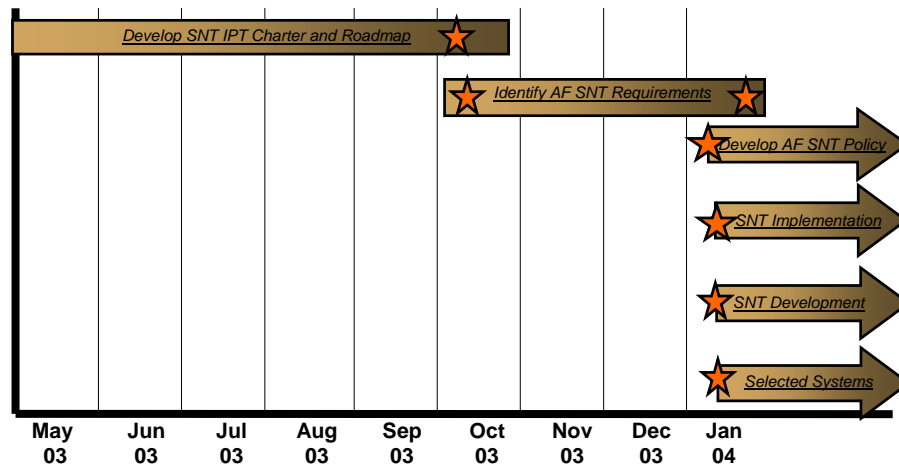
# Serial Number Tracking (SNT)



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## SNT will:

- Create a standardized capability to track parts in Air Force inventory
- Manage and fund technical requirements for integration across a spectrum of data systems
- Goal: Exploit a serial number tracking methodology that enhances warfighter support



## Current Status

- The SNT and PM IPT conducting weekly telecom and monthly face-to-face for information on the creation of a baseline roadmap
- What's next? – Identify existing SNT capabilities to establish requirements (Starting Oct 03)
- Establish AF policy for SNT and plan for its implementation throughout the AF logistics community (NLT – Jan 04)
- Implement DoD UID Policy (Jan 04)

## Who's Playing?

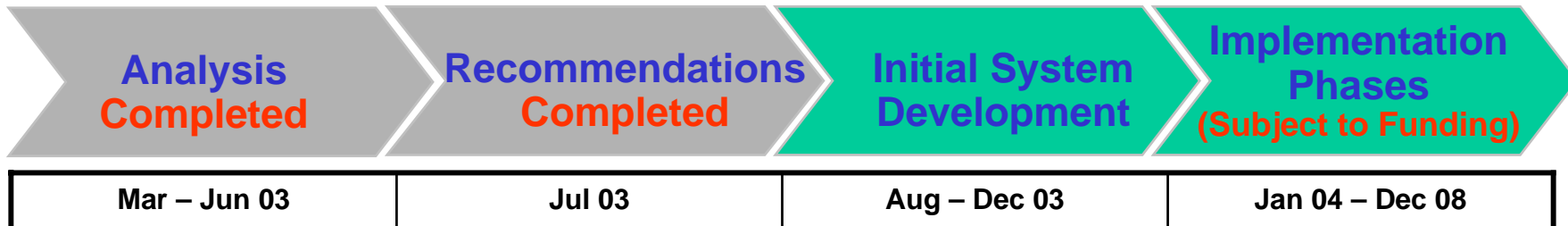
- AFMC, HQ AF/IL, HQ SSG, MSG/LG, SAF/AQC, DLA, ACC, AMC, AETC and ALCs, KLSS, HQ AFMC/LGI
- SNT Committee: HQ, AFMC, and all ALC/PKs and ALC/LGs
- Champions: Mr. Grover Dunn, HQ USAF/ILI  
Mr. Gene Hattenbruck, OO-ALC/LG



# SNT Implementation



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## Analysis

- Draft Charter
- Draft Roadmap
- Review Existing Requirements
  - AF, DoD, DLA, Other Services
- Determine “As Is”
  - Analyze Current Processes
- Design “To Be”
  - Review existing programs
  - Determine Implementation order
  - Estimate Benefits

## Initial Draft

### Implementation Plan

- SNT Analysis
- Communication Plan
- Integration Plan
- Requirements
  - Hardware/Software
  - Marking Quality Compliance
  - Training

## Concept Demonstration

- Data/System Interactions
- Operational Simulations

## Pilot Program

- Draft Pilot Programs
- Funding Estimates
- Coordinate w/ MAJCOMs

## Deliverables

- Policy Guidance
- Refined Requirements
- FY06 POM Input
- Business Case Studies
- Cost and schedule
- Final Imp Plan

## Spiral Implementation

- **Phase 1 – Tracking and some analytical capability**
  - Jan 04 – Dec 04
  - Quick wins/“low fruit”
  - Initiate Pilots
  - Analyze Concept Demo
  - Update Imp Plan
  - Stand-up PMO
- **Phase 2 – More analytical capability**
  - Jan 05 – Dec 06
  - Important/Time consuming interfaces
- **Phase 3 – The rest of the analytical capability**
  - Jan 06 – Dec 08
  - Complex/Enterprise



# SNT AIS Overview



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## Acquisition



**Wide Area Workflow**

- DD 250

**AFPS**

- Warranty Terms

**Transportation**

**FedEx/UPS**

- Shipment Status
- Manifest

## Disposal



**DRMS**

**DAISY**

- Surplus

- Usage
- Status
- Discrepancy
- Maintenance Action
- Corrective Action
- Part Removed / Installed
- Part Requested
- Part Received

## Base Maintenance



**POMX**

**G081**

**CAMS**

**REMS**

## Depot Maintenance



**PDMS**

**ITS**

**FEM**

**Work Control Document**

- Maintenance Action
- Production Counts
- Requisition

**SNT Birth Record/ Tracking Repository**

**EDW**

- DIVAPS**
- Discrepancy
  - Maintenance Action
  - Corrective Action
  - Part Removed/Installed

- CEMS**
- Discrepancy
  - Maintenance Action
  - Corrective Action
  - Part Removed/Installed
- DRILS**
- Discrepancy
  - Maintenance Action
  - Corrective Action
  - Part Removed/Installed

- Requisition
- Receipt
- Issue
- Return
- 1348
- TCN/Doc

**Marking/Engineering Collaboration**

- UID
- Mark Type
- Marking Instructions
- Engineering Approval

## Asset Marking



**SATS**

**Base Supply**

**SBSS**

- DSS**
- Requisition
  - Receipt
  - Issue
  - Return
  - 1348
  - TCN/Doc

**D035**

**AFEMS**

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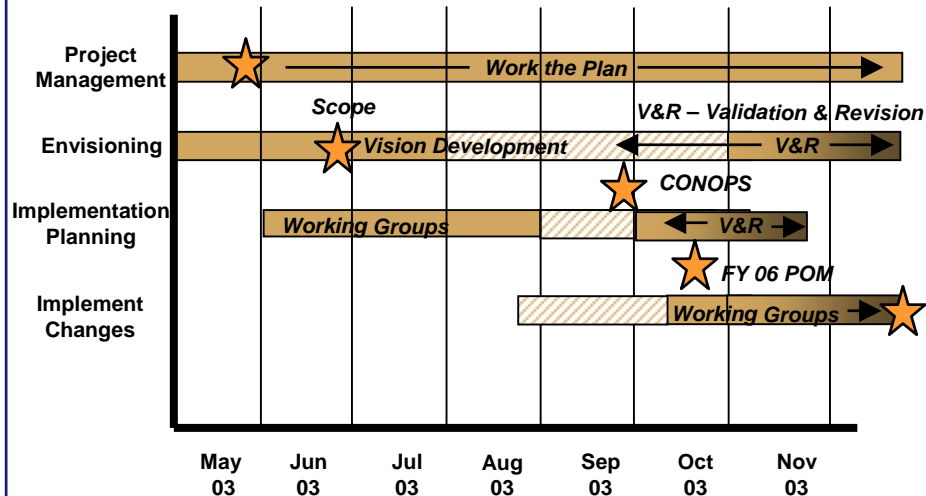
# Regional Intermediate Mx



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## Regional Maintenance will:

- Size OCONUS maintenance to AEF Posture
- Be scenario dependent
- Reduce lift requirements
- Reduce FOL footprint
- Organize CONUS maintenance to achieve synergies across enterprise
- Goal: Economies-of-scale through efficiencies in operations and resource optimization



## Current Status

- Implementation IPT finalized proposed CONUS sites
- Completed draft CONOPS on supply support for repair of Line Replacement Units
- What's next? – Prepare FY06 POM, finalize supply CONOPS, determine supply support requirements for engines and pods, then implement changes

## Who's Playing?

- Lead: AF/ILMM
- Implementation IPT: Air Staff reps from AF/ILID, AF/ILGX, AF/ILGP, AF/ILMM, AFLMA, and MAJCOM SMEs from transportation, supply, and maintenance
- Champion: Maj Gen (s) Ann Harrell, AF/ILM  
Mr. Grover Dunn, AF/ILI



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# USAFE CIRF

## Mildenhall

KC135 W&T (235)  
KC135 Brakes (290)  
KC135 Booms (0)  
Acft Fuel Cell MXS (43)

## Spangdahlem

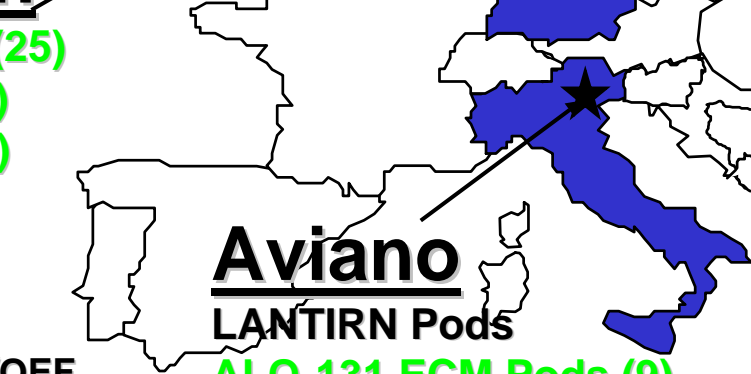
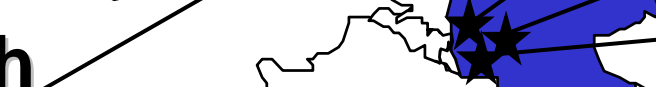
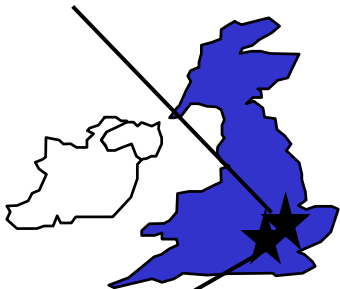
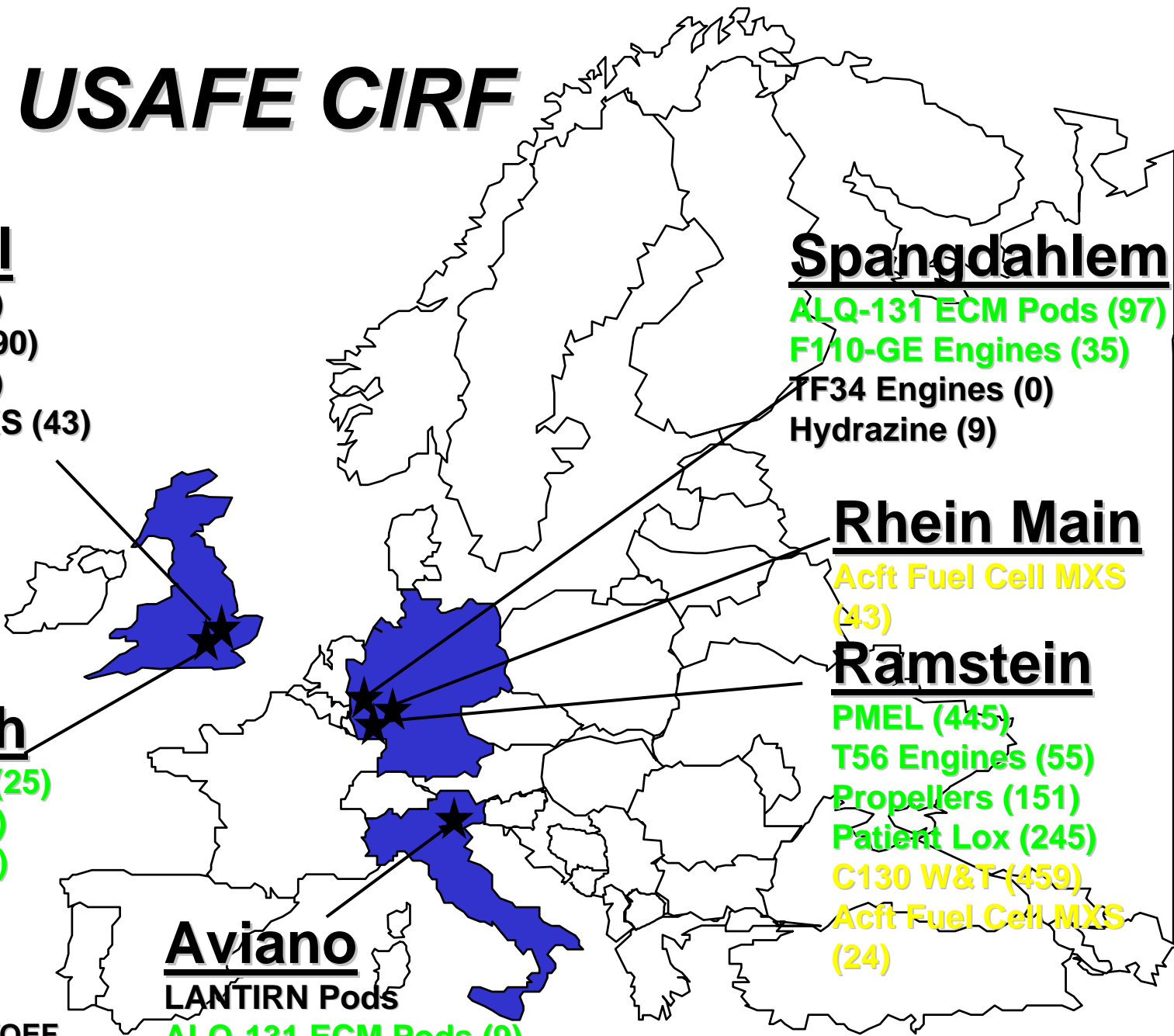
ALQ-131 ECM Pods (97)  
F110-GE Engines (35)  
TF34 Engines (0)  
Hydrazine (9)

## Rhein Main

Acft Fuel Cell MXS (43)

## Ramstein

PMEL (445)  
T56 Engines (55)  
Propellers (151)  
Patient Lox (245)  
C130 W&T (459)  
Acft Fuel Cell MXS (24)



## Aviano

LANTIRN Pods  
ALQ-131 ECM Pods (9)

## Lakenheath

F100-PW Engines (25)  
F-15 Avionics (838)  
LANTIRN Pods (15)

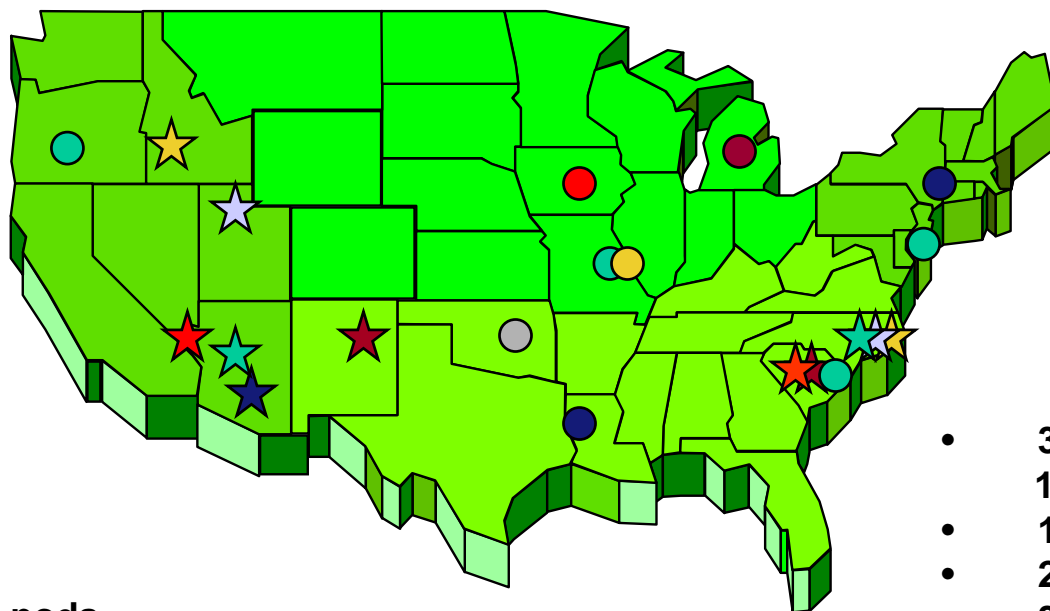


# Proposed CONUS CIRF Locations/ Commodities (Phase 1)



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★	Active	11
○	ANG/AFRC	10
	<b>TOTAL</b>	<b>21</b>



- F110
- F100
- ALQ-184/131 pods
- LANTIRN pods
- TF34
- F-15 Avionics LRUs

- 32 ALQ-184 & 16 ALQ-131 to 3\*\*
- 12 LANTIRN to 3\*\*
- 27 F110 to 3
- 31 F100 to 6
- 15 TF34 to 3
- 13 F-15 AIS to 3
- 145 Facilities to 21

\*\* Consolidation to 3 total in '07



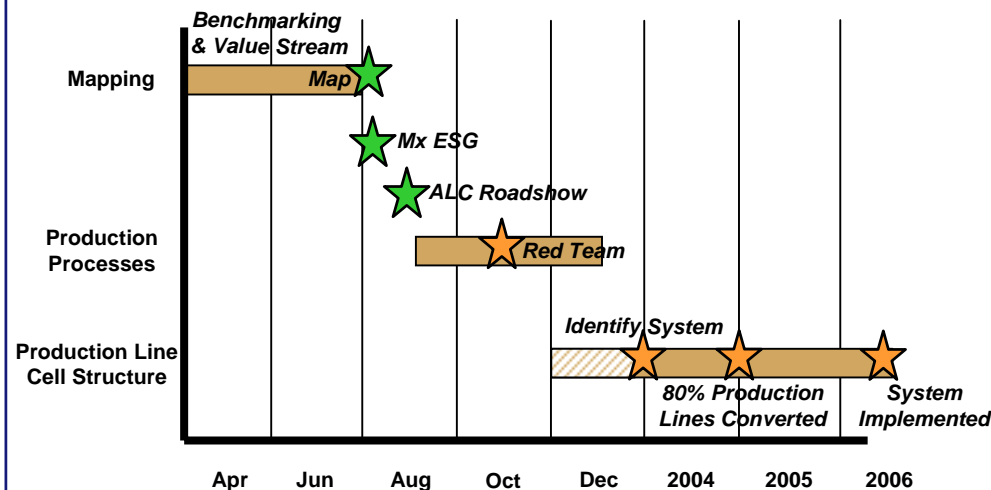
# Depot Maintenance Transformation



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## Re-engineering will:

- Develop lean enterprise characteristics
- Involve one simple, open architecture IT system
- Bring all resources to point of use at need time
- Use right-sized, state-of-the-art facilities and equipment
- Assign single manager responsibility, authority, and accountability
- Use pro-active workload planning and scheduling to anticipate customer requirements
- Goal: Ensure activities are high performing, flexible, and efficient to achieve on-time delivery, customer affordability, and data efficiency



## Current Status

- AFMC-led team has value stream mapped process, and defined future-state vision based on lean maintenance principles
- Gov't/Industry Red Team review 1-2 Oct 03
  - Recommendations/actions in work
- Trailblazers identified ( F-15 PDM, LDG, Avionics, and F100 engine)

## Who's Playing?

- IPT: AFMC ALCs, AF/IL Directorates, and MAJCOM/LGs
- Champion: Mr. Grover Dunn, AF/ILI  
Ms. Debra Walker, AFMC/LG



# DMT Framework



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**Satisfy**  
*war fighter needs with  
high performing, timely, affordable  
combat products and services*

**On Time Delivery** - **Affordable, Predictable Costs** - **Superior Quality**  
100% on time - Reduce Flow Time 25%      Reduce cost 10%      Reduce defects 25%

**Lead and  
Manage  
Change**

**Professional  
Flexible  
Workforce**

**Lean**

**Tailored  
Logistics  
Support**

**Business  
Process  
Reengineering**

**Balanced  
Scorecard**

**Responsive Personnel System - Process Improvement Toolbox**  
**Partnerships – PSCM, WSSCM, DLA (DDC/BSM), Industry**  
**Infrastructure Improvements – Effective Financial Processes – Enabling System Solution**

**Maximize Customer Service - Never Compromise Safety**  
**Constantly Improving**



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# *AF Depot Maintenance Transformation Expectations*



- Define standard production support processes – Aug 03
- Establish HQ and ALC DM Transformation Offices - Nov 03
- Develop Trailblazer implementation plan and deploy – Nov 03
  - F-15 Value Stream – PDM, avionics, landing gear, engine
- Transform one shop within each business unit – Sep 04
  - 6S, cells, POU, pull, visual controls, standard work
- Pilot/implement third party vendor material solution – Dec 03
- Select/implement required IT tool set Dec 03/ FY 04- 06
  - Pilot long term Bill of Materials solution set – Dec 03

- ✓ **100% on time delivery --- 25% reduction in flow time**
- ✓ **10% reduction in cost --- 25% reduction in defects**

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# eLOG21 Summary

## *“Reaching for Tomorrow”*



- AF logistics must transform across the enterprise
  - AF architecture must meet the needs of an Expeditionary AF
- Logistics transformation will make significant improvement
  - Improved affordability and equipment availability
- Continued success requires innovation, partnering with industry, targeted investment, and massive change management
  - Strong, consistent leadership support is the key factor
- We're moving in the right direction but must stay the course
  - It is a journey...we still have a long way to go

***Transformation is not a choice – it's inevitable!***

**America's Air Force . . . No One Comes Close**



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