



THE AIR UNIVERSITY



Air Force Command and Control (C2): The Need for Increased Adaptability

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Bottom Line Up Front (BLUF)



- **Centralized control—the master tenet for organizing, training, and equipping USAF C2 is often misunderstood**
- **Interpretation of the master tenet has led to over centralizing airpower C2 at the combatant commander (CCDR) level**
- **Although productive for single CCDR-led campaigns, this “one-size-fits-all” configuration runs contrary to fully effective C2 of USAF capabilities across the spectrum of conflict**
- **Operations demonstrate effective C2 of airpower requires adaptive control, centralized at the**



Overview



- **C2 Research Study Introduction**
 - Research Study Approach
 - Analytical Model
- **C2 Research Study Results**
 - The Need for Increased Adaptability
 - Guidelines to Develop Adaptable C2
 - Influences Commanders Must Consider When Designing C2 Structures
 - Challenges the USAF Must Overcome to Create Adaptable C2



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Study Approach

- **Tasking**: Review USAF C2 to see what changes are required to ensure success in uncertain and dynamic future scenarios
- **Research Question**: What changes are required to USAF C2 to better meet Joint Force Commander (JFC) needs across the range of military ops (ROMO)?
- **Methodology**:
 - Literature review, held numerous interviews, visited Al Udeid, sponsored C2 workshop
 - Analyzed 4 operations and 3 mission sets (4+3) across the ROMO
 - Allied Force, MCO OIF, COIN OIF & OEF, Katrina + Nuclear, Space, Cyber

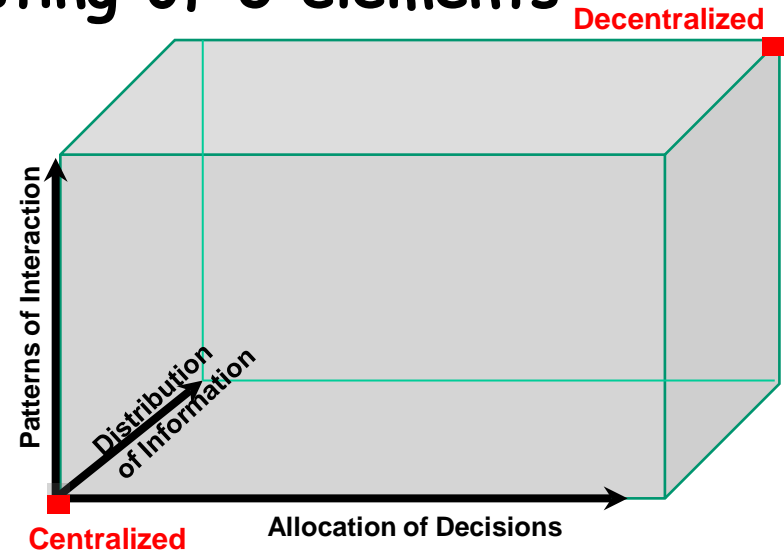
Meeting JFC needs across the range of military operations



Analytical Model



- Result of NATO research effort on C2 agility
- Effective for evaluation of multiple C2 designs
- Describes a C2 approach consisting of 3 elements
 - Decisions (X)
 - Interaction (Y)
 - Information (Z)
- Location within the C2 space reflects degree of centralization





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Analysis Results: Need for C2 Adaptability



- **Current USAF C2 structures**
 - Better suited for global and theater operations
 - Complicates integration with Joint Task Force (JTF) led operations
 - Relied on ad hoc arrangements for C2 at sub-theater level

Adaptive C2 structures enable effective adjustments to operational



Analysis Results: Guidelines for Adaptable C2



- Adaptable C2 allows for varied degrees of centralization
 - Adaptable C2 improves
 - Unity of effort (UoE) through integration at lowest appropriate level
 - Achieves agility and speed of action
 - UoE stresses horizontal coordination & cooperation between partners
 - “Ownership” not required to access partner's capabilities
 - Decentralizing C2 to lowest appropriate level requires;
 - Clear CC guidance, intent, priorities, acceptable risk, and
- Lowest appropriate C2 organizational level varies by situation



Analysis Results: Variables to C2 Design



- Questions commanders should consider when designing C2 structures
 - What is the nature of the operation?
 - What is the capacity of available resources vs. the requirements?
 - What are the C2 capabilities of subordinate units?
 - What is the degree of confidence and trust among partners?
 - What is the political risk?
 - What are the correct organizational levels to locate C2 elements to exploit the unique Air Force capabilities of speed

C2 structures must adapt to each unique operation



Analysis Results: Challenges to Adaptable USAF C2



- **Clarity of Command Relationships**
- **Developing Trust**
- **Capability and Capacity**



Clarity of Command Relationships

Problem: Unclear command relationships hampers vertical and horizontal integration impacting agility and speed of action

Recommendations:

- Broaden Airmen's understanding of centralized control
 - Current understanding of centralized control forces Airmen's thinking into a one size fits all C2 model which limits the way to think about command authorities
 - Effective C2 of Air Force capabilities requires adaptive control, with decision authority placed at the appropriate echelon of command—i.e. command in-depth
- Educate Airmen on proper command relationships especially



Broaden Airmen's Understanding of Centralized Control



- **Command in-depth**
 - Place commanders with designated decision authority in control nodes at appropriate organizational levels
 - C2 node must have situational awareness to understand the requisite actions and the authority to direct forces or delegate decision authority to allow them autonomy



Developing Confidence and Trust



Problem: Lack of confidence and trust impacts willingness to decentralize authority, share information, and create positive interaction

Recommendations:

- Implement C2 structures that provide presence at appropriate organizational levels
- Develop habitual relationships through exercises, pre-deployment spin-ups, and force rotation polices



Capability and Capacity



Problem: Lack of capability and capacity of C2 elements limits integration with partners

Recommendations:

- Codify lower echelon command and planning elements
- *Organize, train and equip* the Air Force for a scalable expeditionary C2 concept of operations
- Create a sub-theater commander force development plan



Air Force Forces in Direct Support of a JTF

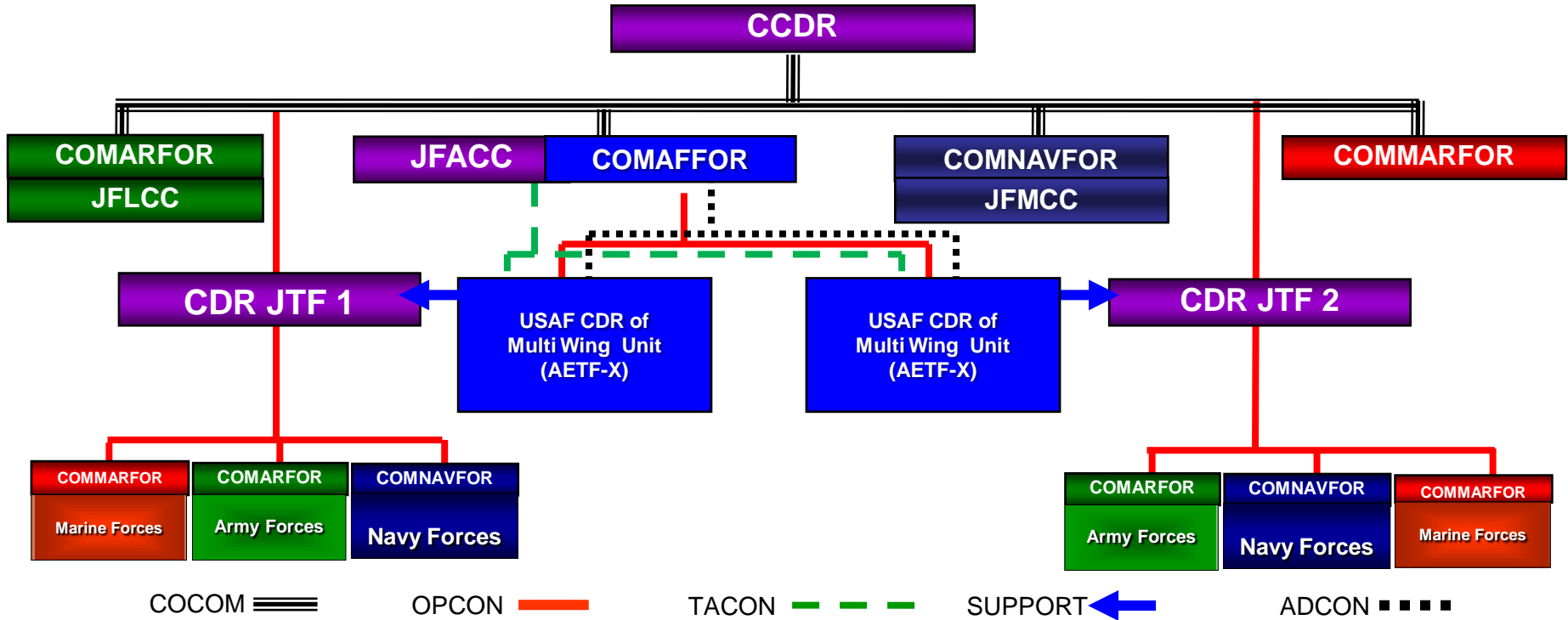
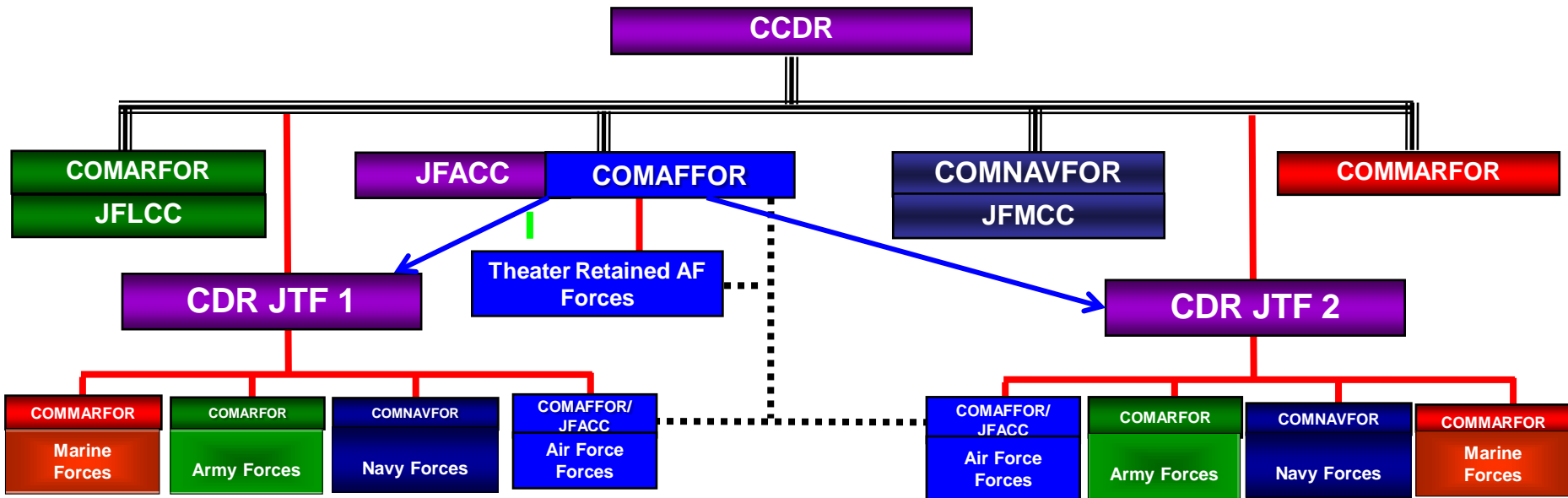


Diagram developed at the Curtis E. LeMay Center for Air Force Doctrine Development and Education, Maxwell AFB, Alabama



Mixture of Theater and JTF Level COMAFFOR / JFACC



COCOM ≡≡≡

OPCON ———

TACON - - - -

SUPPORT ←

ADCON ■■■■

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Summary: Adaptable C2

Adaptable C2

- Allows for varied degrees of centralization
- Goal: Improve unity of effort through
 - Integration at the lowest appropriate organizational level
 - Achieving agility and speed of action in delivering effects

C2 Design Variables

- What is the nature of the operation?
- What is the capacity of available resources vs. the requirements?
- What are the C2 capabilities of subordinate units?
- What is the degree of confidence among partners?
- What is the political risk?
- What are the correct organizational levels to locate C2 elements to exploit the unique Air Force capabilities?

Recommendations

- Expand understanding of command relationships
 - Centralized control
 - Support relationship
 - Plans review
- Develop relationships
 - Presence
 - Habitual relationships
- Improve the capability and capacity of C2 elements
 - Codify lower echelon command and planning elements
 - OT&E a scalable expeditionary C2 CONOPS
 - Force development plan

Adaptive C2 structures enable effective adjustments to operational

Questions?

