

# *Curtis E. LeMay Center for Doctrine Development and Education*







# Mission



*Develop America's Airmen Today...for Tomorrow*



**Principal organization responsible for developing & assessing Air Force doctrine and advocating air power doctrine in Joint & multinational arenas. AF lead for tactical, operational & strategic lessons learned. Ensures lessons learned and doctrinal concepts are integrated into AFTTPs, wargames & education. Educates warfighters through resident & distance learning courses. Executes operational and strategic wargames for the AF, Air University & partner nations.**



AT THE VERY HEART OF WARFARE LIES DOCTRINE



# Up Next



*Develop America's Airmen Today...for Tomorrow*

- **Doctrine Development**
- **Education**
- **Wargaming**
- **Intelligence**
- **AF Lessons Learned**
- **Strategy and Concepts**
- **Joint Outreach and Liaison**



AT THE VERY HEART OF WARFARE LIES DOCTRINE

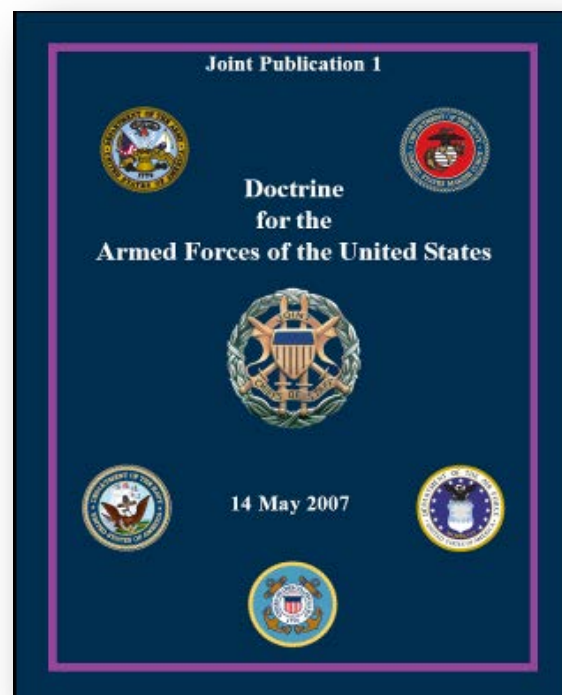




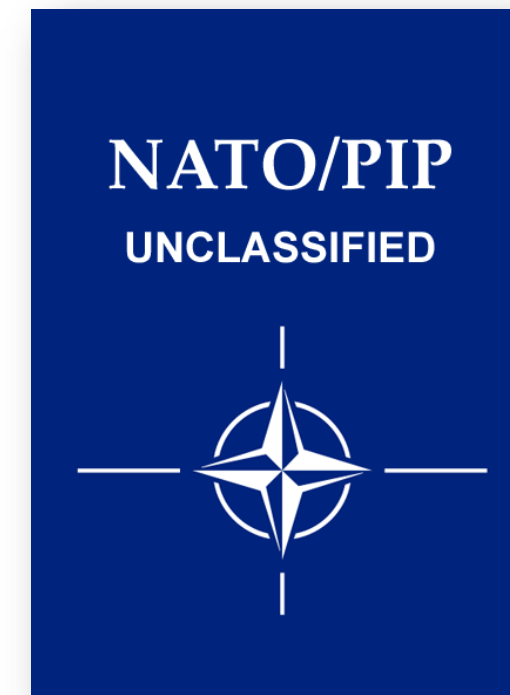
# Doctrine Development



*Develop America's Airmen Today...for Tomorrow*



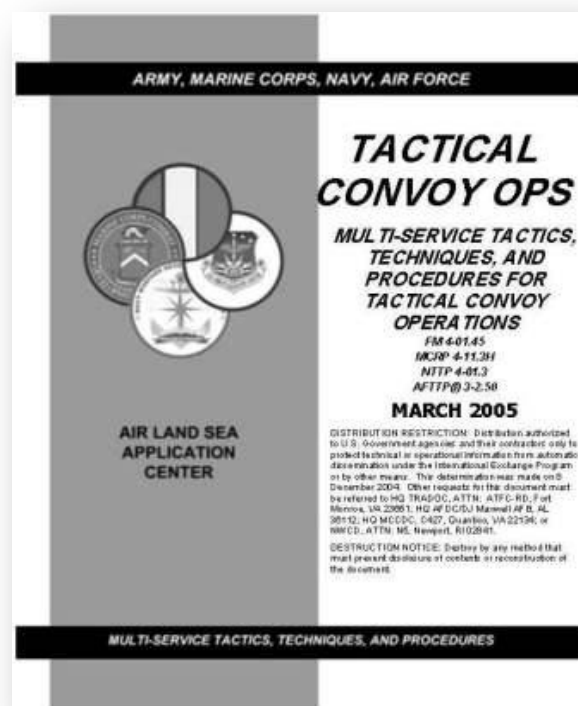
**Joint Doctrine**  
**82 publications**



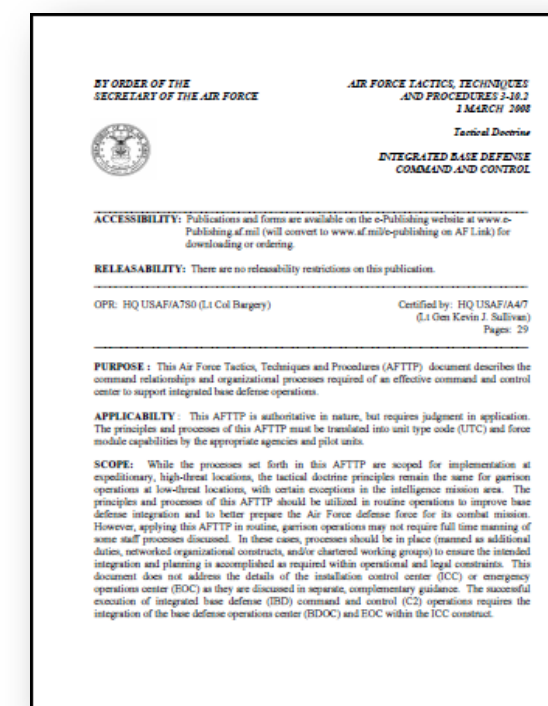
**Multinational Doctrine**  
**100+ publications**



**Air Force Doctrine**  
**5 volumes/28 annexes**



**Multi-Service TTPs**  
**37 publications**



**Air Force TTPs**  
**101 publications**



AT THE VERY HEART OF WARFARE LIES DOCTRINE



# Service/Joint/Multi-Service



*Develop America's Airmen Today...for Tomorrow*

- Develops and coordinates all AF basic and operational doctrine
- Develops the AF doctrinal position for joint doctrine publications
- LeMay Center lead for CSAF Doctrine Summit
- Serves as AF lead agent on 5 joint pubs
  - JP 3-03 *Joint Interdiction*
  - JP 3-30 *C2 of Joint Air Operations*
  - JP 3-52 *Joint Airspace Control*
  - JP 3-59 *Meteorological and Oceanographic Operations*
  - JP 3-60 *Joint Targeting*



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Multinational Responsibilities



*Develop America's Airmen Today...for Tomorrow*

- **NATO Custodian for:**
  - **AJP-3.3.5, Allied Joint Doctrine for Airspace Control**
  - **ATP-3.3.7, Guidance for Training of UAS Operators**
  - **NATO UAS Tactical Pocket Guide**
- **Presents US doctrinal positions as the US Head of Delegation for:**
  - **NATO Air Operations Working Group**
  - **NATO Joint Capability Group for UAS Operations**
  - **Air & Space Interoperability Council's Force Application Working Group**



AT THE VERY HEART OF WARFARE LIES DOCTRINE



# Up Next



*Develop America's Airmen Today...for Tomorrow*

- **Doctrine Development**
- **Education**
- **Wargaming**
- **Intelligence**
- **AF Lessons Learned**
- **Strategy and Concepts**
- **Joint Outreach and Liaison**



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Senior Leader Education



*Develop America's Airmen Today...for Tomorrow*

## Joint Courses:

### Joint Flag Officer Warfighting Course (JFOWC)

- Leading / planning / executing theater-level warfare
- 5-day course, 2 classes / year, 2-star (or select) officers & civilian equivalent

### Joint / Combined Force Air Component Commanders Course (J/CFACC)

- Leading / planning / executing airpower at the theater level
- 9-day course, 1 JFACC and 1 CFACC per year, 1- and 2-star officers

### Senior Joint Information Operations Applications Course (SJIOAC)

- Presents concepts & principles of IO
- 4.5-day course, 2 classes / year, 1- and 2-star officers & civilian equivalents



## AF Courses:

### Cyberspace Operations Executive Course (COEC)

- Prepare senior leaders to interpret the intricacies of strategic decision-making of national cyber policy
- 1.5-day course, one 1- & 2-star/year, one 3- & 4-star/year & civilian equivalents

### Senior Leader Airpower Doctrine Seminar (SLADS)

- Update AF JPME attendees on changes in doctrine & current doctrine issues
- 1-day course or online, 10-12 times / year, AF general officer & civilian equivalents



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Professional Continuing Education



*Develop America's Airmen Today...for Tomorrow*

## Contingency Wartime Planning Course (CWPC)

- Fundamentals of deliberate & crisis action planning
- Duration – 9 days / 10 times per year
- E-5 through O-5 and civilian equivalent (Joint / Coalition)

## Joint Air Operations Planning Course (JAOPC)

- How to develop, plan, & execute the air component's portion of a joint campaign plan
- Duration – 9 days / 10 times per year
- O-3 through O-6 and civilian equivalent (Joint / Coalition)

## IO Fundamentals Application Course (IOFAC)

- Application of the principles of information operations to enhance warfighting capabilities
- Duration – 4 days / 3 times per year
- E-4 through O-5 and GS-7 through GS-13 (Joint / Coalition)

## Mobile Education Teams

## Doctrine Outreach Support



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Up Next



*Develop America's Airmen Today...for Tomorrow*

- **Doctrine Development**
- **Education**
- **Wargaming**
- **Intelligence**
- **AF Lessons Learned**
- **Strategy and Concepts**
- **Joint Outreach and Liaison**



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Wargaming



*Develop America's Airmen Today...for Tomorrow*

## **Educational**

- Global Challenge, Grand Strategy Series (AWC), Joint Land Air & Sea Strategic Exercise (Jt SDE), Joint Series Wargames (ACSC), Theater Air Visualization (SOS, OTS), Alliance Wargames (UK, Netherlands)

## **Operational Wargames**

- Future Capabilities Game (CSAF), Individualized wargames for operational commanders & labs (PACAF, AFGSC, 18 AF, AFRL)

## **World Class Facility & Technical Capability**

- Approved AF Data Center, NIPR Certification and Accreditation, Organic Software Development, 27 connected game rooms, SVTC, AOC simulation room, conference room with capability for 8 independent projections

## **Our Future**

- Distributed wargaming on both NIPR and SIPR
- Partnering with operational commanders to develop choices
- Additional modeling/simulation capability



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Up Next



*Develop America's Airmen Today...for Tomorrow*

- **Doctrine Development**
- **Education**
- **Wargaming**
- **Intelligence**
- **AF Lessons Learned**
- **Strategy and Concepts**
- **Joint Outreach and Liaison**



AT THE VERY HEART OF WARFARE LIES DOCTRINE



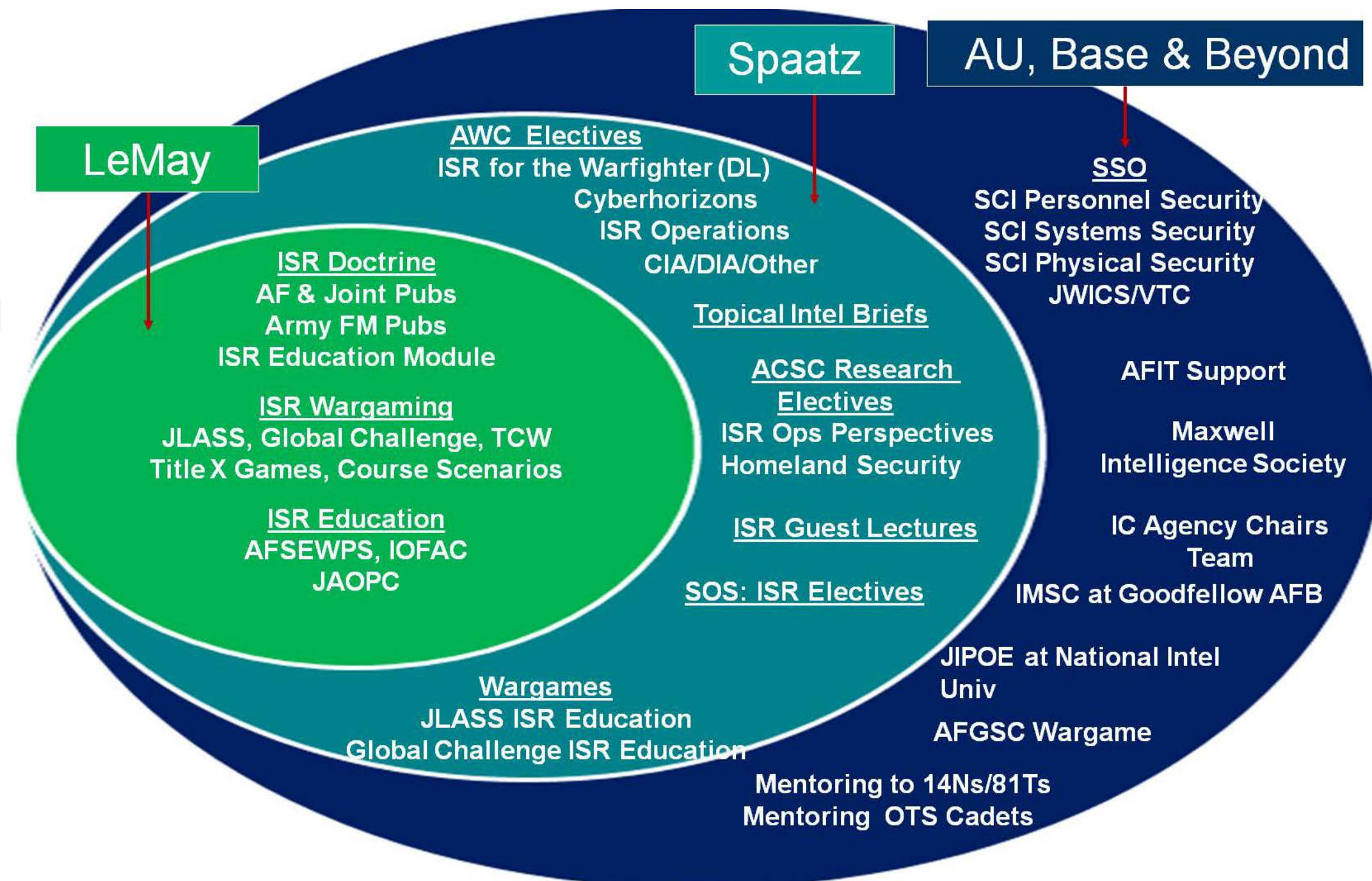


# Intelligence Footprint



*Develop America's Airmen Today...for Tomorrow*

- Strategy, LL, Doctrine
- Education
  - AWC/ACSC Electives
  - JAOPC/IOFAC
  - AU Cyber Center
- Wargaming
  - JCLASS/Global Challenge
  - AF Global Strike Command
- Security
  - AU's SSO
  - Personal & Physical Security
- Academic Engagement
  - Cyber Opportunities Forum
  - Academic Chairs Collaboration (NIU, Service Schools)



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Up Next



*Develop America's Airmen Today...for Tomorrow*

- **Doctrine Development**
- **Education**
- **Wargaming**
- **Intelligence**
- **AF Lessons Learned**
- **Strategy and Concepts**
- **Joint Outreach and Liaison**



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Lesson Learned (LL) Defined



*Develop America's Airmen Today...for Tomorrow*

***A Lesson Learned (LL) is an observation that, when validated and resolved, results in an improvement in military operations or activities at the strategic, operational, or tactical level and results in long-term, internalized change to an individual or an organization.***

**AFI 90-1601 [Under revision to AFI 10-1302]**

- **Contains information of value to some person or organization**
- **Addresses lessons on what DOES work, what DOESN'T work**
- **Can apply to any level**
- **Includes combat operations and other activities**
- **Can apply to an individual or group**
- **Results in long-term behavioral change**



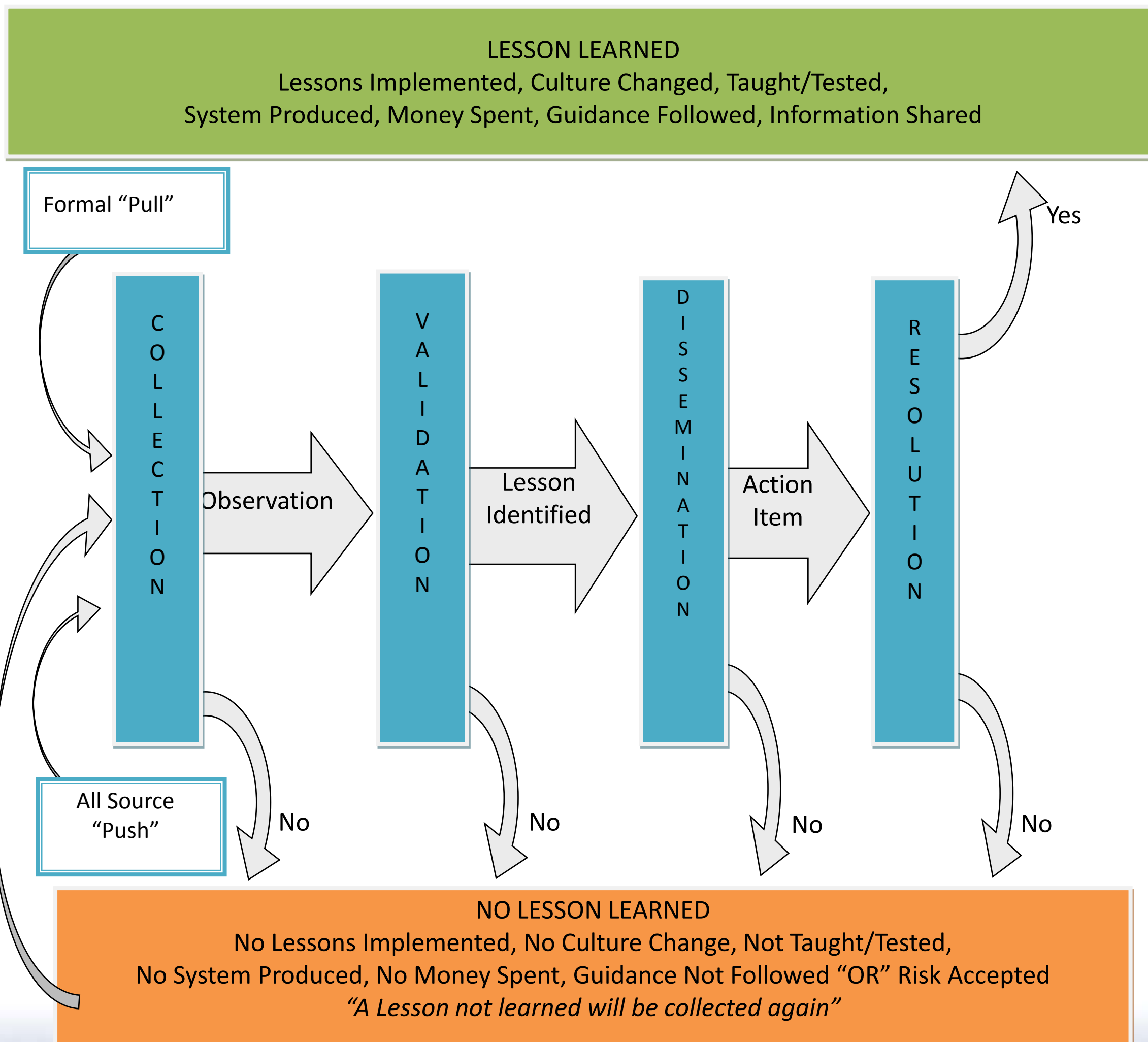
AT THE VERY HEART OF WARFARE LIES DOCTRINE





# AFLL Process

*Develop America's Airmen Today...for Tomorrow*



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Up Next



*Develop America's Airmen Today...for Tomorrow*

- **Doctrine Development**
- **Education**
- **Wargaming**
- **Intelligence**
- **AF Lessons Learned**
- **Strategy and Concepts**
- **Joint Outreach and Liaison**



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Strategy and Concepts



*Develop America's Airmen Today...for Tomorrow*

- **Airpower Advocates**
  - Integrate new ideas to inform strategic decisions
  - Originate/Develop/Support conceptual ideas with HAF
- **Futures Technologies**
  - Collaborate with DOD and civilian partners on emerging technologies
  - Provide researched evidence to align technology to strategic gap
- **Joint Concepts**
  - Assist Joint Staff in coordinating conceptual ideas within Air University
  - Align joint ideas with AF doctrine, Lessons Learned, and Wargaming
- **Collaborative Engagement**
  - Develop and moderate forum for DOD and civilian thinkers
  - Ensure diverse strategic rigor from all facets entwined in evidence
- **Strategic and Operational Conceptual Working Groups**
  - Work daily on short term issues affecting AU/CC and LeMay/CC
  - Draw from across AU to develop teams to support project development



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Up Next



*Develop America's Airmen Today...for Tomorrow*

- **Doctrine Development**
- **Education**
- **Wargaming**
- **Intelligence**
- **AF Lessons Learned**
- **Strategy and Concepts**
- **Joint Outreach and Liaison**



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Geographically Separated Units



*Develop America's Airmen Today...for Tomorrow*



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Joint and Air Staff Liaison



*Develop America's Airmen Today...for Tomorrow*

**Focal point for Joint and Air Staff issues and communication**

**Assists CAPSTONE SLADS for LeMay Center – 60 students per year**



AT THE VERY HEART OF WARFARE LIES DOCTRINE





# Joint Integration Directorate



*Develop America's Airmen Today...for Tomorrow*

## Air Force - Army tie-in

- Located at Fort Leavenworth & 3 operating locations
- Plans, prepares, & presents Air Force instruction to Army personnel in Branch PME Courses (AVN, MVR, Fires, ADA)
- Provides Air Force support to TRADOC experiments & wargames
- Supports Army doctrine development
- LeMay SMEs for AF/Joint Air-Ground Doctrine issues



AT THE VERY HEART OF WARFARE LIES DOCTRINE



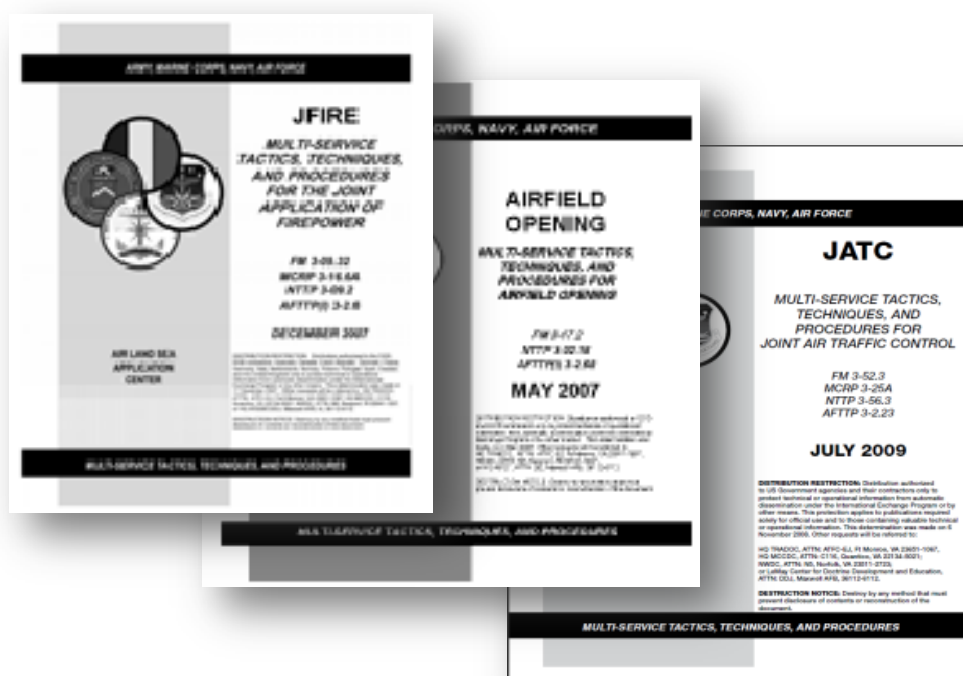


# Air, Land, Sea, Application Center

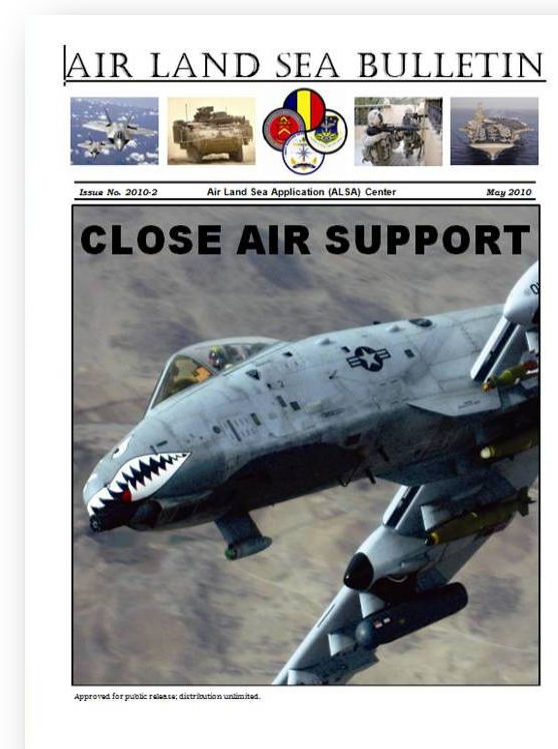


*Develop America's Airmen Today...for Tomorrow*

- Joint organization: “meeting immediate needs of warfighter”
- Chartered by 4 services – steered by Joint Actions Steering Committee
- LeMay Center is the Air Force voting member
- Input from field + speed = Joint solution with instant combat impact
- Authors & maintains 35 Multi-Service manuals / instructions
- Conducts field research to stay relevant, outreach to inform units



## Multi-Service Tactics, Techniques and Procedures



## Quarterly Bulletin



AT THE VERY HEART OF WARFARE LIES DOCTRINE



# LeMay Center



*Develop America's Airmen Today...for Tomorrow*

***“At the very heart of warfare lies doctrine”***



**<https://wwwmil.maxwell.af.mil/au/lemay> (Mil)**

**<https://www.au.af.mil/au/lemay> (Public)**



AT THE VERY HEART OF WARFARE LIES DOCTRINE