

10 Aug 05

## Inquiry Response

**Re:** BI-0196, CT-0821, Commission Request for Info on Air Force LSC / CIRF Initiatives

**Requester:** BRAC Commissioner Gehman (Commission POC: Art Beauchamp)

**Request:** Commissioner Gehman requested the Air Force's "Master Plan" on the Air Force Logistics Support Centers initiative (AF - 118) and the F-100 Engine Centralized Intermediate Repair Facilities initiative (AF - 119).

Please provide an executive summary, along with any briefings or background papers on each initiative. The Commissioner is trying to gain an understanding of what the Air Force is trying to accomplish with these initiatives.

**Response:** Attached are detailed AF/IL talking papers and briefings on the Centralized Intermediate Repair Facility (CIRF) and Logistics Support Center (LSC) initiatives.

To summarize the CIRF initiative: Traditional intermediate level aircraft maintenance is performed in a back shop--not on the flightline--at the base where the aircraft are stationed. A CIRF centralizes that intermediate maintenance to a single base within the region. This creates efficiencies by consolidating functional expertise, test equipment, and spares into fewer locations, but still within short transport range of the operational flightline.

The Department's recommendations establish CIRFs for the following commodities: TF-34, F-110 and F-100 engines, F-15 avionics, ALQ-184 pods, and Low Altitude Navigation and Targeting Infrared for Night (LANTIRN) pods. The CIRFs locations "follow the fleet" consistent with aircraft movements and fleet laydowns made by other BRAC recommendations.

To summarize the LSC initiative: In 1997 the Air Force decided to regionalize various supply support functions previously performed at individual Air Force bases, with significant savings in manpower. The LSC further consolidates these functions from five Air Force major command (MAJCOM) oriented regional centers to two LSCs: one for Combat Air Forces (fighters, bombers and reconnaissance) and one for Mobility Air Forces (airlift, tankers, special operations forces). The consolidation to two LSCs creates a better management structure while further reducing required manpower to perform these centralized functions.

The Department's recommendations establish the Combat Air Forces LSC at Langley AFB, VA with Air Combat Command and the Mobility Air Forces LSC at Scott AFB, IL with Air Mobility Command.

Both CIRF and LSC initiatives were conceived directly from United States Air Forces in Europe (USAFE) and CENTCOM efforts during the two Iraq wars, Afghanistan and Bosnian operations. The result will be CONUS operations that are both more efficient and more closely mirror plans for theater operations during conflict.

**Re:** BI-0196, CT-0821, Commission Request for Info on Air Force LSC / CIRF Initiatives

Approved

A handwritten signature in black ink, appearing to read 'D. L. JOHANSEN', with a long horizontal line extending to the right.

DAVID L. JOHANSEN, Lt Col, USAF  
Chief, Base Realignment and Closure Division

Attachments:

1. Executive Summary, Centralized Intermediate Repair Facility (CIRF)
2. CIRF Background Paper
3. CIRF Briefing
4. Logistics Support Center (LSC) Background Paper
5. LSC Briefing

## Centralized Intermediate Repair Facility

### **EXECUTIVE SUMMARY**

The Air Force Director of Maintenance, Deputy Chief of Staff, Installations and Logistics, led an Air Force Working Group to develop a Centralized Intermediate Repair Facility (CIRF) concept that leverages CONUS wing-level intermediate level repair capability to support wing-level maintenance. The CIRF concept was validated during Operation ALLIED FORCE in 1999 when the USAF demonstrated the use of CIRFs to support intermediate repair requirements within the EUCOM Theater of operations.

For many years, the USAF regionalization efforts have proven successful both in peacetime and wartime by reducing the logistics footprint and increasing economies of scale. CIRFs are fundamental to supporting Expeditionary Air Force goals of rapidly configuring support, deploying quickly, employing immediately, seamless transitioning to sustained operations, and maintaining Major Theatre War readiness. Most recently, the utilization of CIRFs during Operation NOBIL ANVIL (ONA) was an overwhelming success. During ONA, CONUS based flying squadrons deployed to the European theater without deploying their intermediate level maintenance capability. Instead, squadrons leveraged in place intermediate repair capabilities at several United States Air Forces Europe bases saving premium strategic airlift.

CONUS CIRFs will enable us to consolidate resources, capitalize on improved training opportunities, to train the way we fight in an expeditionary way, and posture our forces for the integrated global support network.

**BULLET BACKGROUND PAPER**

**ON**

**CENTRALIZED INTERMEDIATE REPAIR FACILITIES (CIRF)**

**BACKGROUND**

- CIRF Concept
  - o Intermediate maintenance shop consolidation
    - Regionalizes shops from like-equipment bases
    - NOT depot level maintenance
- Benefits
  - o Increased experience pool that enhances training
  - o Resource synergies (test equipment, LRU/SRUs, bit and piece parts, etc.)
  - o Economies of scale and production smoothing
- CIRF construct
  - o Integrated workforce of Active Duty (AD), Air Reserve Component (ARC), Civilian, and Contract personnel
  - o UTC(s) assigned to AEF buckets with supported units
  - o Deploy pax/equipment to existing or temporary OCONUS CIRF
  - o CIRF is a Total Force concept

**DISCUSSION**

- RAND commissioned to study F-15, F-16, and A-10 commodities for CONUS CIRF potential
  - o Commodities reviewed include TF-34/F-110/and F-100 series engines, ECM and LANTIRN pods, and F-15 avionics
- BRAC considerations
  - o Commodities feasible to realign under CIRF concept: TF-34/F-110/F-100 engines and LANTIRN pods
  - o Optimum networks (spokes) and CIRF locations (hubs)
  - o Additional infrastructure required at CIRF locations (facilities/equipment/supplies/personnel)
  - o Force structure realignment
- Recurring costs – asset shipment, facility operation and maintenance costs will drive a bill to the MAJCOM until savings can be recouped from realigned manpower, divested equipment and economy of scale operations
- BRAC Implementation Planning
  - o 10 CONUS CIRFs
    - 5 AD only; 1 Air Nat'l Guard (ANG) only
    - 4 integrated AD/ARC CIRFs
  - o FY07-FY09 Implementation

**RECOMMENDATION:** For background information only

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## **F-100 Centralized Intermediate Repair Facility (CIRF) Proposal (AF-119)**



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# Overview

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- **USAF Levels of Maintenance**
- **CIRF Concepts**
- **CIRF OEF/OIF Results**
- **BRAC CIRF Intent**
- **Proposed BRAC F-100 Locations**
- **Summary**



# ***USAF Levels of Maintenance***

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- **Organizational – on-equipment/flight line**
  - War fighters... “triage” - minor repairs and PMI/servicing”
- **Intermediate – base level “back shops”**
  - Supports all commodities - “out patient care”
  - Repairs supported by minimal test/repair equipment
  - Supported by rotational workforce
  - Assigned to Air Expeditionary Force forces
  - Quick turn for war fighter requirements
- **Depot – centralized major overhaul / repair**
  - Major overhaul/repairs – “major surgery”
  - Major investment-type test equipment & technology infusion
  - Permanent workforce to retain skill/expertise



# CIRF Concepts

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- **Consolidation of Intermediate Maintenance shops**
  - Regionalizes shops from like-equipment bases
  - Benefits:
    - Increased experience pool that enhances training
    - Resource synergies (test equipment, LRU/SRUs, bit and piece parts, etc.)
    - Economies of scale and production smoothing
    - Improved opportunities for Reliability Centered Maintenance
- **NOT depot level maintenance**
- **CIRF construct:**
  - Fully deployable technicians and equipment
  - Deploy to existing or temporary combat zone CIRF
  - Assigned to AEF to support war fighters

**“We have successfully employed the [CIRF] concept for many years at our overseas bases. It’s time to centralize at least some of our intermediate repair activities into a CONUS CIRF network that takes full advantage of our ability to pool scarce reparable assets and fully leverages our robust national transportation network.” - Gen John P. Jumper, CSAF, Memo to MAJCOMs, 23 Mar 05**



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DCN 7697

# CIRF OEF/OIF Results

- USAFE set-up 12 CIRFs at 4 MOBs to produce:
  - 152 engines & 157 propellers
  - 80 ECM & targeting pods
  - 433 F-15 avionics units
  - 55 aircraft fuel cells
  - 694 wheels/tires, 290 brake assemblies
- Reduced FOL logistic foot print
- Reduced strat airlift by 910 pallets or 52 C-17s
- Continues today...



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# ***BRAC CIRF Intent***

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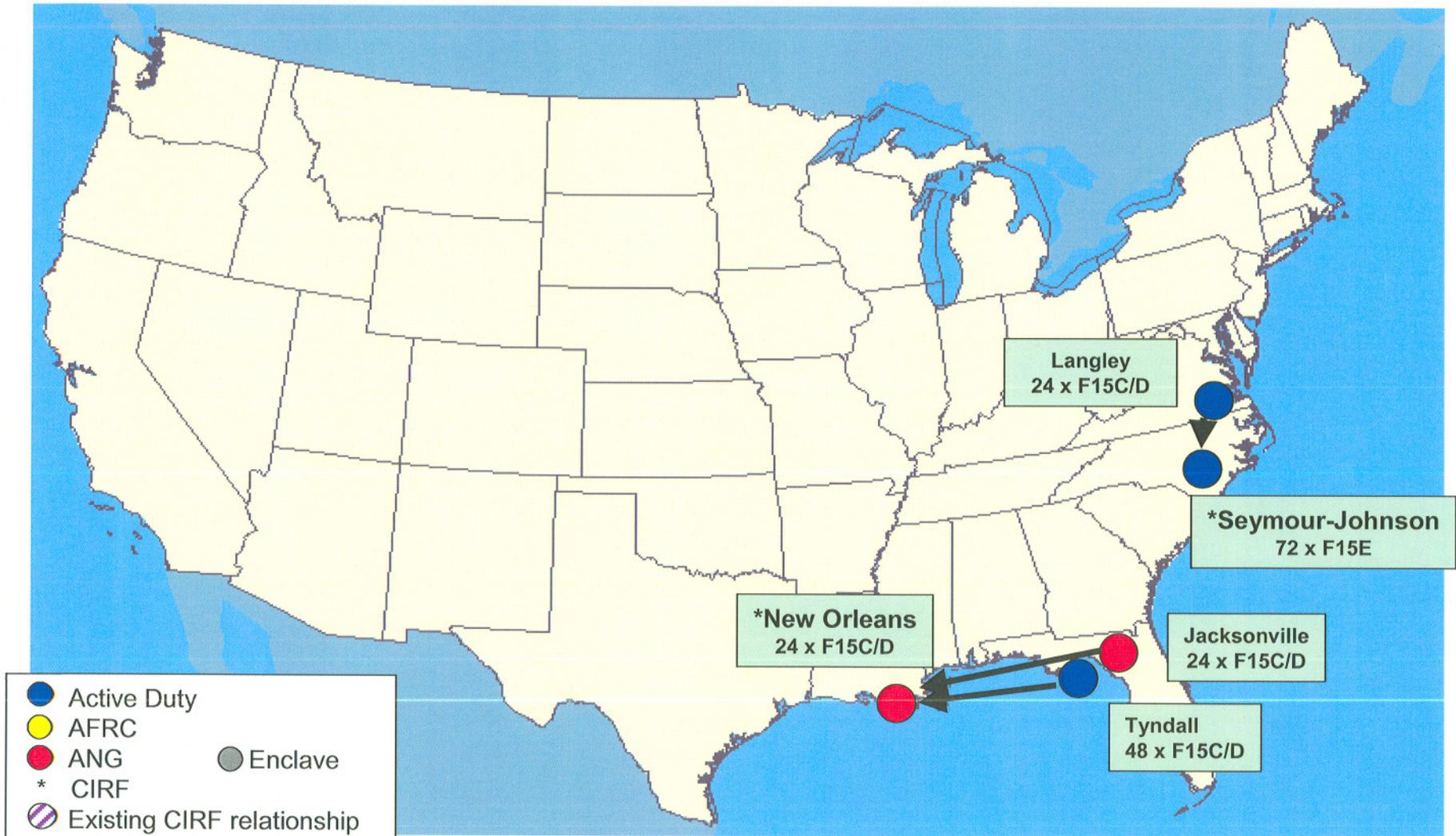
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- **Standardize maintenance concepts between CONUS and OCONUS**
  - e.g. “Train like we fight/deploy”
- **Improve training opportunities - both quantity and quality**
- **Create efficiencies through “economies of scale”**
  - Smooth random workloads
- **Improve reliability centered maintenance**
  - e.g., engine module matching



# Proposed CIRF Locations -- F100-220

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# Summary

- **CIRF...not a new concept...we've employed successfully for years**
  
- **CIRFs support expeditionary mission/Agile Combat Support principles**
  - Flexibility for EAF war fighter requirements
  - Decision makers with accurate information & instant status

**“...by integrating and networking our capabilities, we can find, assess, fix, and track anything, anywhere...” *AF Vision 2020***



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# Backups

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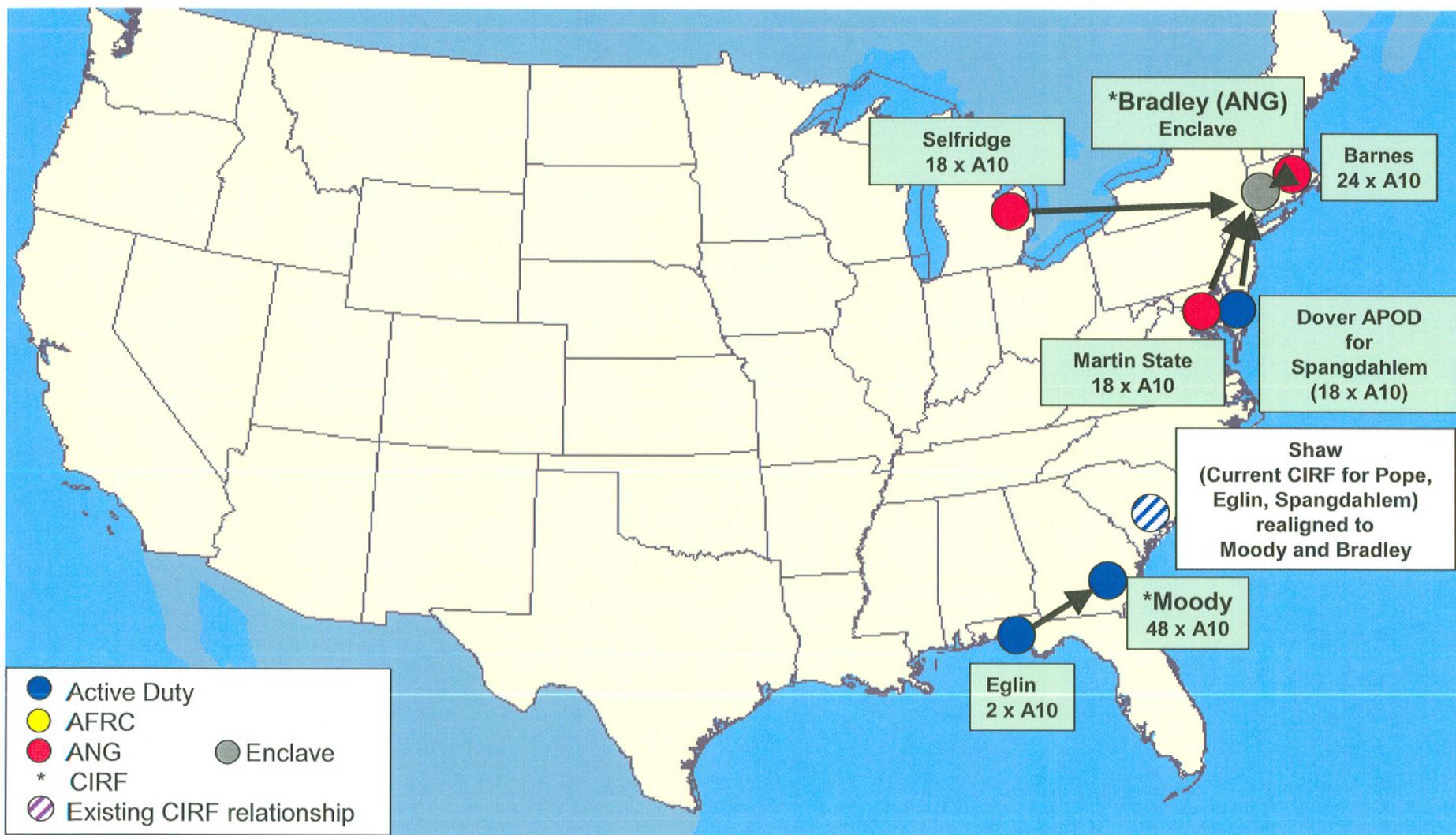
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# Proposed BRAC CIRF Locations -- TF-34

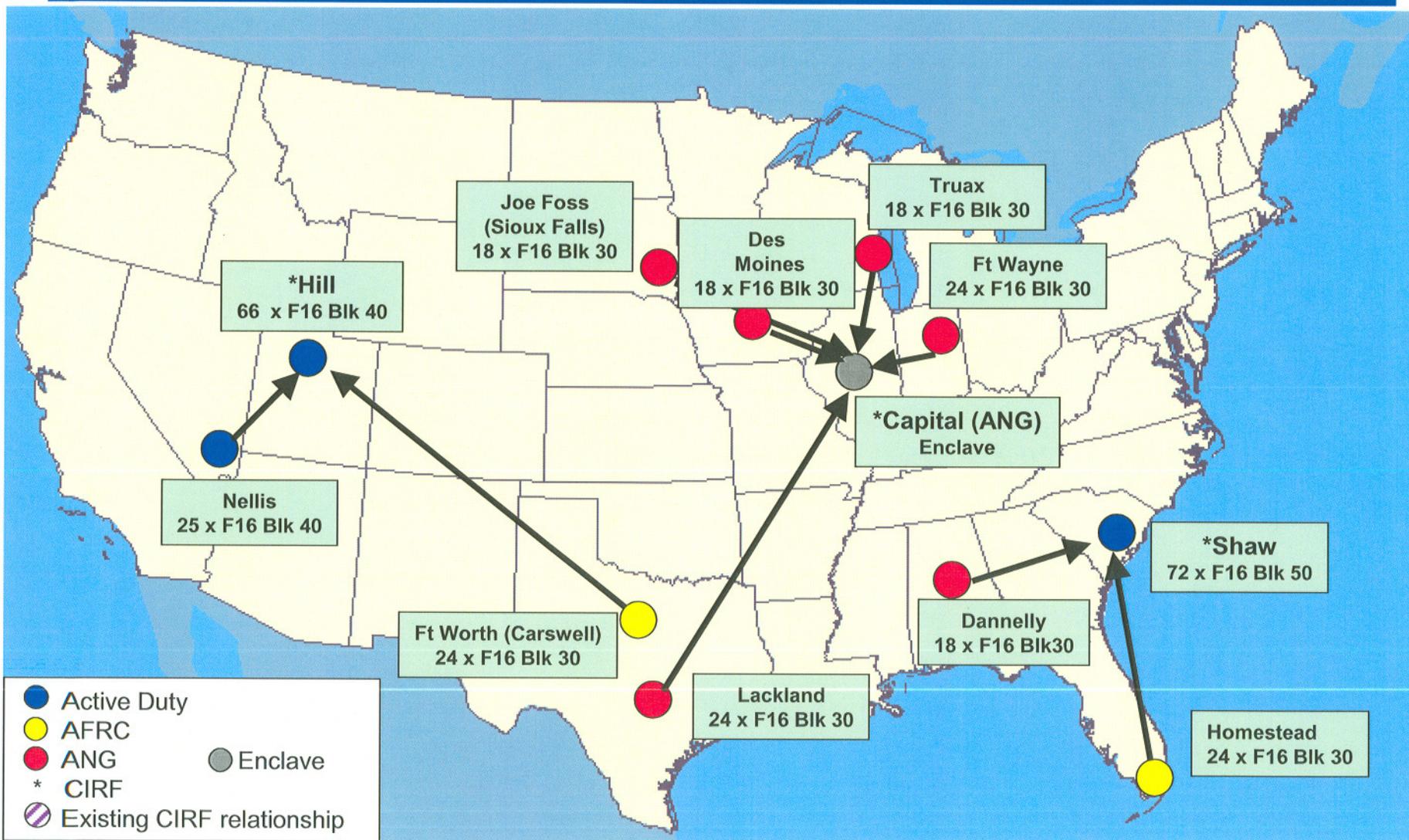
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# Proposed BRAC CIRF Locations -- F110-100/129

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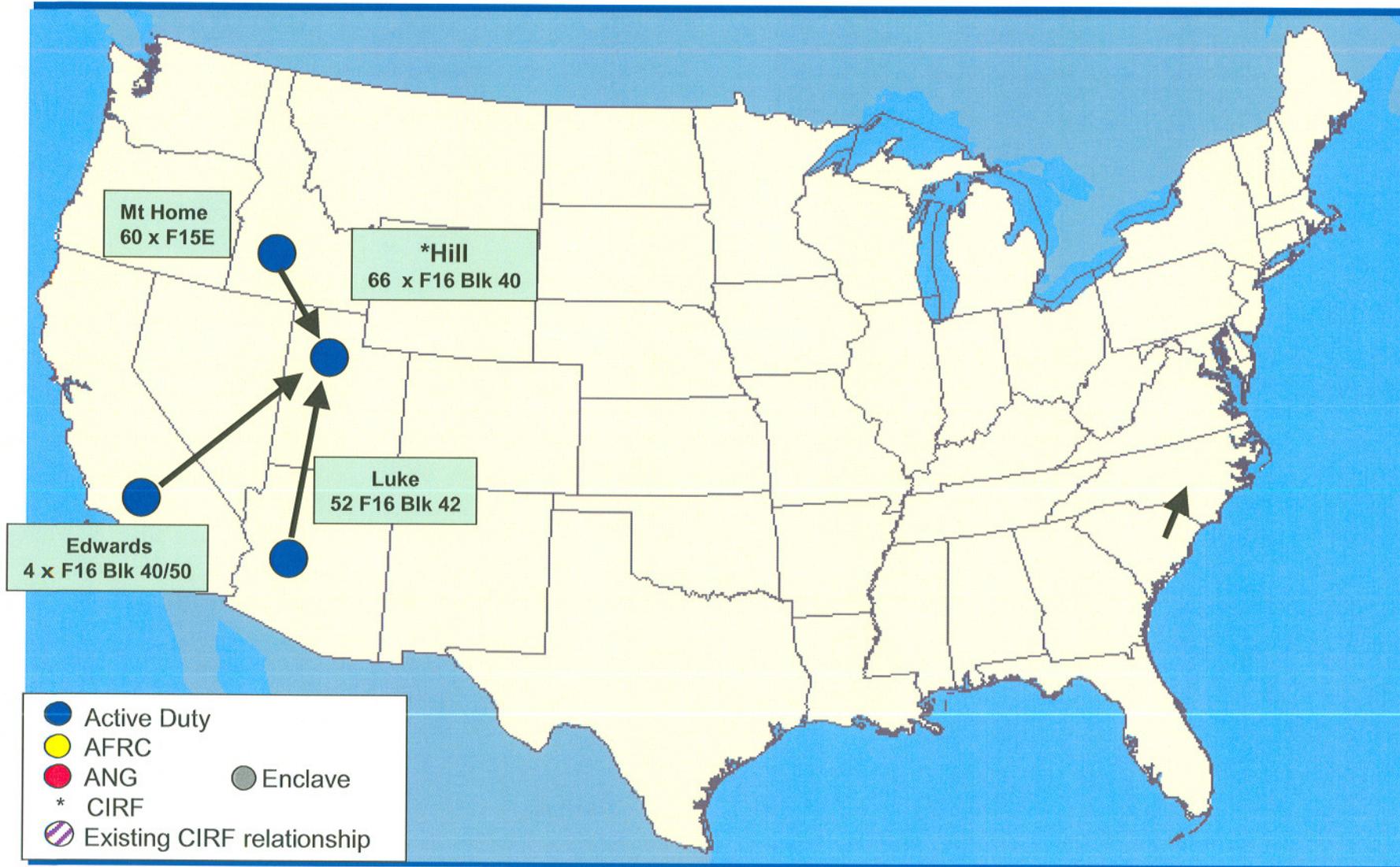


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# Proposed BRAC CIRF Locations -- LANTIRN

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# Proposed BRAC CIRF Locations -- ALQ-184

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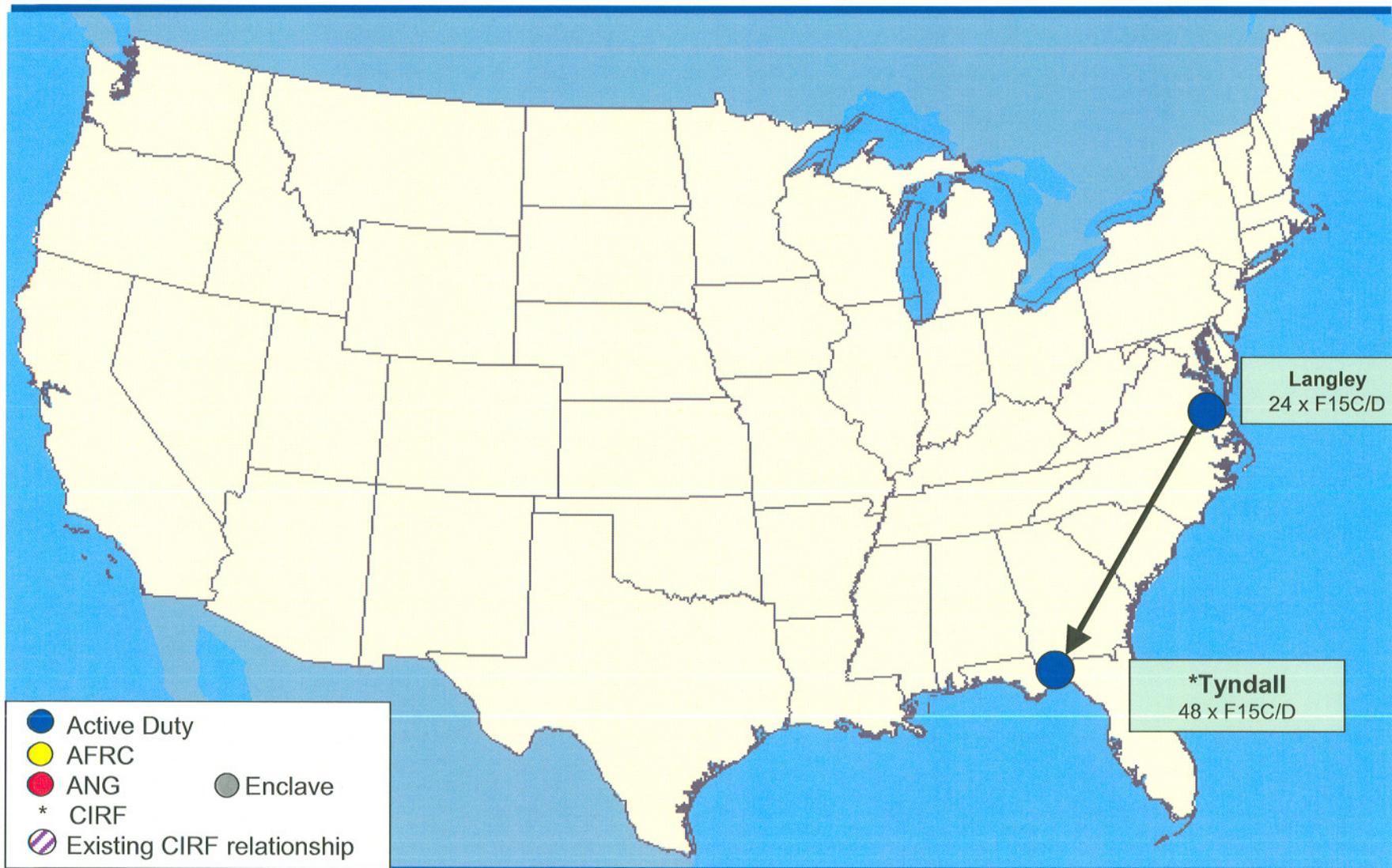


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# Proposed BRAC CIRF Locations -- F-15 Avionics



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# Consolidation

- Candidate CIRFs incorporate ANG/AFRC participation and increase overall consolidation of intermediate-level maintenance shops across the CAF (these numbers reflect only those bases impacted by these CIRFs—not all units performing mx on these assets)

<u>Commodity</u>	<u>Without CIRFs No. of Shops</u>	<u>With CIRFs No. of Shops</u>	<u>Percent Reduction</u>
TF-34 Engine	6	2	66%
F100-220 Engine	5	2	60
F110 Engine	11	3	73
LANTIRN Pod*	4	1	75
ALQ-184 Pod*	2	1	50
F-15 Avionics*	2	1	50
<b>TOTAL</b>	<b>30</b>	<b>10</b>	<b>66%</b>

\* REMAINS ACTIVE DUTY ONLY

BULLET BACKGROUND PAPER

ON

FUTURE CAF/MAF LOGISTICS SUPPORT CENTERS

PURPOSE

To provide background on the future CAF/MAF Logistics Support Centers (LSC)

BACKGROUND

- Five current Regional Supply Squadrons (RSS) control all supply backshop functions for their bases: funds, stock control, MICAP, equipment and records management, and computer ops
- LSC concept will combine these functions, based on weapon system, into either the CAF center located at Langley AFB or the MAF center located at Scott AFB
- LSC is Total Force, supporting all bases to include ARC and contractor-supported units
- Supports all Agile Combat Support and eLog 21 initiatives

DISCUSSION

Weaknesses with current RSS structure:

- Support based on geographical boundaries, requiring warfighter support from two or more centers when units are deployed
- Inefficiencies as different RSSs compete for the same parts and airlift
- Minimal fleet support visibility
- Results in support seams during transition from peacetime to contingency operations
- Not all MAJCOMs or ARC forces supported by a regional squadron

LSC Strengths:

- Streamline capability to deploy, employ, and sustain operations
  - Provide total weapon system/fleet visibility
  - Improve spares and airlift allocation
  - Seamless transition from peacetime to contingencies for all AF units
- Collaboration across the supply chain: Maintenance, Distribution, Weapon System Supply Chain Management and MAJCOM warfighting headquarters
- Providing “one face” to warfighter, whether at home or deployed
- Provide weapon system-centric spares support for the Total Force

Way Ahead:

- Consolidation of MAJCOM RSSs into LSCs approved as a BRAC initiative
- LSC implementation scheduled for CY 07 to CY 08...awaiting BRAC approval
- Start with non-regionalized bases and MAJCOM RSSs...then consolidate all ANG units...lastly, consolidate all contractor-operated units in AFSPC, AETC and AFRC

SUMMARY

CAF/MAF LSC meets eLog21 goals and provides seamless materiel management support to the warfighter...whether that warfighter is at home station or deployed

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# **Logistics Support Center Initiative**



Lt Col Scott Tew  
AF/ILGM

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# *Overview*

- **Regional Supply Squadron (RSS) “101”**
- **LSC Study and Goals**
- **LSC Keys to Success**
- **Weapon System Structure**
- **Implementation Strategy and Timeline**
- **Wrap-up**



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# ***RSS History***

- **Successful AF Contingency Supply Squadron during Operations Desert Shield and Desert Storm (1990)**
  
- **AF/ILS – Directed establishment of RSSs (1997)**
  - **ACC, AMC, USAFE, & PACAF regionalized initially**
  - **Generated manpower savings for JUMP START reductions**
  
- **Spares Campaign – Initiatives provided opportunity for all MAJCOMs to establish an RSS (2001)**
  - **AFSOC and AFSPC established RSSs**



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# ***RSS Functions***

- **Regionalized support of core supply back-shop functions**
  - **Stock Control**
  - **Records Maintenance**
  - **Working Capital Fund Management**
  - **Mission Capability Support (MICAP)**
  - **Computer Operations**
  - **Equipment Management**
- **Other logistics functions within the RSSs perform as enablers: Transportation, WSMs**
- **Designed for MAJCOM regionalized Fleet Management**



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# ***RSS Weaknesses***

- **Current CONOPS supports the warfighter based on geographical boundaries**
- **Creates inefficiencies as different RSSs compete for same parts and airlift**
  - **Multiple interfaces with SCMs**
  - **Minimal fleet support visibility**
- **Deployment seams (RSP, Equipment transfers, augmentation) - need seamless peacetime to contingency transition for all MAJCOMs**
- **Not all MAJCOMs (i.e. AFMC, AETC, ARC) regionalized**
- **Contractor supported weapon systems (C-17, KC-10, F-22, F-35, etc)**



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# Study

## Air Force IPT - Project Lead: AF/ILGM

- 13-month study...members from all MAJCOMs & ARC
- Total Force focus - active duty, ARC, contract operated units and contingency locations
- Map future relationships: CIRFs, WS SCMs, warfighting headquarters, COCOMs
- Develop in collaboration with eLog21 transformation
- Ensure compatibility with ACS C2 concepts

**IL accepted study conclusion: CAF/MAF LSC**



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# ***LSC Goals***

- **Single point wpn sys visibility and management**
  - **Acft, Space, Missiles, Comm, BOS**
- **Seamless transition from peace to war**
- **Include “Total Force” (active and ARC)**
- **Improve spares/airlift allocation**
- **Increase leverage with suppliers/WS SCMs & SCMs**
- **Gain efficiencies through standardization**
- **Align with eLog21 initiatives**



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# *Keys to LSC Success*

- Provide most effective support to the warfighter
- Ensure SOF forces receive intensive management support
- Provide valuable support to unique weapon systems
  - Integrate space and training assets into LSC concept
- Innovative integration of ARC assets into LSC

“My ‘bottom line’ desire is to be able to look across the entire fleet (active, AFRC & ANG) to see where we are by mission type and by MDS.” T. Michael Moseley, General, USAF, VCSAF

- Determine effective mix of blue-suit, civilian and contractor personnel to support LSC
- Build customer confidence that LSC will meet needs
  - Education, training, tours, etc.



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# CAF/MAF LSC

## CAF\*

- Fighters (incl Trainers)
- Bombers
- AWACS
- Intel/Surv/Recon
- Missiles/Space Systems
- AETC 'White Jets'
- Bare Base/WRM
- Like AFMC R&D Aircraft
- CIRFs (Spang, Lake)
- Applicable ARC support

## MAF\*

- Airlift (incl Trainers)
- Tankers (incl Trainers)
- SOF Acft/Armament
- Med Evac
- Like AFMC R&D Aircraft
- CIRFs (Mild, Rams)
- Helicopters (incl Trainers)
- Applicable ARC support

**CIRF support divided, based on aircraft supported**



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# *Proof of Concept*

- RSS is a proven concept – LSC is next logical step
- Migration to LSC concept is already underway
- ACC RSS supporting:
  - Hill (AFMC) – F-16's
  - Tinker (AFMC) – AWACS
  - Eglin (AFMC) – F-15s and entire base
  - Pope (AMC) – A-10's
  - Luke (AETC) – F-16's...coming soon
  - AOR – all CAF aircraft
- AMC RSS supporting:
  - Little Rock (AETC) – C-130's
  - Dyess (ACC) – C-130's
  - Altus (AETC) – C-5's, C-17's, KC-135's
  - AOR – all MAF aircraft

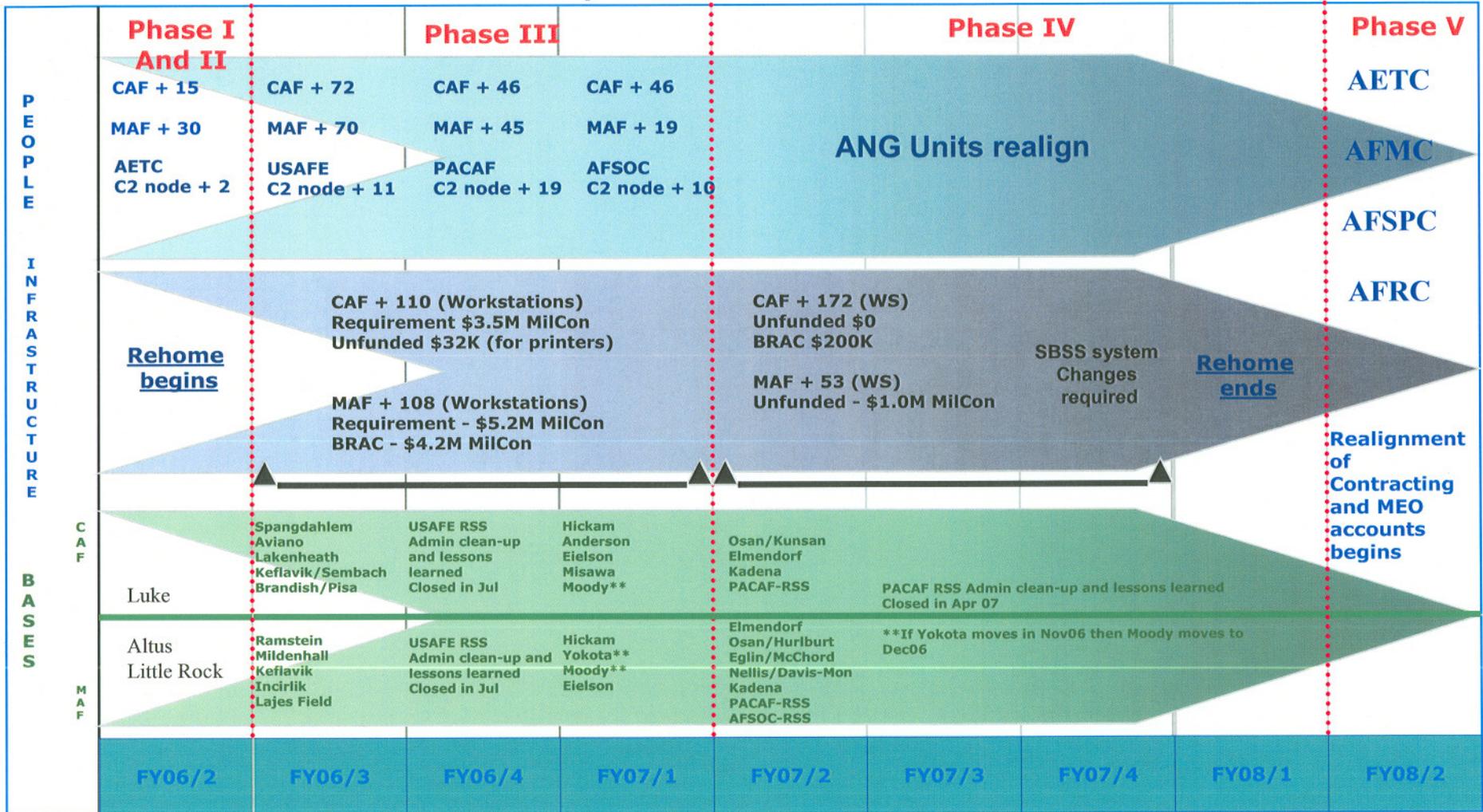


# LSC Implementation Schedule

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Slide content contingent on the approved BRAC Report

## Implementation Schedule



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# ***LSC Implementation Phases***

Slide content contingent on the approved BRAC Report

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## **PHASE I & II – Non-regionalized bases**

- Most supply backshop duties now being done by CAF/MAF
- Only 3 Active Duty bases not regionalized:
  - Altus (except for equipment management)
  - Little Rock (except for equipment management)
  - Luke – complete by Dec 05
- Awaiting last manpower moves
  - 8 authorizations moved in FY05
  - 37 move by FY07

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# ***LSC Implementation Phases***

Slide content contingent on the approved BRAC Report

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## **PHASE III – RSS Integration**

- **BRAC Issues**
  - **Manpower Moves:** consistent with BRAC implementation plan
  - **Re-homing schedule modifications** to coincide with BRAC
  - **Determine needs of unique bases:** i.e. Eielson and Grand Forks
- **Financial Working Group**
  - **12-14 Jul, FM experts** from MAJCOMs, HQ AFMC, AF
  - **Develop standardized funds transfer/stock fund management**
  - **Intermediate step** toward Future Financials
- **Facilities – mesh BRAC and LSC timing/requirements**
  - **CAF: 110 workstations** MAF: 108 workstations



# **LSC Implementation Phases**

Slide content contingent on the approved BRAC Report

## **PHASE IV – ANG Integration**

- **BRAC Opportunity**
  - **Virginia and Illinois ANG units losing F-16s**
  - **Integrate these ANG units into MAF/CAF LSCs**
  - **Allow LSCs to manage all 1,300 ANG aircraft**
  - **Total Force solution**
- **First meeting with ANG was a success**
  - **AF/XP (Total Force Office) involved in planning**
  - **ANG/DP & AFMA partnering on IPT**
- **Planned FY07 integration contingent on BRAC**



# ***LSC Implementation Phases***

Slide content contingent on the approved BRAC Report

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## **PHASE V – Contractor/MEO Integration**

- IPT with SAF/AQ to map options
  - Capitalize on contracting expertise in AFSPC/AETC
- Developing strategic plan for contractor integration
- Integration start planned for FY08



# ***LSC Implementation Plan***

Slide content contingent on the approved BRAC Report

## **MAJCOM Concerns**

- **USAFE: integration must be complete by Jul 06**
  - Can make it happen
- **PACAF: requested change in integration start date**
  - Can make it happen
- **AFSOC: MICAP support**
  - Shifted AFSOC units to end of Phase III – FY07
  - Provide 1-year of LSC experience before AFSOC/RSS transition
  - Allow AFSOC to handpick personnel to PCS to MAF LSC
  - 10-per. AFSOC C2 node – direct coord with experts in MAF LSC
- **AETC/AFSPC: detail study of contractor integration**
  - IPT developing strategic contractor integration plan for FY08

**Final LSC vision: CAF & MAF manage retail  
supply support for all 6,000 AF aircraft!**