AIR FORCE DOCTRINE PUBLICATION 3-0

OPERATIONS



U.S. AIR FORCE

22 January 2025

Air Force Doctrine Publication 3-0, *Operations*

Table of Contents

Foreword i
Chapter 1: THE ROLE OF AIRPOWER 1
- **THE COMPETITION CONTINUUM** 2
- **COOPERATION** 5
- **COMPETITION BELOW ARMED CONFLICT** 5
- **ARMED CONFLICT** 7

Chapter 2: AIR FORCE FUNCTIONS AND CAPABILITIES 11
- **AIR SUPERIORITY** 11
- **GLOBAL PRECISION ATTACK** 13
- **RAPID GLOBAL MOBILITY** 15
- **GLOBAL INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE** 16
- **COMMAND AND CONTROL** 17
- **SUPPORT CAPABILITIES** 18

Chapter 3: AIRPOWER APPLICATION 20
Chapter 4: COMMANDING AIR FORCES 25
- **COMMAND RELATIONSHIPS AND AUTHORITIES** 30

Chapter 5: PRESENTING AIR FORCE FORCES 37
- **LEVELS OF FORCE PRESENTATION** 40
- **FORCE ATTACHMENT CONSIDERATIONS** 44
- **FUNCTIONAL AIR FORCE FORCES** 45

Appendix A: JOINT ALL-DOMAIN OPERATIONS TERMINOLOGY 47
Appendix B: JOINT FUNCTIONS 48
Appendix C: AGILE COMBAT EMPLOYMENT 51
- **ACE ENABLERS** 51
- **ACE CONSIDERATIONS** 53

References 58

FOREWORD

Doctrine embodies the fundamental principles by which military forces guide their actions in support of national objectives. It is a body of carefully developed, authoritative ideas that are officially approved and establish a common frame of reference for solving military problems. However, to be an effective guide, the challenge for doctrine is to simultaneously look to the past, be applicable in the present, and orient toward the future.

Air Force Doctrine Publication (AFDP) 3-0, *Operations*, though firmly rooted in the past, also looks to the future, adapting where needed to ensure continued utility and efficacy for tomorrow's challenges. This publication was significantly revised from the previous version (AFDP 3-0, *Operations and Planning*) to focus on operational fundamentals guiding the United States Air Force (USAF) in a new reality where decision advantage, freedom of maneuver, and freedom of action are increasingly challenged. In this complex world, airpower remains the key enabler of the United States' (US) military power. **The underlying imperative for AFDP 3-0 is that an Airman's greatest contribution to the joint force is understanding airpower application.**

Success in this contested environment requires increased integration and synchronization with the joint force. Therefore, AFDP 3-0 has been restructured to describe the competition continuum as the global context for air operations and communicate how the USAF's core functions, enabled by the Service's distinct capabilities, guide the application of airpower. Additionally, AFDP 3-0 discusses how the USAF will command, generate, and present combat-ready forces, including the Air Force Force Generation (AFFORGEN) model, combat wings, and the concept of Agile Combat Employment (ACE). These topics incorporate the joint functions and tenets of airpower to communicate USAF doctrine in a language that is recognizable and familiar to other Services.

Additionally, previous AFDP 3-0 topics such as the "Common Operations Framework" and the "Joint Planning Process for Air (JPPA)" have moved into separate publications (AFDP 3-0.1, *Command and Control*, and AFDP 5-0, *Planning)*. This restructure highlights the importance of the command and control (C2) function, prepares Airmen to operate in contested, degraded, or operationally limited environments with the Air Force Planning Process (AFPP), and presents the intellectual framework for distributing control to accomplish decentralized operations with the mission command philosophy of leadership. These changes consolidate foundational airpower theory in AFDP 3-0 and make it the cornerstone for the remaining library of USAF operational doctrine.

CHAPTER 1: THE ROLE OF AIRPOWER



"In this our time of consequence, it's up to us to have the courage and the boldness to take these actions, and I believe that these actions will result in what our airmen need, which is One Air Force, and what the Joint Force demands, which is One Air Force, what the nation demands, which is One Air Force, to meet the challenge and ensure we can continue to fly, fight and win, and deliver airpower anytime, anywhere."

–General David W. Allvin, 23rd Chief of Staff, USAF
"One Air Force," 2024

The primary USAF contribution to warfighting is airpower. **Airpower is the ability to project military power through control and exploitation in, from, and through the air.** Historically, airpower has been an asymmetric advantage for the US and remains a primary guarantor of our nation's security and a fundamental component of the military instrument of power. **The USAF employs airpower to achieve joint force commander (JFC) objectives and to complement other components of the joint force.**[1]

Airpower provides the joint force with the advantages of speed, range, precision, tempo, lethality, and adaptability to create effects in all domains. By its nature, **the employment of airpower is fundamentally different than other forms of military power.** Airpower can create effects across a theater or the entire globe. It provides a means to bypass fielded forces and directly strike enemy centers-of-gravity (COGs), to produce operational and strategic effects that enable US forces to gain an enduring advantage. **Airpower can wrest the initiative from an adversary,[2] set the terms of battle, establish a dominant tempo of operations, better anticipate an adversary through superior observation, take advantage of opportunities, and strike directly at an enemy's capabilities and strategy.**

Airpower identifies and exploits asymmetries that are enabled when friendly forces possess control of the air (and the necessary degree of space, cyberspace, and electromagnetic spectrum [EMS] control). The flexibility and responsiveness of USAF forces affords the US more control over the strategic situation by imposing the terms of the competition on adversaries.

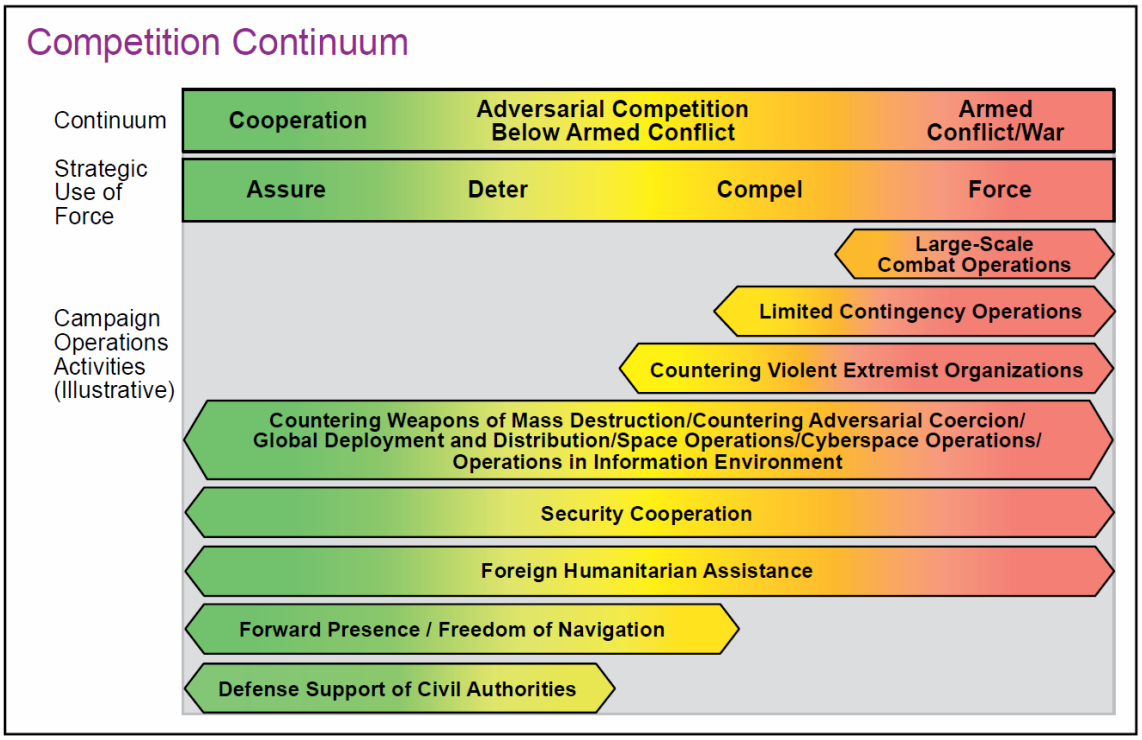
The **tenets of airpower** are mission command, flexibility and versatility, synergistic effects, persistence, concentration, priority, and balance. These tenets are guided by the **principles of joint operations,** including unity of command, objective, offensive, mass, maneuver, economy of force, security, surprise, simplicity, restraint, perseverance, legitimacy, and unity of effort. They reveal fundamental truths tested in combat and

[1] For additional information on Service culture, see AFDP 1, *The Air Force*.
[2] In the competition continuum, the term "adversary" is used to discuss parties in competition below armed conflict. The term "enemy" is used to address hostile parties in armed conflict.

proven through experience. Commanders, in every situation, should apply their professional judgment and experience to the tenets and principles as they employ airpower across the competition continuum.[3]

THE COMPETITION CONTINUUM

The competition continuum describes a world of enduring competition conducted through a mixture of cooperation, adversarial competition below armed conflict, and armed conflict. State and non-state actors continuously attempt to protect and advance their interests by competing for advantage using diplomatic, informational, military, and economic instruments of national power. There can be simultaneous interaction with the same strategic actor at different points along the competition continuum.[4] The figures below depict the competition continuum with the corresponding uses of force that are generally employed in each relationship. The first figure, "The Competition Continuum from Joint Publication (JP) 3-0," depicts the operations and activities conducted by the joint force.

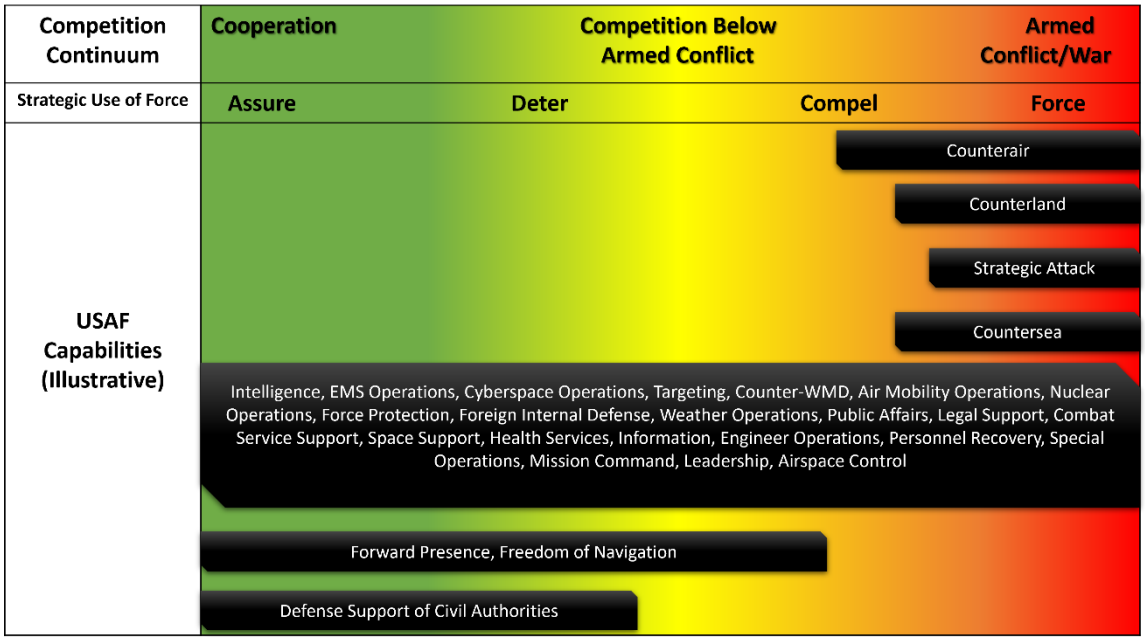


The Competition Continuum from JP 3-0

Across the continuum, the air component gives the JFC a primary means of action since airpower can be deployed and employed farther and faster than most other forms of military power. **Airpower provides a unique component of operational military power that can assure, coerce (deter or compel), or force strategic and operational effects that ensure the President and US diplomats negotiate from positions of strength.**

[3] For additional information on the tenets of airpower and principles of joint operations, see AFDP 1, *The Air Force*.
[4] For additional information on the competition continuum, see JP 1 Vol 1, *Joint Warfighting,* and JP 3-0, *Joint Campaigns and Operations*.

These uses of military power are realized through the USAF functions and associated capabilities. The "USAF Capabilities in the Competition Continuum" figure depicts where USAF capabilities may be applied.



USAF Capabilities in the Competition Continuum

The Competition Continuum: An Example

The Cold War was a clear example of the many facets of strategic competition. The US and the Soviet Union competed in numerous ways (e.g., for greater influence in international organizations, for the next great achievement in space, and for more medals won at the Olympics). Rather than engage in direct armed conflict, each state fought through and with surrogates as an indirect means to achieve their strategic objectives. Yet, the two superpowers also cooperated, such as when both backed actions in the United Nations Security Council.

–JP 3-0, *Joint Campaigns and Operations*

GLOBAL CAMPAIGNING

The military instrument of power is applied across the competition continuum through campaigning. **Campaigning is the persistent conduct of related operations, activities, and investments that align military actions with the other instruments of national power, supporting global integration across the competition continuum in pursuit of strategic objectives.** Campaigning is the result of strategic discussion, policy, and operational-level planning and execution. It includes many Service component operations, joint operations, and continual alignment of military actions with interorganizational and multinational partners. In concert with other instruments of national power, campaigning activities anticipate a future beyond strategic objectives.

Airpower contributes to campaigning through joint air operations, activities, and investments that use the USAF's unique capabilities within a joint force campaign.

CAMPAIGNS

A campaign is a series of related military operations to achieve strategic and operational objectives in a specific time and space. **Campaigns are always joint operations, and they are implemented through campaign plans.** Combatant Commanders (CCDRs) plan and conduct campaigns and operations, while Service and functional components conduct operations, activities, battles, and engagements. These elements are inextricably linked and begin at the tactical level with engagements and battles.

An engagement can include a wide variety of noncombat tasks and activities between opposing forces, normally of short duration. Battles typically last longer than engagements and consist of a series of related engagements. Battles involve larger forces and have greater potential to affect the course of an operation. A specific operation is a sequence of tactical actions with a common purpose or unifying theme. For example, air component operations may include air mobility operations, counterair operations, countersea operations, and cyberspace operations.

A **major operation** is a series of tactical actions conducted by combat forces, coordinated in time and place, to achieve strategic or operational objectives in an operational area. Major operations are a primary building block of a campaign. They often include competition and even cooperation alongside or in conjunction with armed conflict, up to and including large-scale combat operations (LSCO). Such operations are generally conducted against nation-states or non-state actors that possess significant military capabilities that threaten US national security.

Individual operations are typically sequential and unfold by phases or branches to align with their commander's intent. A commander may design any number of unique phases to support their operations and the JFC's concept of operations (CONOPS). Phases are a tool to integrate and synchronize related activities, within available resources, to enhance C2, improve flexibility, and strengthen unity of effort during execution. A plan's phases are distinct and sequential. However, activities often overlap between the phases.

Campaign plans organize the day-to-day operations of the joint force to shape the operational environment (OE) and achieve national objectives. There are three types of campaign plans: global campaign plans, functional campaign plans, and combatant command campaign plans (CCPs). USAF forces support CCPs with air component campaign support plans.[5] Regardless of the type of plan, campaigns occur within the context of the competition continuum, starting with cooperation.

[5] For additional information on campaigns and campaign plans, see JP 5-0, *Joint Planning,* and AFDP 5-0, *Planning.*

COOPERATION

Cooperation is categorized by situations in which joint forces act with another strategic partner in pursuit of policy objectives. Military engagement and security cooperation are designed to establish, shape, maintain, and refine domestic and international relationships.

During cooperation, the USAF conducts many operations in support of CCDR strategies to produce an enduring advantage. Airpower cooperation activities include (but are not limited to):

- Arms control operations.
- Foreign internal defense.
- Humanitarian assistance.
- Military engagement activities.
- National Guard Bureau State Partnership Programs.
- Security cooperation activities (international and domestic).
- Unilateral and partner/allied-nation exercises.

ASSURANCE

Cooperation activities primarily focus on assurance. Assurance involves the use of instruments of national power to demonstrate commitment and support to US allies and partners to build trust. Military assurance often takes the form of security cooperation, combined exercises, and the forward stationing of US forces. Exercises and the forward posture of US forces provide security, advance ally and partner interoperability, and create strategic messaging opportunities related to theater security, partnership, and disaster response.

Deterrence and assurance are often inextricably linked, particularly regarding nuclear operations. Extended nuclear deterrence, as described in JP 3-74, *Joint Nuclear Operations*, involves efforts to assure the security of actual and potential partners under the umbrella of existing US and allied nuclear deterrent capabilities to persuade adversaries against pursuing courses of action (COA) contrary to US interests (e.g., pursuit of their own weapons of mass destruction arsenals).

COMPETITION BELOW ARMED CONFLICT

Competition is the interaction among actors in pursuit of the influence, advantage, and leverage necessary to advance and protect their respective interests. Competition is continuous because the conditions defining an acceptable state are constantly changing.

During competition, the USAF enables CCDR strategies to shape the OE and capitalize on the relationships strengthened in cooperation. Example activities include (but are not limited to):

- Counterdrug operations.
- Cyberspace operations.
- EMS operations (EMSO).
- Nuclear deterrence.
- Operations in the information environment.

DETERRENCE

Competition activities often incorporate deterrence. Deterrence is the practice of discouraging an actor from taking unwanted action.[6] Deterrence is an effect on the state of mind of an adversary brought about by the existence of a credible threat of unacceptable retaliation. The USAF provides flexible, responsive, and stabilizing deterrents through nuclear and conventional forces. In addition to its nuclear capability, the USAF contributes to deterrence through its ability to rapidly respond and destroy targets using accurate conventional weapons anywhere on the globe. Additional deterrence contributions include the ability to forward-deploy a variety of air capabilities swiftly, operate securely from contingency locations, provide accurate, globally integrated intelligence, surveillance, and reconnaissance (ISR), and use air mobility to deploy assets of other Services rapidly around the world. While these capabilities often provide a deterrent quality of their own, they are merely one component of integrated deterrence.

Integrated deterrence is a whole-of-government approach, in close collaboration with the US Government, allies, and partners that is tailorable to a variety of circumstances. Integrated deterrence "applies a coordinated, multifaceted approach to reducing competitors' perceptions of the net benefits of aggression relative to restraint." It is "enabled by combat-credible forces prepared to fight and win, as needed, and backstopped by a safe, secure, and effective nuclear deterrent."[7]

OPERATIONS IN THE INFORMATION ENVIRONMENT

Operations in the information environment (OIE) are critical across the entirety of the continuum to support creating, maintaining, and exploiting overall joint force advantage. However, they are uniquely influential during competition below armed conflict. OIE activities can be used to achieve and leverage information advantage through integrated and coordinated campaign activities. Further, it may be required to achieve operational objectives in restricted, contested, or politically sensitive areas where destructive physical force is constrained or insufficient.[8]

---

[6] For additional information on deterrence, see JP 1 Vol 1, *Joint Warfighting.*
[7] For additional information on Integrated Deterrence, see 2022 National Security Strategy, 2022 National Defense Strategy, and 2022 Nuclear Posture Review.
[8] For additional information on operations in the information environment, see AFDP 3-13, *Information in Air Force Operations*.

Homeland Operations

The primary objective of homeland operations is to defend the United States from attack. Homeland operations incorporate all operations, planning, and execution designed to detect, preempt, respond to, mitigate, and recover from the full spectrum of incidents and threats to the homeland, whether manmade or natural. The USAF provides control of the air, rapid global mobility, global ISR, and C2 functions to conduct homeland operations and provide defense support of civil authorities (DSCA). For additional information on homeland operations, see JP 3-27, *Joint Homeland Defense*, and AFDP 3-27, *Homeland Operations*.

THE BALANCE OF READINESS, ASSURANCE, AND DETERRENCE

Across the competition continuum, the interaction between readiness-building activities, assurance activities, and deterrence activities are interrelated and complimentary. Readiness-building activities are vital to the health and maintenance of forces to ensure they are prepared to conduct assigned operations and postured for unforeseen contingencies. While some readiness activities may not directly contribute to accomplishing an assigned operation, they may create effects that support assurance and/or deterrence.

Similarly, assurance and deterrence activities may generate readiness in certain areas and create multiple effects that contribute to JFC objectives. However, assurance and deterrence activities may also negatively impact readiness for other operations or missions. Therefore, the air component commander should apply sound judgment and operational art to balance the effects of readiness-building, assurance, and deterrence activities. To manage these effects, commanders should conduct OIE that shape perceptions of readiness-building activities and their contribution to assurance or deterrence.

ARMED CONFLICT

Armed conflict/war occurs when military forces act against an enemy in hostilities or declared war. International law distinguishes international armed conflicts (those involving the use of armed force by one or more States against another State) and non-international armed conflicts (protracted armed confrontations between governmental forces and the forces of one or more non-governmental armed groups). Non-international armed conflicts are distinguished from lesser forms of violence, such as civil unrest, riots, and other sporadic acts of violence, by the intensity of the conflict and the organization of the parties.

While crisis response is not specifically addressed in the competition continuum, the joint force has extensive experience in **crisis and limited contingency operations.** Crisis response and limited contingency operations may be single small-scale, limited-duration operations or a significant part of a major operation of extended duration involving combat. Many of these operations involve a combination of military forces and capabilities in close cooperation with other organizations.

COERCION

Coercion is a broad concept that encompasses two distinct forms of persuasion or intimidation: deterrence and compellence. Deterrence is addressed above in the "Competition Below Armed Conflict" section (note: deterrence activities may also occur in armed conflict). Compellence is an attempt to modify an adversary's behavior.

The key to coercion is to deter or compel with sufficient strength and credibility that opponents, due to the perceived cost of non-compliance, choose our preferred actions (or decide not to act). Airpower's flexibility offers options to effectively coerce opponents while still providing available capability for other operations.

COMPELLENCE

Compellence is the use of military force to influence an adversary to modify or desist ongoing behavior or do something they would rather not do. Compellence generally takes one of three forms: denial, risk, punishment, or any combination of the three.

- **Denial.** Denial seeks to change an adversary's behavior by preventing the adversary from achieving its objectives or changing its behavior by making its actions seem pointless. Airpower is well suited to conduct denial-based COA against enemy-fielded military forces. Persistent and pervasive ISR pinpoints military targets. Precision attack enables discrimination and reliable action against those targets.
  - **Paralysis.** Paralysis is a form of denial that uses parallel attacks across the enemy's entire system, including their leadership and C2 mechanisms, to render the enemy largely incapable of controlling crucial systems or even their society at large (a significant concern of autocratic regimes). Parallel attacks usually complement other forms of denial, helping lessen military resistance and increasing the psychological effect of destruction. Airpower is uniquely suited to induce paralysis. It can strike the broadest possible array of targets in the shortest time across the depth of the OE.
- **Risk.** Risk is placing that which the enemy values at a credible potential for loss. Typically, risk strategies slowly raise the probability of damage to the enemy's systems. Airpower is generally the instrument of choice in pursuing risk strategies because of its ability to bypass enemy-fielded military forces and put strategic targets at risk.
- **Punishment.** Punishment is administering adverse action against the enemy until they act in the desired manner (or cease undesired action). Punishment is often used to refer to a strategy that attempts to inflict enough pain that leaders change their behavior. This strategy is executed exclusively through the lawful engagement of military targets. Airpower offers unique advantages for pursuing punishment strategies due to its ability to discriminately engage targets anywhere within an adversary's system.

FORCIBLE ACTION

Forcible action requires the violent application of military force to project the will of the US on an enemy by eliminating their resistance. Defeating an enemy creates the conditions to impose the desired strategic outcome, usually through exhaustion, attrition, and/or destruction to the point of annihilation. Importantly, military strategies rarely set out to force our will on an enemy from the outset due to the cost imposition on both sides. Rather, forcible actions typically result from failed coercive strategies.

- **Exhaustion.** Exhaustion imposes unacceptable costs that erode the enemy's will to fight, even if the enemy is achieving tactical or operational military success.
- **Attrition.** Attrition disrupts, degrades, or neutralizes an enemy's armed forces or war-making capabilities by applying combat power over time to create a cumulative operational or strategic impact.
  - **Leadership attack.** Leadership attack (both lethal and nonlethal) is a specific form of attrition that removes enemy leadership by direct attack when members of that leadership constitute lawful targets. It can entail a direct attack to sever C2 links between an enemy's leadership and its fielded military forces.

    Leadership attack is most effective when an enemy is led by a single charismatic and authoritarian figure who cannot be easily replaced. Other considerations are organizations with rigid, hierarchical leadership structures whose leaders, and their replacements, can all be identified, located, and removed. Planners should consider the second and third-order effects that may jeopardize a country's long-term stability if its leadership is removed.

    As a matter of practice, attacks on the national leadership of an enemy State have often been avoided based on comity and to help ensure that authorities exist with whom peace agreements can be concluded.

Civilian Harm Mitigation and Response

The success of air operations across the competition continuum depends on acting consistent with the fundamental principles of the law of war. Preventing, mitigating, and responding to civilian harm should be integrated into mission objectives from the start. An effective civilian harm mitigation and response plan for air operations depends on incorporating appropriate planning considerations and ensuring Airmen are trained and aware of their obligation to minimize civilian harm.

Airpower offers unique operational capabilities to mitigate and respond to civilian harm. For example, the advantages of global precision attack enable JFCs to create effects against lawful enemy targets while minimizing collateral damage, and air mobility operations provide the ability to rapidly evacuate at-risk civilians from dangerous situations.

- **Annihilation.** Annihilation eliminates the ability of an enemy's armed forces to fight as a cohesive organization. In the past, it often involved seeking a single decisive battle to defeat an enemy's main force-main strength against main strength. Truly decisive outcomes in such battles are very seldom achieved. Most often, especially in modern warfare, decisive battles are turning points that help determine the broad direction events take, rather than a point of complete defeat for one antagonist or the other.

CHAPTER 2: AIR FORCE FUNCTIONS AND CAPABILITIES



"We are the only service that provides the nation the assurance of air superiority, the advantage of global strike, the agility of rapid global mobility, the adaptability of intelligence, surveillance, reconnaissance, and the authority in our command and control to sense, make sense, and act. It is what we must do today and must be prepared to do tomorrow. Bottom line, airpower is the answer."

–General Charles Q. Brown, Jr., 22nd Chief of Staff, USAF
"Airmen in the Fight," 2023

The USAF provides airpower by organizing, training, and equipping forces that contribute unique capabilities through Service-specific functions. USAF functions are explicitly defined in Department of Defense Directive (DoDD) 5100.01.[9] From these, five are recognized as core functions:

- Air Superiority.
- Global Precision Attack.
- Rapid Global Mobility.
- Global ISR.
- Command and Control.

The five USAF core functions, along with the USAF's distinct support capabilities, contribute to the seven joint functions (C2, information, intelligence, fires, movement & maneuver, protection, and sustainment). Together, these functions and associated capabilities enable air component operations to achieve joint force objectives and attain desired end-states.

AIR SUPERIORITY

Airpower's primary role in joint air operations is to achieve control of the air. Historically, control of the air has been a prerequisite to success for modern operations. It facilitates freedom of action, freedom of movement, and prevents enemy air and missile threats from effectively interfering with operations of friendly air, land, maritime, space, cyberspace, and special operations forces (SOF). **Dominance of the air cannot be assumed.** In the air, the degree of control ranges from complete absence, to air parity (or neutrality) where neither adversary can claim any level of control over the other, to local air superiority in a specific area, to air supremacy over the entire operational area.

[9] For additional information on USAF functions, see DoDD 5100.01, *Functions of the Department of Defense and Its Major Components.*

Control of the air may vary over time. It is important to remember that the degree of control of the air can be bounded and limited in both duration and geography (temporally, horizontally, and vertically), local or defined, in the context of an entire theater. The desired degree of control will be at the direction of the JFC and based on the JFC's CONOPS, which will typically be a priority objective of joint air operations. Commanders should not expect air supremacy or superiority against a capable enemy. Counterair operations occur throughout campaigns and major operations to produce the desired degree of control of the air at the times and places chosen by the JFC.

Operations to control the air are not limited to specific assets or weapons systems. Control of the air may be achieved by employing many different USAF capabilities. However, operations are generally classified into offensive counterair (OCA), defensive counterair (DCA), and the subcategory of integrated air and missile defense (IAMD).[10]

OFFENSIVE COUNTERAIR

OCA operations seek to dominate enemy airspace and prevent the launch of threats, resulting in greater freedom from attack and increased freedom of action. It includes four operations used to achieve specific counterair effects: attack operations, suppression of enemy air defenses (SEAD), fighter escort, and fighter sweep. OCA is normally grouped with the joint function of fires and is often associated with countering an adversary's anti-access, area denial (A2AD) capabilities.

Countering A2AD Capabilities

Advancements in adversary A2AD capabilities greatly expand the range and lethality of adversary kill chains. These kill chains limit friendly freedom of action and raise risk to mission while making achievement of JFC's objectives more difficult.

Through a target system analysis of the adversary's A2AD kill chain, the JFC can determine the most effective application of fires to counter an adversary's A2AD capabilities. OCA through long-range fires (i.e., kinetic systems employed from physical positions of relative safety and are difficult to defend against) are especially effective at targeting nodes and linkages in an adversary A2AD kill chain. Long-range fires paired with non-lethal effects in the EMS and cyberspace have the potential to degrade an adversary's A2AD capability and enable freedom of maneuver and freedom of action across multiple domains. Airpower contributes to long-range fires through intelligence gathering, inputs to the joint targeting board and joint fires element, C2, employment of long-range weapon systems, airspace management and control, and the maneuver and sustainment of long-range fires platforms.

[10] For additional information on control of the air, see AFDP 3-01, *Counterair Operations*.

DEFENSIVE COUNTERAIR

DCA operations defend friendly lines of communication, deny the enemy the freedom to carry out offensive attacks from the air, and provide a secure area from which all elements of the joint force can operate. DCA operations are not limited to protecting the joint force. They can be conducted in conjunction with, or independent of, OCA. They also ensure US territory, the domestic population, and critical defense infrastructures are protected from attack. In some cases, DCA may be the only means to counter air and missile threats due to political constraints. Thus, USAF DCA directly supports the joint function of protection.

Expeditionary Basing Defense

Joint air defense capability and capacity, combined with air component schemes of maneuver such as Agile Combat Employment (ACE), will stress air defense resources. The emergence of asymmetric threats such as small-unmanned aerial systems (sUAS), loitering munitions, and hypersonics present complex problems for defending air bases both at home and abroad.

INTEGRATED AIR AND MISSILE DEFENSE

As a component of DCA, IAMD is an approach to counter some, but not all, air and missile threats. IAMD integrates capabilities and overlapping operations to defend the homeland and US' national interests, protect the joint force, and enable freedom of action by negating an adversary's ability to create adverse effects from their air and missile capabilities.

Emerging Threat: Hypersonics

Our adversaries are undertaking hypersonic weapons testing and development from a variety of delivery platforms. These weapons operate at speeds greater than Mach 5. Their maneuverability makes them challenging to detect and defeat. Weapons operating at these speeds provide significant offensive capabilities that challenge an opponent's decision timelines. Hypersonics are not necessarily strategic weapons that create strategic effects. However, like airpower in general, hypersonics may create tactical, operational, or strategic effects depending on their target.

GLOBAL PRECISION ATTACK

Global precision attack is the ability to hold a target at risk or strike rapidly and persistently, with a wide range of munitions, to create swift, decisive, and precise effects across multiple domains. The global precision attack function includes strategic attack, nuclear operations, and counterland operations in the form of air interdiction and close air

support (CAS).[11] Global precision attack may also include countersea operations, information in Air Force operations, EMSO, cyberspace operations, special operations, and targeting. These capabilities are closely tied to the fires, information, and protection of joint functions. As part of the fires function, USAF global precision attack capabilities often constitute long-range options for a JFC.

STRATEGIC ATTACK

Strategic attack is a JFC-directed offensive action against a target that is selected to achieve national or military strategic objectives. These attacks seek to weaken the adversary's ability or will to engage in or escalate conflict and may achieve strategic objectives without necessarily achieving operational objectives as a precondition. Strategic attack is closely associated with the joint function of fires.

NUCLEAR OPERATIONS

Nuclear operations are activities conducted across the competition continuum, in cooperation with mission partners, which include nuclear deterrence, responding to a crisis involving nuclear weapons, nuclear strike, assessment of the effects of a nuclear strike, and return to stability. The threat of nuclear attack in response to enemy attacks is the bedrock of strategic nuclear deterrence while assuring the security of allies and partners against regional aggression. USAF nuclear capabilities for two legs of the US Nuclear Triad (nuclear bombers and intercontinental ballistic missiles). The employment of nuclear weapons is a form of strategic attack that supports the joint function of fires.

AIR INTERDICTION

Air interdiction is defined as air operations conducted to divert, disrupt, delay, or destroy the enemy's military potential before being brought to bear effectively against friendly forces or to otherwise achieve the JFC's objectives. Air interdiction can channel movements, constrict logistics systems, disrupt communications, force urgent movement, and attrit enemy fielded forces.

CLOSE AIR SUPPORT

CAS is defined as air action by aircraft against hostile targets that are in close proximity to friendly forces and require detailed integration of each air mission with the fire and movement of those forces. CAS supports firepower in offensive and defensive operations to destroy, disrupt, suppress, fix, harass, neutralize, or delay enemy targets as an element of joint fire support. The speed, range, and maneuverability of airpower allow CAS assets to attack targets to enable the ground scheme of maneuver. Both air interdiction and CAS are USAF counterland operations that support the joint functions of movement & maneuver and fires.

[11] For additional information on global precision attack, see AFDP 3-02, *Strategic Attack*, AFDP 3-72, *Nuclear Operations*, AFDP 3-03, *Counterland Operations*, and AFDP 3-04, *Countersea Operations*.

ELECTROMAGNETIC SPECTRUM OPERATIONS

EMSO are military actions to exploit, attack, protect, and manage the electromagnetic operating environment. These actions include and impact all joint force transmissions and receptions of EM energy. The goal of EMSO is to achieve EMS superiority, contributing to gaining and maintaining information advantage and decision advantage to achieve the JFC's objectives.

CYBERSPACE OPERATIONS

Cyberspace operations can be executed independently, or integrated with operations in other domains, to achieve primary, complementary, or enabling effects. USAF cyberspace forces support these objectives through the conduct of offensive cyberspace operations (OCO), defensive cyberspace operations (DCO), and Department of Defense (DoD) information network (DODIN) operations.

Long-Range Fires

Long-range fires provide significant offensive capabilities that can improve deterrence and survivability. By enabling power projection from standoff ranges, the risk to critical US assets decreases while the defensive burden imposed upon the enemy increases. These fires challenge an adversary's logistics, C2, and basing, forcing them to choose between increased risk and decreased effectiveness. Long-range fires may create key effects that counter an adversary's kill chain.

RAPID GLOBAL MOBILITY

The USAF provides mobility forces with global reach to employ and sustain military forces that enable JFCs to conduct decisive operations across the competition continuum. The USAF fulfills the rapid global mobility function through air mobility, which is the rapid movement of resources to, from, or within, a theater by air.

Rapid global mobility uniquely contributes to the joint function of movement and maneuver. Air mobility enhances combat power and flexibility, either by extending their range or providing them with greater maneuverability. These capabilities enable the joint force to gain operational reach and positional advantage. Air mobility operations are classified into four core functions: airlift, air refueling (AR), aeromedical evacuation (AE), and air mobility support.[12]

AIRLIFT

Airlift is the movement of personnel and materiel via mobility air forces (MAF) to support strategic, operational, and tactical objectives. Airlift provides rapid, flexible, and secure transportation for the joint force. Personnel and cargo, categorized as requirements, are transported to meet the JFC's objectives and priorities.

[12] For additional information on air mobility operations, see AFDP 3-36, *Air Mobility Operations*.

AIR REFUELING

AR is the in-flight transfer of fuel from a tanker aircraft to a receiver aircraft in support of strategic, operational, and tactical objectives. AR expands options available to commanders by increasing the range, payload, persistence, and flexibility of joint and coalition receiver aircraft.

AEROMEDICAL EVACUATION

AE is the movement of patients under medical supervision to and between medical treatment facilities by air transportation. AE provides time-sensitive, in-flight care of patients or casualties to and between levels of care, predominantly using mobility aircraft or contracted aircraft (civilian air ambulance) with trained medical aircrew onboard.

GLOBAL INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE

ISR is an activity that synchronizes and integrates the planning and operation of sensors, assets, processing, exploitation, and dissemination systems, and analytic systems or capabilities to directly support current and future intelligence operations. ISR operations comprise the primary activities that feed data and information into the joint intelligence process.

ISR activities produce information and data. Through the joint intelligence process, information and data is then used to produce intelligence. From this perspective, ISR is a subordinate intelligence activity conducted to gather information and data necessary to meet intelligence requirements.[13] ISR supports the joint function of intelligence.

AIRBORNE ISR

One of the most visible representations of USAF intelligence operations is airborne ISR. Airborne ISR can provide a unique, taskable, and visible presence to provide real-time, tailorable information during mission execution.

TARGETING

> "In essence, airpower is targeting, targeting is intelligence, and intelligence is analyzing the effects of airpower."
>
> **–Colonel Phillip S. Meilinger, USAF**
> "Ten Propositions Regarding Airpower"

Intelligence operations are a primary contributor to targeting and directly influence the joint targeting process. Targeting is the process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities.[14]

Targeting is focused on achieving objectives through effects. The effects that airpower can generate necessitate a close relationship to targeting. Airpower's speed, range,

[13] For additional information on intelligence, see AFDP 2-0, *Intelligence*.
[14] For additional information on targeting, see AFDP 3-60, *Targeting*.

precision, tempo, lethality, and adaptability create effects in all domains and link the targeting process to the application of airpower in direct ways that may not be shared by other forms of military power.

COMMAND AND CONTROL

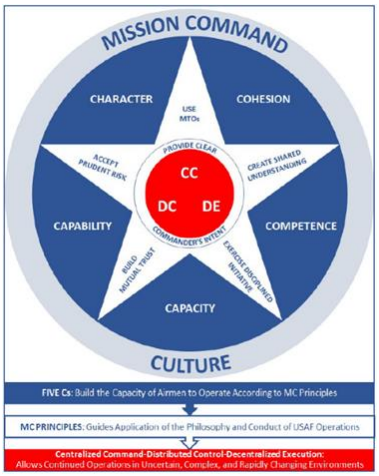
C2 is the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of a mission. In addition to the commander, the C2 function encompasses the act of exercising authority (the C2 process), the framework that guides it, and the systems that support it. **Airmen understand that C2 is the central joint function that integrates all the other functions and enables operations**.[15]

THE C2 PROCESS

The C2 process is the progressive and iterative series of major C2 activities, led by a commander, which characterize the act of command and control. The four major C2 activities are: planning, preparing, executing, and assessing. The C2 process captures many different processes and cycles that occur within the air component (i.e., the Air Tasking Cycle, Targeting Cycle, and Airlift Cycle).

MISSION COMMAND

Mission command provides the guiding framework for C2. In addition to being a philosophy of leadership, mission command refers to the effective execution of decentralized operations within the framework of Centralized Command-Distributed Control-Decentralized Execution (CC-DC-DE). CC-DC-DE provides a means to fully capitalize on airpower's advantages (speed, range, flexibility, and lethality) by guiding the act of C2 through authority delegation to subordinate commanders.[16]



BATTLE MANAGEMENT

Battle Management (BM) is C2 in execution-the management of operational activities based on the commands, direction, and guidance given by appropriate authority. During BM, C2 nodes (e.g., Air Operations Centers (AOCs), Airborne Warning and Control Systems (AWACS), Wing Operations Centers (WOCs), mission commanders) manage missions in execution.

ALL-DOMAIN SYNCHRONIZATION

The Department of the Air Force's (DAF) vision for all-domain synchronization is captured in the concept of joint all-domain C2 (JADC2). JADC2 is the art and science of decision-making to rapidly translate decisions into action and leverage capabilities across all domains, with mission partners, to achieve operational and informational advantage in

[15] For additional information on command and control, see AFDP 3-0.1, *Command and Control*.
[16] For additional information on mission command, see AFDP 1-1, *Mission Command*.

both competition and conflict. It is the natural extension of C2 across domains and functional components and is essential for joint all-domain operations (JADO). The DAF's vision for JADC2 connects distributed sensors, shooters, and data across all domains, to all forces, to enable mission command for the scaled, coordinated exercise of authority to integrate planning and ensure the convergence of effects across a dynamic battlespace.

ASSURED COMMUNICATIONS

So long as commanders require support from other geographically dispersed commands, forces, and capabilities, there will always be a need for resilient theater-level communications to support global integration and dynamic force employment. However, relying exclusively on theater-level integration of domain-oriented assets, without local ability for all-domain integration and backup C2, presents a communications chokepoint and a targeting opportunity for an adversary. Local C2 capabilities should enable geographically co-located forces to build all-domain options in accordance with higher headquarters (HHQ) guidance, including the capability to sustain operations during times of intermittent communications.

AIRSPACE CONTROL AND AIR DEFENSE

A critical element of the C2 function in the dynamically evolving context of Great Power Competition (GPC) is the role of the airspace control authority (ACA) and area air defense commander (AADC). The ACA is a commander designated by the JFC to assume overall responsibility for the operation of the airspace control system in the airspace control area. The ACA develops the airspace control plan and publishes the airspace control order. The AADC is a commander appointed by the JFC, who is responsible for DCA operations, which include the integrated air defense system for the joint operations area (JOA). Traditionally, these roles are filled by the joint forces air component commander (JFACC).[17]

SUPPORT CAPABILITIES

In addition to the five core functions, the USAF provides distinct support capabilities. Generally categorized as combat service support, these capabilities protect and sustain forces at all levels of warfare. Specific best practices are captured for weather operations, public affairs (PA), legal, force protection (FP), personnel recovery (PR), and space support. These capabilities contribute to the joint functions of sustainment and protection.[18]

[17] For additional information on airspace control, see AFDP 3-52, *Airspace Control*.
[18] For additional information on combat support, combat service support, weather operations, public affairs, legal support, force protection, personnel recovery, and space support, see AFDP 4-0, *Combat Support*, AFDP 3-59, *Weather Operations,* DAFPD 3-61, *The DAF Role in Public Affairs,* AFDP 3-84, *Legal Support,* AFDP 3-10, *Force Protection,* AFDP 3-50, *Personnel Recovery,* and AFDP 3-14*, Space Support.*

WEATHER

USAF weather operations directly support conventional and SOF of the DAF and Army. When designated, DAF weather forces also support joint, multinational, and other national agency operations. Weather operations provide critical situational awareness when a commander is building battlespace awareness for their assigned operational area.

PUBLIC AFFAIRS

PA is an operational information capability that affects friendly, neutral, and adversary perceptions and behavior through the planning and execution of public communication and engagement and the release of true, accurate, and timely information. PA is the DAF's primary public communication capability and a principal Information Warfare capability.

LEGAL SUPPORT

Sound, timely, and accurate legal guidance is vital for successful military decision-making and aids mission success. Commanders employ judge advocates (JAs) to gain insight into the law and its implications for USAF operations.

FORCE PROTECTION

FP is preventive measures taken to prevent or mitigate enemy and insider threat actions against DoD personnel (including family members and certain contractor personnel), resources, facilities, and critical information. All Airmen should understand the fundamental aspects of FP to safeguard their own lives, fellow Airmen, joint Service members, and valuable DoD resources. The key to the USAF's view of FP is the protection of its people, the Service's prime asset.

PERSONNEL RECOVERY

The USAF conducts global PR operations including theater-wide combat and civil search and rescue (SAR), in coordination with the other military Services, US Special Operations Command (USSOCOM), and DoD components. The USAF conducts PR using the fastest and most effective means to recover isolated personnel.

SPACE SUPPORT

The USAF uses various capabilities to suppress threats against space systems operating outside the space domain and serve as critical enablers of space operations. Since the USAF relies on a wide range of space capabilities to be combat effective, it integrates space effects and considerations into air operations.

CHAPTER 3: AIRPOWER APPLICATION

The USAF's approach for applying airpower is driven by a JFC's CONOP and informed by the *Joint Warfighting Concept* (JWC), the *Air Force Future Operating Concept* (AFFOC), and schemes of maneuver such as ACE. These operating concepts reflect how the USAF's ability to operate is challenged by A2AD threats and the rapid proliferation of advanced technologies that restrict freedom of maneuver.

These approaches and concepts use airpower capabilities that are guided by the principles of joint operations, refined by the airpower tenets, and ultimately synchronized by the joint functions to accomplish JFC objectives. The process of incorporating the tenets, principles, and functions is accomplished through proven planning processes such as the JPPA and the AFPP.[19] Using these processes, joint all-domain effects are generated to counter adversary kill chains, accomplish JFC objectives, and attain desired end-states.

JOINT WARFIGHTING CONCEPT

The JWC is the unifying vision to guide future force design, force development, and force employment to ensure the joint force has the right technology, leaders, and doctrine. The JWC will continue to incorporate evolving threats to help JFCs face the future. The concept includes fidelity on key warfighting concepts and precision on the operational approaches that will enable the joint force to gain positions of advantage against peer adversaries. To meet this charge, the USAF is developing warfighting capabilities to sense, make sense of, and act at all levels of warfare, in multiple areas of responsibility (AORs), in all domains, and with partners to deliver information advantage at speed to forces and decision-makers.[20]

AIRPOWER IN JOINT OPERATIONS

The primary way the DoD employs two or more Services (from at least two Military Departments) in a single operation is through joint operations. **Joint operations are military actions conducted by joint forces** and those Service forces employed in specified command relationships (COMRELs) with each other, which of themselves do not establish joint forces. Joint operations occur at the operational level of warfare, linking the tactical employment of forces to strategic objectives.

Joint air operations are performed by forces made available for joint air tasking. Joint air operations do not include air operations a Service component conducts as an integral and organic part of its operations. Airpower primarily contributes to joint air operations through the air domain. The **air domain** is the atmosphere, beginning at the Earth's surface and extending to the altitude where its effects upon operations become negligible. The area above the air domain, the space domain, is a particularly important consideration for Airmen that enables freedom to operate in the air domain.[21] Airpower's effects cascade across all domains: air, land, maritime, space, and cyber, plus the EMS.

[19] For additional information on planning, see AFDP 5-0, *Planning*.
[20] For additional information on the JWC, see JP 1 Vol 1, *Joint Warfighting*.
[21] For additional information on USAF space support, see AFDP 3-14, *Space Support*.

Airmen integrate capabilities across multiple domains to create effects in support of JFC objectives through JADO. While all Services rely heavily on such integration, joint all-domain integration is fundamental to how Airmen employ airpower as part of the joint force. JADO are joint force actions in multiple domains integrated in planning and synchronized in execution, at the speed and scale needed to gain advantage and accomplish the mission. Successful joint operations require a convergence of effects globally, across all domains, to present an adversary consecutively or simultaneously with multiple dilemmas. Synergistic employment of capabilities in different domains enhances effectiveness and compensates for vulnerabilities, creating outcomes not readily attainable through single-domain action. Such dilemmas, when presented at an operational tempo that complicates or negates an adversary's response, enable the joint force to operate inside an adversary's decision cycle.[22] Additionally, JADO requires continuous and iterative, near-term tactical planning, longer-term operational planning, and campaign refinement as conditions change. Therefore, planning methodologies like the AFPP and JPPA are necessary to rapidly and consistently integrate and synchronize forces at all echelons.[23]

Airpower to Counter Adversary Kill Chains

To attack friendly forces, an adversary must complete a sequence of actions to implement their kill chain. They must detect friendly forces, communicate via C2 networks, decide on engagement options, and then employ fires. Target analysis can help exploit vulnerabilities in every step of this sequence to counter these kill chains. Airborne electromagnetic attacks can disrupt and degrade adversary maritime-based detection systems. Offensive cyberspace operations can disable land-based communication networks. Long range fires can destroy command and control nodes. ACE can complicate adversary targeting and fires employment. Ultimately, airpower is a critical contribution to joint all-domain operations that can counter adversary kill chains to generate the JFC's desired effects.

The proper application of a coordinated force at all echelons and across multiple domains produces **synergistic effects** exceeding the contributions of individually employed forces. **Airpower provides simultaneous and rapid attacks on key nodes and forces, producing a convergence of effects that can overwhelm the enemy's capacity to adapt or recover.** As a result, the effects of parallel operations can be achieved quickly. They may have a decisive impact, maximizing the operations' depth, timing, and tempo. Further, the shock and surprise of such attacks and the uncertainty of when or where the next strike may fall can negatively affect the enemy's morale. These attacks can decisively influence an enemy's decision cycle and open opportunities for exploitation.

Concentrating overwhelming power at a decisive time and place is a warfighting imperative that is supported by the principles of mass and economy of force. **When employed aggressively, air forces conduct concentrated operations to directly accomplish the JFC's objectives.** These types of operations may not rely on concurrent

[22] For additional information on JADO terminology, see Appendix A.
[23] For additional information on planning, see AFDP 5-0, *Planning*.

surface operations to be effective, nor are they necessarily affected by the geographical disposition of friendly surface forces. Instead, they are planned to achieve dominant and decisive effects by striking directly at enemy COGs and critical vulnerabilities. Such operations are planned to disrupt the enemy's overall strategy or degrade the enemy's ability and will to fight.

Air Force Future Operating Concept

The AFFOC articulates how Airmen will successfully fight in the future. It uses the USAF functions and capabilities to facilitate the concentration of airpower in time and space to create opportunities to win the six key "fights" of future conflict.

These six fights manifest the principles, tenants, and functions by incorporating the full range of USAF doctrine.

- **Fight to compete and deter:** Airmen compete to nurture partnerships, strengthen alliances, and deter horizontal and vertical escalation throughout the competition continuum.
- **Fight to get into theater:** Airmen execute ACE to gain access into a theater as adversaries resist and interfere in our operations from the very beginning of any crisis.
- **Fight to get airborne:** Airmen generate combat power as the adversary seeks to stop our attempts to get airborne.
- **Fight for air superiority:** Airmen create windows of opportunity to enable joint all-domain operations.
- **Fight to deny adversary objectives:** Airmen stop attacks and invasions.
- **Fight to sustain:** Airmen sustain the fight by conducting logistics under attack, rapidly reconstituting, and applying relentless combat pressure.

Effectively executing the AFFOC requires understanding the operational environment, understanding the adversary, and synchronizing joint, operational, and tactical doctrine with a philosophy of mission command. Airmen will synergize actions, using established best practices and emerging concepts, to create opportunities for the joint force to stop adversary aggression.

For more information on the AFFOC, see the *Air Force Future Operating Concept Executive Summary*.

Due to airpower's inherent **flexibility**, it can seamlessly transition between mission sets while simultaneously exploiting the principles of mass and maneuver. An example of airpower's ability to exploit mass and maneuver is captured in the concept of ACE.

Agile Combat Employment

ACE is a scheme of maneuver that increases survivability while generating airpower. Applying airpower in a large-scale conflict will likely include the concept of ACE to address the challenges of a reduced global footprint, adversarial technological advances, pervasive ISR, and all-domain long-range fires-all which place air bases at significant risk.

ACE incorporates USAF capabilities to complicate the enemy's targeting process, create political and operational dilemmas, and improve the flexibility of friendly forces. ACE achieves freedom of action and decision advantage through Mission Ready Airmen, mission command, and tailorable force packages.

Mission Ready Airmen will conduct ACE through:

- **Planning.** Planning is the process through which Airmen tailor the tenets of airpower to the OE and provide both air and cross-domain solutions.
- **Generating and understanding orders.** As the means of transmitting commander's intent and communicating instructions, orders will be vital to decentralized operations.
- **Realizing USAF capabilities.** Airmen should understand the capabilities, activities, and operations that the USAF provides.
- **Understanding joint force integration.** The USAF fights as a component of the joint force and ACE will require extensive joint integration, even as a Service-specific scheme of maneuver.

For more information on ACE, see Appendix C, Agile Combat Employment.

Furthermore, airpower is **versatile** because it can be employed effectively at the strategic, operational, and tactical levels of warfare to provide a wide variety of capabilities in concert with other joint force elements (FEs). **Flexibility and versatility enable parallel and asymmetric operations that are often more effective, achieve faster results, and are less costly than sequential or symmetric operations.**)

Operations or attacks conducted in parallel are planned in concert and conducted concurrently to achieve synergistic and/or compounding effects. In contrast, sequential operations create one effect after another. They may be employed when certain effects or objectives are required to enable subsequent actions. For instance, operations to achieve air superiority should often precede other air missions such as air interdiction or strategic attack. Similarly, while it may be necessary to match strength against strength, air operations are generally most effective when directed at points of asymmetry. Points vulnerable to attack may be considered critical vulnerabilities if they allow commanders to gain a marked advantage over an adversary when acted upon.

Joint air operations are often conducted continuously against a broad spectrum of objectives. Airpower can create effects across multiple targets without occupying terrain or remaining in proximity to areas of operation to create effects upon targets. **In some situations, airpower may be the only force immediately available and capable of providing an initial response.** Due to the speed at which USAF capabilities can be employed, this may occur early in a crisis before significant friendly surface forces have deployed. In such cases, airpower can be brought to bear against the enemy system to attack enemy strategy, blunt or defeat initial actions, and hinder their achievement of immediate objectives, often through strategic attack. Airpower may be the only persistent option available to a JFC.

Ultimately, the skill of the air component commander is reflected in balancing the principles of joint operations and airpower tenets to combine USAF capabilities that produce synergistic effects. **Airpower has the inherent ability to balance rapid, long-range maneuver with fires to accomplish lethal and nonlethal effects.**

CHAPTER 4: COMMANDING AIR FORCES

The command of airpower, at any echelon, requires knowledge of the authority, capacity, capabilities, and interdependencies of forces and an understanding of the JFC's intent. **C2 and organization are inextricably linked to fulfill the principles of unity of command and unity of effort.** Clear lines of authority, with clearly identified commanders at appropriate echelons, exercising appropriate control, are essential to achieving unity of effort, reducing confusion, and maintaining priorities. Commanders should be clearly identified and empowered with appropriate operational and administrative command authorities, and appropriate joint command arrangements should be specified to integrate effects generated by Service capabilities.

"The Air Force organizes, trains, and equips forces to be an air component to a JFC. As part of the joint force's air component, our forces must be prepared to accomplish JFC objectives**.** The air component commander's administrative authorities are derived from Title 10, U.S. Code, and exercised as the commander, Air Force forces (COMAFFOR). The air component commander's operational authorities are delegated from the JFC and exercised as both the COMAFFOR, over Air Force forces, and as the JFACC, over joint air forces made available for tasking. Thus, the air component commander leads Air Force forces as the COMAFFOR and the JFC's joint air operations as the JFACC. This duality of authorities is expressed in the axiom: Airmen work for Airmen and the senior Airman works for the JFC."

–Air Force Doctrine Publication (AFDP) 1, *The Air Force*

Since the COMAFFOR and JFACC are nearly always the same individual, this AFDP will use the term "air component commander" when referring to duties or functions that could be carried out by either or both, unless explicit use of the term "COMAFFOR" or "JFACC" is necessary for clarity.

THE CHAIN OF COMMAND

The President and the Secretary of Defense (SecDef) exercise authority and control of the armed forces through two distinct branches of the chain of command: an operational branch and an administrative branch.

The chain of command for the operational branch starts with the President and passes through the SecDef to the CCDRs for missions and forces assigned to their commands. The chain of command for the administrative branch starts with the President and passes through the SecDef, to the Secretaries of the Military Departments, and as prescribed by the Secretaries, to the commanders of military Service forces.

The Secretaries of the Military Departments exercise administrative control (ADCON) over Service forces through their respective Service chiefs and commanders. The Service

chiefs, unless otherwise prescribed by law, perform their duties under the authority, direction, and control of the Secretaries of the respective Military Departments to whom they are directly responsible.

AIR FORCE SERVICE COMPONENT

When USAF forces are assigned or attached as part of a joint force, they become the Air Force Service component to that JFC. Air Force Service components have several features: forces tailored to the needs of the JFC and the tasks to be performed, a single designated COMAFFOR, and the appropriate mechanisms and authorities to C2 USAF forces.

The organization of attached USAF expeditionary forces depends on whether there is an existing USAF C2 structure. Combatant commands (CCMDs) (e.g., US Indo-Pacific Command [USINDOPACOM]) and subordinate unified commands (e.g., US Forces Korea) have Air Force Service components with an established USAF C2 structure. The Air Force Service component may be a component major command (C-MAJCOM) (e.g., Pacific Air Forces [PACAF]), a component numbered Air Force (C-NAF) (e.g., First Air Force [Air Forces Northern]), or a joint task force (JTF)-level Service component command (SCC).

Additional USAF expeditionary forces attached to a CCDR should be organized within the existing Air Force Service component. For instance, an F-16 squadron deployed from Shaw Air Force Base for operations at Misawa Airbase, Japan, should be designated as an expeditionary fighter squadron and organized under the in-place 35th Fighter Wing at Misawa. However, if the CCDR elects to establish a JTF including USAF forces, there might not be an in-place USAF command structure. In this case, a temporary SCC would be the JFC's Air Force Service component. The commander of the SCC is either the COMAFFOR directly responsible to the JFC or supporting the JTF under the authority of the theater air component commander.

Some capabilities may not be organic to the component and may be made available through a supported/supporting COMREL or made available through reachback.[24]

Joint Air Component Coordination Element. The air component commander should establish a close working relationship with the JFC to ensure the best representation of airpower's potential. The air component commander should collocate with the JFC or establish a Joint Air Component Coordination Element (JACCE) with the JFC. This ensures air component representation in the Joint Force headquarters (HQ), as well as aiding the Joint Force HQ staff in planning and commanding air component operations. Additionally, JACCEs may be established with other component commanders' HQ or sub-theater JTF JFCs to better integrate operations. These elements act as the air component commander's primary representatives to the respective commanders and facilitate interaction with their staffs.

[24] For additional information on reachback, see page 34 and JP 3-30, *Joint Air Operations*.

THE COMMANDER, AIR FORCE FORCES

The COMAFFOR is the USAF commander of an Air Force Service component assigned or attached to a JFC at the unified CCMD, subordinate unified command, or JTF level. At the unified CCMD level, the CCDR's Air Force Service component is specified in the SecDef's *Forces for Unified Commands* memorandum. The SecDef or CCDR may elect to permanently establish a subordinate unified command or temporarily establish a subordinate JTF as part of the organizational structure. Thus, in a theater where numerous SCCs exist, the position of COMAFFOR may exist simultaneously at various levels within a given theater if each COMAFFOR is separately assigned or attached to a different JFC, as depicted in the figure "Air Component Relationships" on Page 32.

Within the administrative branch, the COMAFFOR is delegated ADCON over assigned and attached USAF forces from the Secretary of the Air Force through the Chief of Staff, USAF. Simultaneously, within the operational branch, the COMAFFOR is typically delegated operational control (OPCON) over assigned and attached USAF forces and ensures forces are organized, trained, and equipped to support the JFC's operational requirements.

The COMAFFOR will normally retain OPCON over their assigned and attached Service forces. If not delegated OPCON, or if the stated command authorities are not clear, the COMAFFOR should request delegation of OPCON.

The COMAFFOR, as the Air Force Service component commander, has the following operational responsibilities:

- Develop program and budget requests per CCDR guidance on warfighting requirements and priorities.
- Execute and assess cooperation and competition operations.
- Inform the CCDR (and any intermediate JFCs) of program and budget decisions that may affect joint planning.
- Support the CCDR's theater campaign plans through the development of appropriate supporting Service plans.
  - Develop strategies to support and contribute to the development of CCDR campaign plans and security cooperation country plans.
  - Provide commander's intent to inform tactical-level planning, execution, and assessment.
  - Recommend and implement policy and rules of engagement for the conduct of operations.

As the Service component commander to a JFC at any level, the COMAFFOR has the following service responsibilities, regardless of MAJCOM or USAF component (Regular, Guard, or Reserve):

- Establish FP and other local defense requirements.

- ✪ Maintain internal administration and ensure good order and discipline in accordance with the Uniform Code of Military Justice.
- ✪ Organize, train, and sustain USAF forces for CCDR-assigned missions.
  - ✪✪ Maintain reachback between the USAF component and other supporting USAF elements. Delineate responsibilities between forward and rear elements.
  - ✪✪ Prescribe the chain of command within the Air Force Service component.
  - ✪✪ Provide logistics and mission support functions normal to the command.
  - ✪✪ Provide training in Service-unique doctrine, tactical methods, and techniques.
- ✪ Oversee the morale, welfare, safety, and security of assigned and attached forces.
- ✪ Provide Service intelligence and oversight of intelligence activities to ensure compliance with laws, executive orders, policies, and directives.

The COMAFFOR should normally be designated at a command level above the operating forces and should not concurrently serve as commander of one of the subordinate operating units (i.e., "dual hatting"). This allows the COMAFFOR to focus at the operational level, while subordinate commanders lead their units at the tactical level.

THE JOINT FORCE AND THE JOINT FORCE AIR COMPONENT COMMANDER

JFCs designate functional component commanders when forces of two or more Military Departments operate within the same mission area or physical domain (e.g., air domain). **The JFC normally designates a JFACC to establish unity of command and unity of effort for joint air operations.** The designation of a functional component commander should not adversely affect the COMREL between the Service component (e.g., the COMAFFOR) and the JFC.

The JFACC should be the Service component commander with the preponderance of air forces and the ability to C2 joint air forces. Typically, the JFACC is also designated as the AADC and the ACA. The JFACC exercises tactical control (TACON) over the joint air forces (USAF forces and other Services' forces made available) for offensive operations (e.g., strategic attack), and the AADC exercises TACON over the joint air forces for defensive operations (e.g., air and missile defense, DCA).

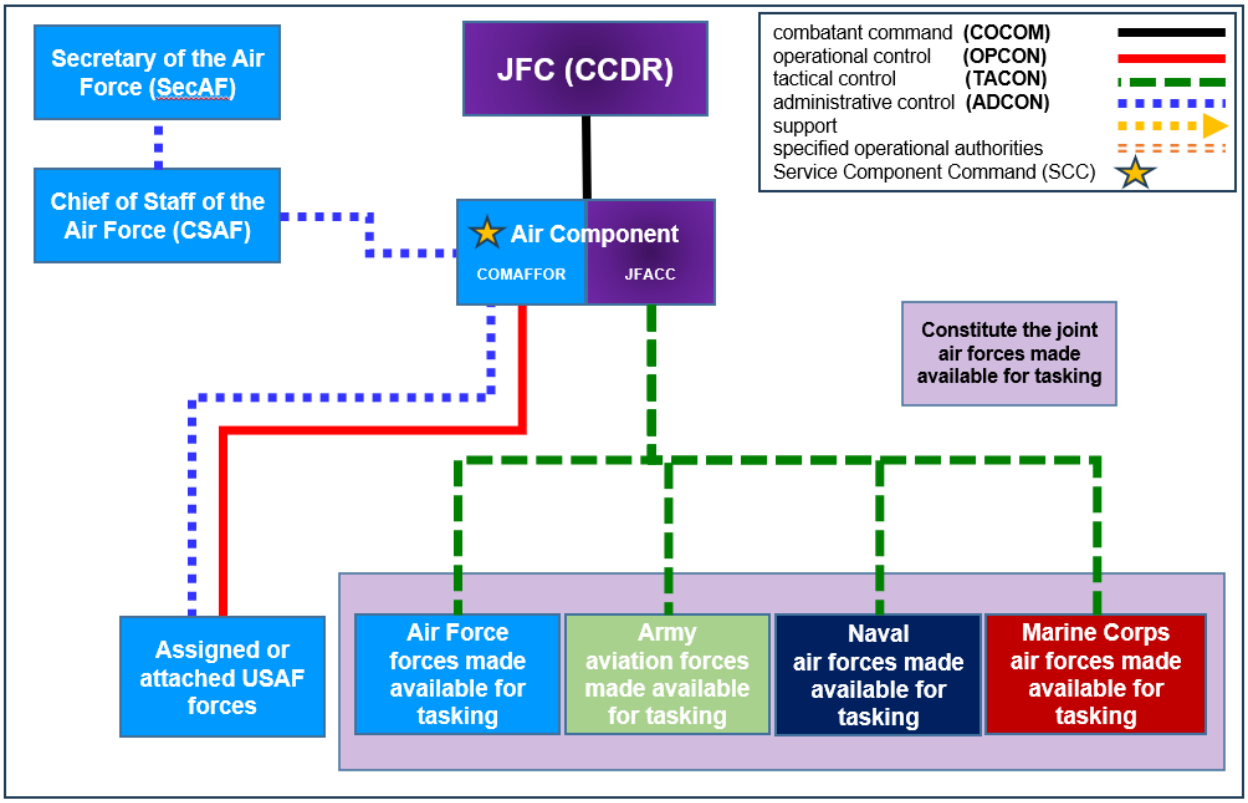
When a CCDR has multiple JTFs within an AOR, they may retain C2 of joint air forces at the CCMD level. Joint air forces will be controlled to support the multiple JTF commanders according to the JTF commanders' objectives and the CCDR's AOR-wide priorities. In this situation, joint air forces are controlled at the theater level, under the direction of a theater JFACC that is subordinate to the CCDR. The theater-level JFACC provides flexibility in managing limited air assets to meet the requirements of the CCDR and multiple JTFs. Alternatively, the CCDR may distribute joint air forces to some (or all) of the JTFs or create subordinate organizations specifically to support each JTF commander. Regardless of the organizational construct, the theater JFACC should

maintain responsibility for coordinating, synchronizing, and communicating airpower at the CCMD level.

The JFACC recommends the proper employment of air component forces to the JFC. The JFACC also designs, plans, prepares, executes, assesses, allocates, and tasks joint air operations to accomplish assigned operational missions. The wide scope of joint air operations necessitates that the JFACC maintain a theater-wide or JOA-wide perspective similar to the JFC.

The JFC normally assigns broad missions to the component commanders, including the JFACC. With each mission comes a specification of the supported commander for that mission. As an example, the JFC may designate the air component commander as the supported commander for counterair, strategic attack, air interdiction, and theater airborne ISR (among other missions). As such, the air component commander would be responsible to the JFC for planning, coordinating, executing, and assessing these missions, while other component commanders support the air component commander.

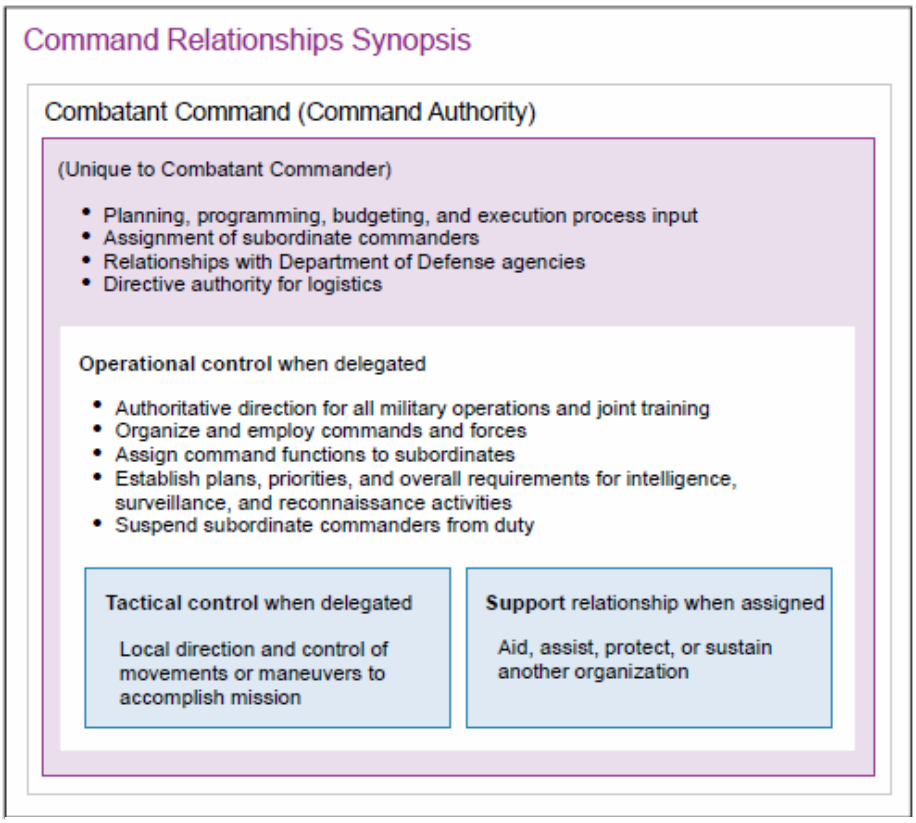
The JFC usually designates the COMAFFOR as the JFACC. The dual-designated air component commander exercises OPCON and ADCON over USAF forces as the COMAFFOR, and commands and controls the joint air forces (USAF forces and other Services' forces made available for tasking) through TACON as the JFACC. See figure below, "Air Component Relationships."



Air Component Relationships

COMMAND RELATIONSHIPS AND AUTHORITIES

Organizations require clear and effective COMRELs with defined authorities**.** A working understanding of terminology is essential to understanding component relationships and responsibilities. Specific COMRELs include combatant command (command authority - COCOM), OPCON, TACON, and support. Other authorities include ADCON, coordinating authority, and Direct Liaison Authorized (DIRLAUTH).[25] See figure below, "Command Relationships Synopsis from JP 1 Volume 2, *The Joint Force*."



Command Relationships Synopsis from JP 1 Volume 2, *The Joint Force*

Forces should be attached with the specification of either OPCON or TACON. If forces are not attached, they may support through the establishment of a defined support relationship.

- **Specification of OPCON.** OPCON is inherent in COCOM and may be delegated (whereas COCOM is nontransferable and only exercised by CCDRs). OPCON enables the commander to organize and employ commands and forces, assign tasks, designate objectives, and provide authoritative direction over all aspects of military operations and the joint training necessary to accomplish assigned missions. OPCON should be delegated from the CCDR to subordinate organizations. OPCON is primarily used for C2 of assigned forces.

[25] For additional information on command relationships and authorities, see JP 1 Volume 2, *The Joint Force*.

- **Specification of TACON.** TACON is inherent in OPCON. It is the authority over assigned forces, attached forces, or forces made available for tasking. It is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish assigned missions or tasks. Like OPCON, TACON may be delegated.
- **Specification of Support.** The JFC can establish support relationships among all functional and Service component commanders. Within a joint force, the JFC may designate more than one supported commander simultaneously, and components may simultaneously receive and provide support for different missions, functions, or operations.

Support Relationship for JADO

Support relationships are often associated with a binary supported and supporting construct. Each supported commander sets the priorities within their lines of operation and effort but cannot change priorities between these lines. Support priorities between two or more supported commanders are set by the establishing authority (the common superior commander over both subordinate commanders).

This binary supported and supporting construct works well when operations are conducted in one primary domain supported by another. However, in complex scenarios involving multiple interdependencies along multiple lines of effort in multiple domains, traditional supported and supporting relationships may be inadequate to affect rapid reprioritization among efforts. JADO requires commanders to rapidly reprioritize and reflow support to multiple commanders as operational situations change. Therefore, commanders at all levels must have the information and authority to adapt to rapidly changing contexts.

ASSIGNMENT OF FORCES

Forces are assigned to CCDRs by SecDef through the Global Force Management (GFM) process and identified in the *Forces for Unified Commands* memorandum and the *Global Force Management Implementation Guidance*. The assignment of forces is relatively permanent. Forces assigned to a CCMD may be transferred from that command only by the SecDef and approved by the President. A CCDR may subsequently organize assigned forces as necessary, including the establishment of subordinate unified commands and JTFs. Establishing authorities for subordinate unified commands and JTFs may direct the assignment or attachment of forces to subordinate commands as appropriate.

ALLOCATION AND ATTACHMENT OF FORCES

When a CCDR requires more forces or capabilities than those already assigned, they may request additional forces be attached. Force attachment is temporary and may be sourced from other CCMDs or Service-retained forces. Attachment may provide

continuing presence, rotational presence, or limited presence for a specific crisis. The COMREL the gaining commander exercises over such attached forces (and the losing commander relinquishes) should be specified by the SecDef in an establishing directive. The SecDef should attach forces with the specification of OPCON to the gaining CCDR using a deployment order (DEPORD).

The DEPORD is used for transferring forces and establishing supported and supporting relationships between CCDRs. Forces may also be transferred by an execute order (EXORD) which also executes an approved operation plan. Other orders created during the planning process, such as warning orders (WARNORD), planning orders (PLANORD), alert orders, or fragmentary orders (FRAGORD), may also specify or shape COMRELs, but they do not transfer forces.[26] The DEPORD should specify to which CCDR the deployed forces are attached and the COMREL (OPCON or TACON) that defines the authority exercised by the gaining commander. While the JFC ultimately has the authority to determine the delegation of command among subordinates, USAF commanders should consistently make recommendations and present forces to the JFC.

IN-THEATER FORCES

USAF forces that deploy to a theater are normally attached with the specification of OPCON through the GFM allocation process to the CCDR to whom the President or SecDef has assigned responsibility for accomplishing the mission. However, not all elements of ADCON are transferred to the forward-based gaining commander. ADCON can run concurrently between the gaining COMAFFOR and the parent organizations of the deployed forces. The specific elements of ADCON forwarded and those retained by the parent organization should be specified.

OUT-OF-THEATER FORCES

In accordance with Title 10, U.S.C, Section 162, except as otherwise directed by SecDef, all forces operating within the geographic area assigned to a CCDR shall be assigned or attached to, and under the command of, that CCDR. However, this does not apply to the US Northern Command AOR or specific US Transportation Command, US Special Operations Command, US Cyber Command, US Space Command, and US Strategic Command capabilities that remain under control of their respective CCDR. **Transient forces do not come under the chain of command of the CCDR solely by their movement across operational area boundaries, except when the CCDR is exercising TACON for the purpose of FP.**

Forces assigned or attached to a CCDR with an assigned AOR that launch from bases outside that CCDR's geographic area are normally specified with OPCON. An example is bombers stationed at Diego Garcia (per SecDef DEPORD) in USINDOPACOM conducting operations in the US Central Command (USCENTCOM) AOR. The US Air Forces Central air component commander would exercise OPCON of the bombers. The Commander, PACAF, may exercise specified elements of ADCON through the established PACAF organizational structure but would have no operational responsibility

[26] For additional information on types of orders, see JP 5-0, *Joint Planning*.

or authority over the forces attached to Commander, USCENTCOM.

FORCES IN EXERCISES

If possible, forces participating in a CCDR's joint exercise should exercise the COMREL as dictated by the OPLAN being exercised. Except for the US Northern Command AOR, the CCDR has TACON for exercise purposes for forces conducting exercises within the AOR, they do not authorize the operational employment of those forces.

FUNCTIONAL FORCES

Functional forces satisfy mission global requirements and are thus retained by CCDRs with functional responsibilities. For such forces, the CCDR with functional responsibility normally retains OPCON of assigned forces and executes in support of the supported CCDR with an AOR. When functional forces or transient forces bed down in another theater or AOR, the CCDR exercises TACON for FP while a USAF host base or installation commander (or senior USAF officer present on the installation, if the USAF is a tenant) normally exercises a minimal degree of ADCON for Uniform Code of Military Justice enforcement, dining and lodging, and some limited force reporting.

A CCDR with an AOR may request additional functional forces beyond those supporting operations in the AOR. The decision to attach functional forces, with a specification of OPCON to a CCDR, should be balanced against competing needs across multiple AORs. In some cases, the requirement for OPCON over specific forces to accomplish the CCDR's missions may be of higher priority than the competing worldwide mission requirements of the CCDR with functional responsibilities. Therefore, after coordination with the owning functional commander and upon SecDef approval, functional forces may be attached to another CCMD and organized accordingly.

The decision to attach additional functional forces should consider the following:

- Will the forces be used at or near their full capability with little or no residual capability for other missions?
- Will the forces be used regularly and frequently over a period, not just for a single mission employment?
- Can the commander effectively C2 the forces?

If the above conditions are met, then the functional forces should be attached to the CCMD. If any of the above conditions are not met, then the forces should remain under the OPCON of their current CCDR's air component commander and be tasked to support the CCDR with an AOR.

ORGANIC AIR FORCE FORCES

The majority of assigned and attached USAF forces are normally made available for tasking by the JFC. However, the COMAFFOR may designate some USAF forces as organic for specific Service component purposes. Organic forces may be necessary to carry out responsibilities not directly related to the JFC's mission such as force

sustainment or to organize, train, and equip forces.

Designation of a force as organic does not usurp the JFC's authority to command that force or to whom it may be further attached. Decisions for internal Service reorganization or transfer of organic forces should only be made in consultation with the Service component commander. The Service component commander has the necessary expertise to understand the immediate impact and long-term mission cost of reorganizing Service forces. If the JFC elects to reorganize designated organic forces, the COMAFFOR should inform the JFC of the associated risk when doing so may prevent the Service component from performing the functions for which those forces were provided.

REACHBACK AND DISTRIBUTED OPERATIONS

Reachback is "the process of obtaining products, services, and applications, forces, equipment, or material from organizations that are not forward deployed."[27] Reachback may be provided from a supporting or supported relationship or by Service retained forces. This relationship gives the air component commander the support necessary to conduct operations while maintaining a smaller deployed footprint.

Distributed operations are operations where independent or interdependent forces, some of which may be outside the JOA, participate in the operational planning or decision-making to accomplish missions and objectives for commanders. Forces conducting distributed operations should be assigned or attached to a CCDR.

The design of a distributed operation should enable a more resilient C2 network capable of distributing tasks, information, and responsibilities. The commander may establish a formal supported or supporting relationship between distributed nodes. In other instances, distributed nodes may have a relationship permitting direct liaison or coordination.

SPLIT OPERATIONS

Split operations are distributed operations conducted by a single C2 entity separated between two or more geographic locations. A single commander should have oversight of all aspects of a split C2 operation. For example, sections of the air tasking order may be developed from a rear area or backup operation center to reduce the deployed AOC footprint.

The decision to establish distributed or split operations requires several tradeoffs:

- Fewer personnel or forces deployed forward reduce the logistics support required for those forces, however, face-to-face interaction between forward and rear decision-makers may be limited and could delay decision-making timelines.
- Having fewer personnel or forces forward reduces security requirements, however, expertise is no longer immediately at hand for ad hoc problem-solving.
- C2 reachback requires more bandwidth for communications. These links may then

[27] For additional information on reachback, see JP 3-30, *Joint Air Operations.*

become critical vulnerabilities. However, an operation with distributed authority and capability may arguably be more survivable and less prone to single-point failure.

AIR RESERVE COMPONENT

The Air Reserve Component (ARC) is a component of the USAF that consists of the Air Force Reserve and the Air National Guard of the United States (10 U.S.C. §10110). The purpose of each reserve component is to provide trained units and qualified persons available for active duty in the armed forces, in times of war or national emergency, and at such other times as national security may require, to fill the needs of the armed forces whenever more units and persons are needed than are in the regular components.

When mobilized under Title 10, U.S.C., authority and command of ARC forces (except those forces specifically exempted) is assigned by the SecDef to the CCMDs. Those forces are available for operational missions when mobilized for specific periods in accordance with the law or when ordered to active duty and after being validated for employment by their parent Service. ARC forces can be activated both voluntarily and involuntarily to support national requirements. Types of involuntary activation include full mobilization (10 U.S.C. §12301(a)), partial mobilization (10 U.S.C. §12302), presidential reserve call-up authority (10 U.S.C. §12304), armed forces in disaster response (10 U.S.C. §12304(a)), and preplanned mission support (10 U.S.C. §12304(b)). The authority to accomplish each type of activation generally resides with the Secretary of the Air Force, Congress, or the President.

Once activated, there are different degrees of OPCON and ADCON applicable to ARC members. The ARC structure normally retains full ADCON, the gaining COMAFFOR normally exercises some specific elements of ADCON, which should be articulated with appropriate orders.

MULTINATIONAL OPERATIONS

Multinational operations are conducted by forces of two or more nations and are usually undertaken within the structure of a coalition or alliance. The functional component model easily transitions to support combined (allied) or coalition employment. In this model, the JFACC may become the multinational force air component commander. The designation will be based on the type of multinational configuration used in the operation-usually as the combined forces air component commander (CFACC).

Commanders may not have the same defined degree of control over multinational forces as a US-only force and degrees of control may have to be negotiated. In some cases, non-US controls may be used, such as North Atlantic Treaty Organization (NATO) operations that use NATO C2 mechanisms. Therefore, commanders and staff should be aware of the different nuances. Finally, each nation may retain its chain of command over its forces and its own rules of engagement, thereby further complicating unity of command. Thus, the challenge in multinational operations is the effective integration and synchronization of available capabilities toward the achievement of common objectives through unity of effort despite disparate C2 structures, capabilities, equipment, and

procedures.[28]

MULTINATIONAL AND INTERAGENCY COORDINATION

Many operations involve military forces of allies, intergovernmental organizations (IGOs), NGOs, and regional organizations. Direct command over these various entities is normally not possible, and unity of effort is the desired goal. Attaining national objectives requires the use of diplomatic, informational, military, and economic instruments of national power supported by and coordinated with all participating organizations.

- **Interagency coordination** is conducted between elements of DoD and relevant US government (USG) departments and agencies. Interagency coordination links the US military and the other instruments of national power.
- **Interorganizational coordination** refers to broader interaction among elements of the DoD, relevant USG departments and agencies, state, territorial, local, and tribal agencies, foreign military forces and government agencies, IGOs, NGOs, the private sector, and other mission partners.[29]

[28] For additional information on multinational forces, see JP 3-16, *Multinational Operations*.
[29] For additional information on interorganizational coordination, see JP 3-08, *Interorganizational Cooperation*.

CHAPTER 5: PRESENTING AIR FORCE FORCES

Joint force readiness depends on the USAF's ability to provide capable forces. The primary function of the USAF prescribed by law is to organize, train, equip, and **provide** forces for the conduct of prompt and sustained combat operations. This legal provision establishes the Service as a "force provider." When CCDRs request additional forces through the request for forces (RFF) process, the SecDef may allocate additional forces to be provided by the Services or transferred between CCMDs. Force **generation** is the Service's term for the system and processes by which it ensures the availability and readiness of operational forces to be provided to CCMDs when directed. Whether assigned or attached, Service forces are **presented** to a JFC as a Service component by the senior Service commander.



"We've been on this journey, this evolution of how we deploy for really a long time…what we're trying to really do is build warfighting effectiveness over time with coherent teams… for this current strategic environment and the one going into the future."

–Lt Gen Adrian L. Spain, Deputy Chief of Staff for Operations
"Air Task Forces and the Future of Force Presentation," 2024

FORCE GENERATION

The basic USAF model for force generation is AFFORGEN. AFFORGEN is designed to enable operational preparedness and readiness recovery to compete with peer competitors while ensuring the USAF's ability to predict and sustain force provision. For the active component, the model establishes a 24-month rotational cycle comprised of four 6-month phases: Reset (for reintegration and reconstitution), Prepare (for training towards peak readiness), Ready (for certification), and Available (for deployment). For the ARC, the model is a modified 48-month rotational cycle.

A unit of action is comprised of **Force Elements (FEs)** that progress through the AFFORGEN cycle. An FE is an integrated set of unit type codes (UTCs) that offer operational capabilities to JFCs through the GFM process. Units of actions consist of three layers that include:

- **Command layer.** The command layer is an empowered echelon comprised of a senior leader and the support staff necessary to C2 the unit.
- **Mission layer.** The mission layer will include **at least one Mission Generation Force Element (MGFE)** with modularity to attach additional MGFEs as the mission requires. MGFEs will provide combat, combat support, and combat service support capability.
- **Sustaining layer.** In addition to the organic sustainment forces resident in MGFEs, the sustaining layer will include standardized combat support to accomplish base operating support (BOS), air operations, sustainment, and protection.

Incorporating a command layer, mission layer, and sustaining layer in a unit of action provides CCDRs with a clear, credible, and modular combat capability. Accordingly, units of action may be tailorable but not divisible. A JFC may request a specific subset of UTCs within a single FE. However, the remaining UTCs within that FE are rendered unavailable for employment elsewhere in that AFFORGEN cycle.

FORCE PRESENTATION

Service Component Command. Assigned and attached USAF forces are presented to a JFC as a Service component through an established USAF SCC. CCMDs and subordinate unified commands typically have established USAF SCCs (C-MAJCOM or a C-NAF) to which additional expeditionary forces may be attached. **However, provisional JTFs do not normally have a standing USAF SCC structure. When the priority, operational tempo, intensity, duration, or scope justify dedicating USAF forces to a JTF, a temporary SCC should be established.**

The SCC commander is the senior USAF warfighter and exercises the appropriate C2 over the forces assigned, attached, or in support of the SCC. In the context of a joint organization, a single commander presents one USAF position to the JFC with clear lines of authority. As the most senior Airmen in a joint organization, the SCC commander should be assigned as the COMAFFOR with the specification of OPCON.

Air Expeditionary Task Force (AETF). Historically, the **AETF is the USAF structure established to accept expeditionary forces and execute operational taskings when there is no existing structure prepared to accept expeditionary forces or serve as an SCC.** When established, AETFs may fill the role of a SCC or as a subordinate Service command. AETFs are scalable, tailorable organizations with three elements: a single, clearly designated commander, appropriate C2 mechanisms, and tailored and fully supported forces. AETFs provide the JFC with a task-organized, integrated package with the **appropriate balance of force, sustainment, C2, and FP.**

AETF Presentation. A COMAFFOR may elect to establish an AETF for operational or administrative purposes.

- **AETF Assigned or Attached to a JTF.** An AETF may be assigned or attached to a JTF to serve as the SCC. In this case, the AETF commander is a COMAFFOR, and a separate C2 capability and AFFOR staff are required to employ and support the AETF. Once attached to the JTF, those forces may not be available to support other operations. See figure “AETF Assigned or Attached to a JTF” in the Levels of Force Presentation section.

- **AETF as a Subordinate Unit.** An AETF may be established to provide direct support to a JTF or other functional or component command without attaching to the JTF. In this model, the theater-level COMAFFOR will delegate the necessary authority for the AETF to support the JTF with USAF forces. AETFs established as subordinate command echelons within the theater SCC do not constitute a separate SCC. See figure “AETF in Support of a JTF” in the Levels of Force Presentation section.

AETF Organization. The AETF commander organizes forces as necessary into subordinate units to provide reasonable internal spans of C2 at appropriate levels, and to retain unit identity.

- **Numbered Expeditionary Air Force (NEAF).** A NEAF is the generic title for an AETF made up of multiple expeditionary wing-sized units and is the largest AETF. NEAFs normally carry an appropriate numerical designation based on the numbered Air Force (NAF) historically associated with the region or command. Some NAFs may not have adequate C2 capability to meet the requirements of a JTF SCC and may require additional augmentation or resources.

- **Air Expeditionary Task Force-X (AETF-X).** AETF-X is the generic title used when a provisional Air Force command echelon is needed between a C-NAF or NEAF and an expeditionary wing-sized unit. AETF-X is also used when a C-NAF or NEAF-level AETF establishes a subordinate provisional command echelon consisting of two or more wings. For example, during Operation ENDURING FREEDOM and IRAQI FREEDOM, the Commander, US Air Forces Central, established two subordinate AETFs: 9 AETF-Iraq (9 AETF-I) and 9 AETF-Afghanistan (9 AETF-A). They provided command over multiple expeditionary wings in their respective JOAs. Depending on why this echelon is established, and its relationship within Service and joint force organizations, the AETF-X commander may or may not be a COMAFFOR.

  Expeditionary Units. The USAF organizes tactical-echelon forces into wings, groups, squadrons, flights, detachments, or elements. When attached to AETFs, these organizations are redesignated as “expeditionary” organizations.

  Provisional Units. A provisional unit is temporary in nature and created when a specific organization is required for a temporary mission where there is no existing organization to attach forces. All personnel are attached to the provisional unit and remain assigned to their permanent unit. A unit under a single provisional unit designation should also be considered to provide continuity of operations for extended contingency operations in which units are frequently rotated in and out (e.g., Operations SOUTHERN WATCH and IRAQI FREEDOM).

Air Task Forces and Combat Wings

The USAF is designing and assembling modular units of action to be assigned or attached to operational service component commands. These units are initially developing as Air Task Forces (ATFs), and eventually as combat wings.

The ATF model is a temporary and modular organization of teams that will generate together through AFFORGEN and then deploy as a unit to maximize effectiveness. ATFs are intended to provide a transitory unit of action at a sustainable pace for employing and posturing forces. ATFs will consist of a command element with an attached expeditionary A-staff, a combat air base squadron, and mission generation FEs with attached mission sustainment teams. ATFs will form the basic building blocks from which a force may be generated and provided to a JFC. An ATF allocated to a CCMD is presented to the CCDR by the theater COMAFFOR as an element of the theater Service component command.

The intent is for ATFs to pave the way for the creation of combat wings. Operational wings will classify as combat wings that will train together, and as applicable, deploy and fight together. As units of action, they will form a significant portion of the Air Force and enhance the ability to directly support CCDRs.

LEVELS OF FORCE PRESENTATION

Modern operations require flexibility in execution to adapt to a wide variety of scenarios, driving the need to assemble the right mix of forces from the appropriate Services tailored to the operation. This flexibility requires adjustable organizations and appropriate COMRELs. Joint doctrine describes three levels for organizing joint forces: the CCMD level, the subordinate unified command level, and the JTF level. **USAF forces are presented at these levels as theater Service components (CCMD level) and sub-theater Service components (sub-unified command and JTF levels).**

Sub-theater Force Presentation Terminology

The USAF is actively iterating through terminology to describe levels of sub-theater command. In the following figures, the level below the theater is referred to as the sub-theater or “middle” echelon. Another commonly used term is the “3rd echelon.” Regardless of the naming convention, the intent is to describe force structure below the CCMD level.

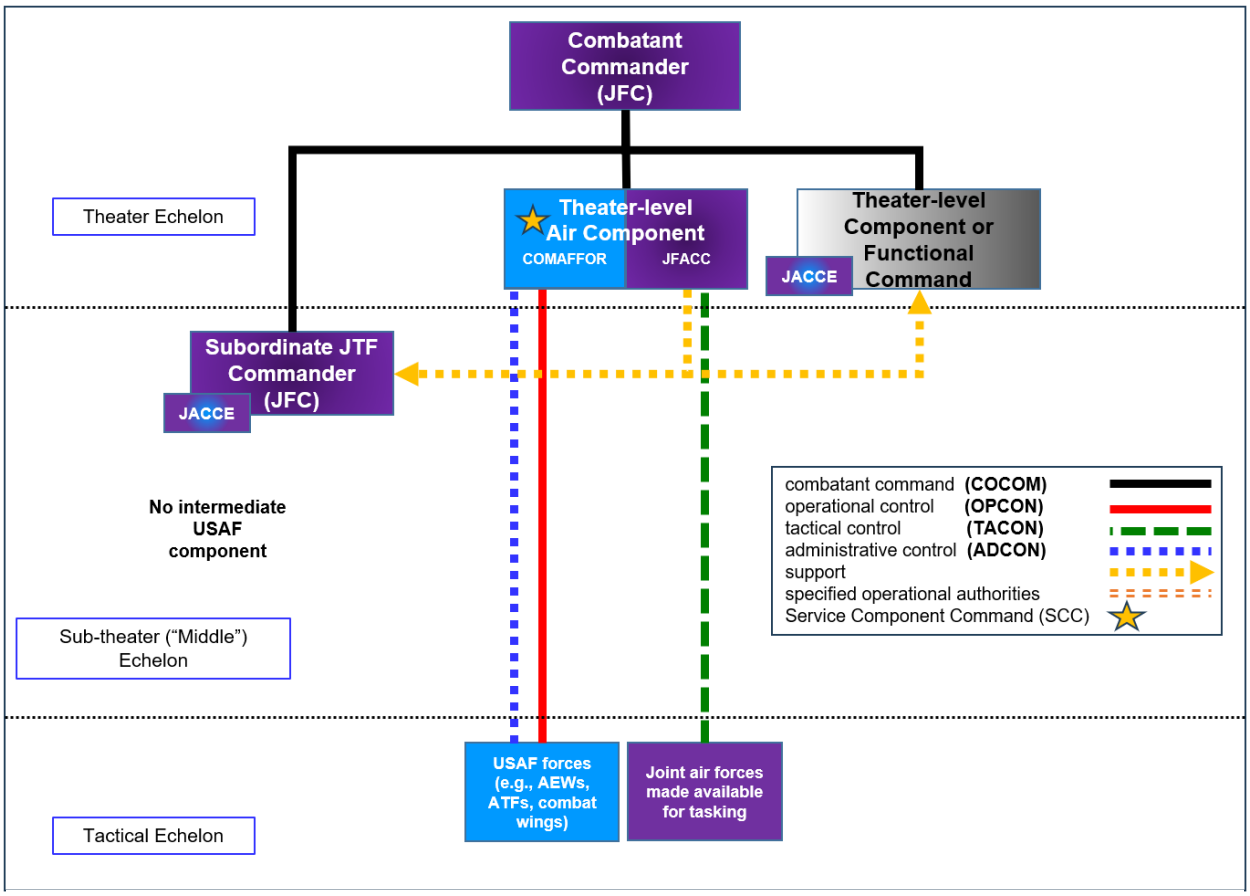
Some theater requirements may drive a mix of theater and sub-theater components. (i.e., competing requirements for high demand/low density Service capabilities such as ISR, remotely piloted aircraft, and AR). In this situation, the CCDR-level air component

commander maintains OPCON and TACON (OPCON as the COMAFFOR and TACON as the JFACC) of these forces and employs them based on CCDR priorities. The key advantage of this model is that it provides fully integrated airpower to a subordinate JFC. The key disadvantage is that USAF forces attached to the sub-theater JFC are not normally available outside the JFC's operational area.

THEATER-LEVEL COMPONENT

This model presents the USAF component at the CCMD level. The COMAFFOR normally exercises OPCON over assigned and attached USAF forces. The COMAFFOR is normally designated as the JFACC. When dual-hatted as JFACC, the air component commander exercises OPCON over USAF forces and TACON of other air forces made available in support of theater JTFs according to the CCDR's theater-wide priorities. The CCDR establishes priorities for the employment of all assigned and attached forces and resolves competing demands among the subordinate commands.

To support planning and operations with subordinate JTFs and other components, the theater-level air component commander may then employ JACCEs to ensure the subordinate JTFs or other components receive appropriate support. The JACCE provides on-hand air component expertise and direct communications back to the theater air component commander and the AOC. See figure "USAF Theater-level Component" for a Sub-theater-level Component.

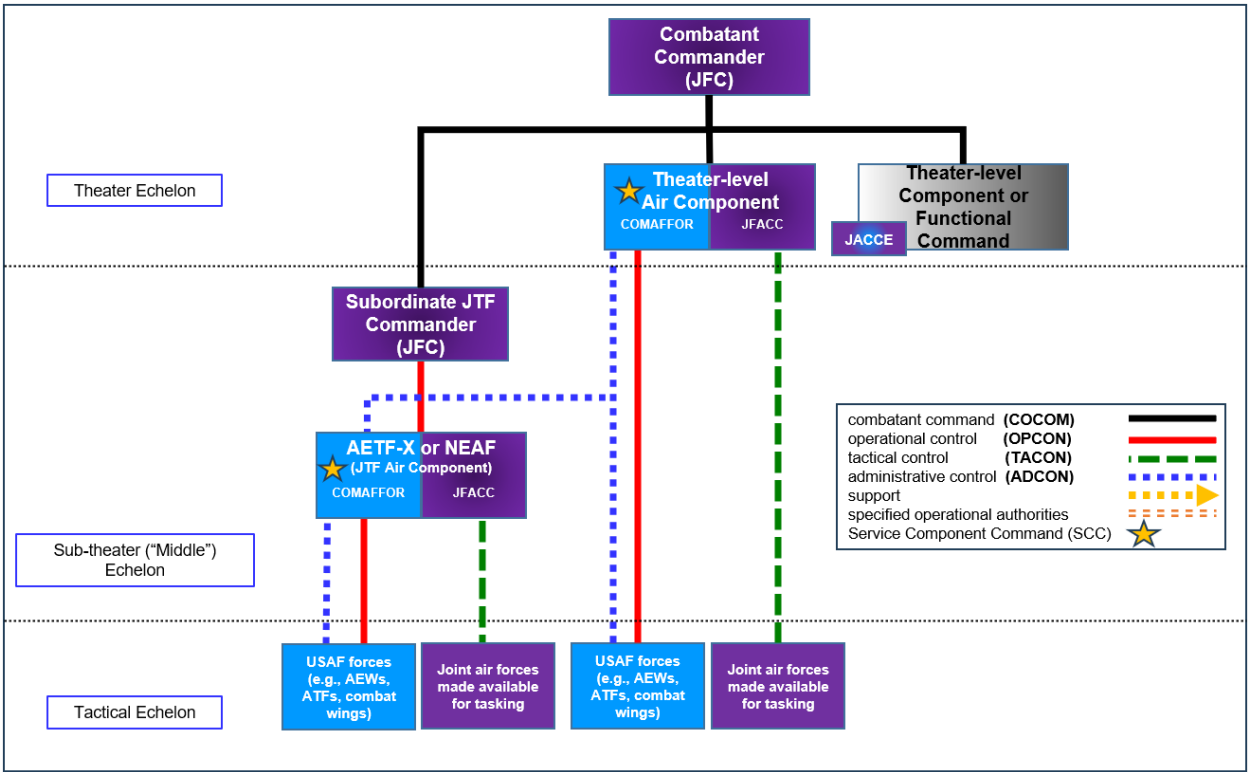


USAF Theater-level Component

SCC assigned or attached. At the subordinate unified command or JTF level, a USAF SCC (typically an AETF) includes a COMAFFOR with OPCON, ADCON, and JFC-delegated authorities over assigned and attached USAF forces. This model may be preferable when the span or scope of operations is less than theater-wide, and operations are conducted continuously. The subordinate SCC can be established to support a geographical area or functional component. This model allows for planning and execution at more local and tactical levels. See figure "AETF Assigned or Attached to a JTF" for a depiction of this force presentation.

Specifics of this model:

- ADCON is retained within the Service chain from the CCDR-level COMAFFOR downward to the sub-theater level COMAFFOR.
- The CCDR-level (theater) COMAFFOR delegates OPCON of the allocated forces attached to the sub-theater JFC for the duration of the operation.
- The sub-theater JFC normally delegates OPCON to the identified sub-theater COMAFFOR for attached USAF forces. This COMAFFOR is poised to also act as a JFACC if a functional air component is established by the sub-theater JFC.

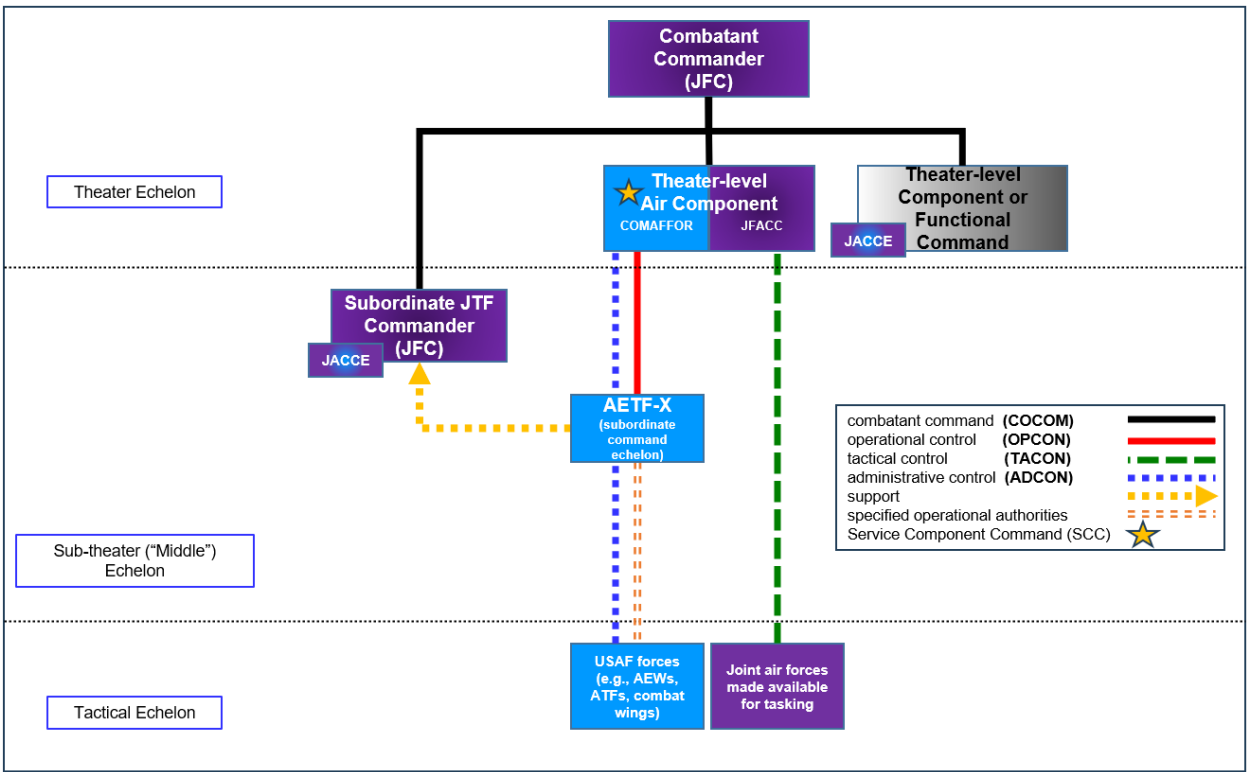


AETF Assigned or Attached to a JTF

Subordinate Service Command in support. When a CCDR establishes a sub-theater JTF and directs the theater air component to provide support, the theater air component may not have sufficient resources (manning and/or equipment) to provide a SCC with adequate C2 capability for designation as a sub-theater JTF air component. In these

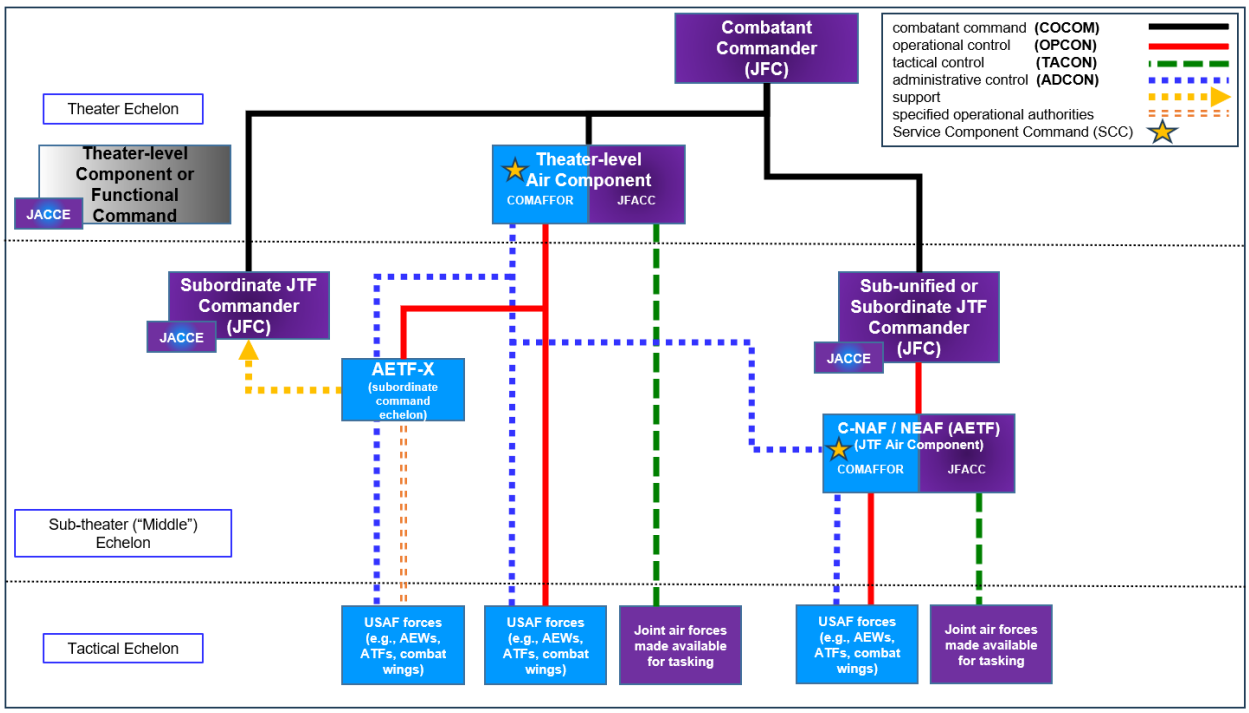
situations, the theater air component commander should **provide direct support to the JTF commander(s).** The theater-level COMAFFOR may choose to create a subordinate service command (AETF) to provide support to the JTF commander. In this model, the theater air component commander delegates appropriate aspects of authority to the subordinate commander but retains COMAFFOR or JFACC authorities/responsibilities. The required support relationship may be enabled through a JACCE, appointed by the theater air component commander.

The advantage of this model is that it provides an Airman empowered with command authorities to the sub-theater JFC while allowing the theater air component commander to retain OPCON of forces across the AOR to address the CCDR's priorities. This model requires a significantly smaller C2 capability than an SCC attached with the specification of OPCON to a sub-theater JFC. See figure "AETF in Support of a JTF" for a depiction of this force presentation.



AETF in Support of a JTF

The three primary force presentation models (theater-level component, sub-theater-level component with SCC assigned/attached, and sub-theater-level component in support) are depicted together in the figure "USAF Force Presentation Examples." Echelons of command at the theater, sub-theater, and tactical levels depict possible component placement for operations.



USAF Force Presentation Examples

FORCE ATTACHMENT CONSIDERATIONS

When the operational mission at the JTF level outweighs competing missions within the CCMD, the CCDR should consider attaching USAF forces to the JTF commander. Considerations include:

- Does the priority, operational tempo, intensity, duration, and scope justify a dedicated SCC that, once attached to the JTF, may not be available to support other operations?
- Does the provision of forces to a subordinate JTF, either by attachment or direct support, demonstrate and enable the air component's commitment to the joint force effort?
- Does the SCC have the ability to provide the required C2 of USAF forces if attached to a JTF?

If an SCC is attached to the JFC, the specification of OPCON and TACON should be determined.

These situations require careful and continuing dialogue between the joint and Service component commanders and the JFC. Decisions, including the delineation of operational and administrative authorities held among the involved commanders, should be captured in written orders such as an OPORD, EXORD, or FRAGORD. USAF decisions may also be captured in G-series orders, such as those appointing the COMAFFOR.[30]

[30] For more information on orders, see JP 5-0, *Planning*, AFI 38-101, *Manpower and Organization*, and DAFI 51-509, *Appointment to and Assumption of Command*.

UNITY OF EFFORT

The CCDR sets the conditions for success by clearly stating and emphasizing the supported command status of subordinate JFCs. Further, they articulate the supporting command role of a theater-level air component commander and provide sufficient guidance for the subsequent allocation decision. To achieve unity of effort across an AOR, the CCDR provides the requisite guidance for the interaction between theater-level and subordinate components. Guidance should identify and specify supported and supporting COMRELs between JTFs and the theater air component commander and include priorities of effort, support, and apportionment. The theater air component commander should then allocate effort across the AOR using CCDR guidance and priorities. The CCDR is the ultimate arbiter for prioritization and apportionment decisions among subordinate JTF commanders.

The commander responsible for a mission should have the requisite authority to carry out that mission. For some missions or functions, specification of support alone may be insufficient for a functional component commander to fully integrate and employ forces made available. In such instances, the JFC may delegate TACON to a subordinate commander for specific elements of another component's resources (this is the usual command authority exercised by functional component commanders over forces made available to them). This provides that commander with a better degree of control. Finally, written establishing directives are extremely useful in clearly outlining the supporting/supported relationship between commanders and providing guidance for staffs. Capabilities that may not be organic to the component may be made available through a supporting/supported COMREL or be made available through reachback or distributed C2 arrangements.

FUNCTIONAL AIR FORCE FORCES

Functional and geographic capabilities normally integrated in a supported or supporting role are air mobility operations, special operations, cyberspace operations, and nuclear operations.

AIR MOBILITY OPERATIONS

COMRELs can allow an interlocking arrangement to manage intratheater and intertheater air mobility operations. Usually, intratheater air mobility forces are attached to the JFC, with OPCON delegated to the COMAFFOR. Intertheater air mobility forces remain under the control of US Transportation Command, delegated down to Air Mobility Command. Within a regional operation, the director of mobility forces (DIRMOBFOR), along with the air mobility division (AMD) in the AOC, provides a coordination function between the intertheater and intratheater air mobility operations.[31]

SPECIAL OPERATIONS

USSOCOM is a CCMD with Service-like responsibilities in areas unique to special operations. The Commander of USSOCOM has COCOM authority over all US SOF and

[31] For additional information on Air Mobility Operations, see AFDP 3-36, *Air Mobility Operations*.

Theater Special Operations Commands (TSOCs). TSOCs are subordinate unified commands established by USSOCOM. The CCDR exercises OPCON of SOF through the TSOC Commander (CDRTSOC). The CDRTSOC may also be designated as the joint force special operations component commander (JFSOCC). The Commander of Air Force Special Operations Command (AFSOC) retains ADCON of all assigned active components and exercises specified elements of ADCON over Reserve Component AFSOF personnel. AFSOC may share selected elements of Service ADCON with other USAF component commands to obtain regional support. The dual-hatted COMAFSOF/Commander, Air Force Special Operations Task Group normally exercises OPCON over assigned forces and in rare cases, they may assume TACON of non-AFSOF for short durations, or where specific short-term missions dictate.[32]

CYBERSPACE OPERATIONS

Global cyberspace capabilities may be presented to a CCDR through a supporting relationship with US Cyber Command (USCYBERCOM), a unified CCMD responsible for synchronizing global OCO, DCO, and cyber capabilities to other CCDRs. USCYBERCOM provides cyberspace capabilities to CCDRs through CCMD aligned Joint Force HQ Cyber staffs and assigned teams.

GLOBAL STRIKE AND NUCLEAR FORCES

When directed by the President of the United States or requested by a CCDR, global nuclear capabilities are employed through supporting relationships with US Strategic Command and the requesting CCMD, as authorized by the President and SecDef.[33]

SPACE SUPPORT FORCES

The USAF both supports space operations and is supported by space capabilities in every CCMD. USAF personnel supporting operations in the space domain will likely do so in conjunction with US Space Force (USSF) Guardians. The air component commander, as a DAF service component lead, can be tasked to provide operational and administrative support for USSF forces assigned to the same theater. While the air component commander normally exercises OPCON of USAF forces and TACON of other Service forces made available for tasking, they do not exercise TACON over space assets or operations.

[32] For additional information on Air Force Special Operations, see AFDP 3-05, *Special Operations.*
[33] For additional information on nuclear operations, see AFDP 3-72, *Nuclear Operations.*

APPENDIX A: JOINT ALL-DOMAIN OPERATIONS TERMINOLOGY

Currently, no single joint functional component commander or echelon of command has assigned or attached capabilities or self-contained C2 to conduct joint warfighting across all domains at all times throughout their OA. The terms and attributes of JADO are based on the accelerating introduction and contributions of joint capabilities in all domains that require joint integration for joint and theater HQs spanning regions, theaters, and multiple CCMD AORs. Joint operations should be more than deconflicted Service component actions. Joint warfighting requires joint operations with all-domain qualities and attributes working in unison to survive and succeed.[34]

DEFINITIONS

Domain: A sphere of activity or influence with common and distinct characteristics in which a force can conduct joint functions.

Decision Advantage: The product of situational understanding, the ability to assure and exchange information, make and communicate decisions by maintaining advantages in all domains.

Joint All-Domain Operations: Comprised of air, land, maritime, cyberspace, and space domains, plus the EMS. Actions by the joint force in multiple domains integrated in planning and synchronized in execution, at speed and scale needed to gain advantage and accomplish the mission.

Joint All-Domain Command and Control: The art and science of decision-making to rapidly translate decisions into action and leverage capabilities across all domains, with mission partners, to achieve operational and informational advantage in both competition and conflict. JADC2 becomes combined joint all-domain C2 (CJADC2) in multinational operations.

Information Advantage: A condition in the information environment, favorable to the achievement of a commander's objectives, achieved through the application of information capabilities and influence, which results in a comparative advantage to support all-domain operations. This includes targeting an adversary's ability to conduct C2 through observing, interpreting, and acting. Information advantage can be achieved by deliberately using information to:

- Influence relevant actors.
- Inform target audiences.
- Attack, exploit, and defend information, information networks, and systems.
- Support decision-making.

[34] For additional information on JADO, see JP 3-0 Appendix D, *Fundamentals of Joint All-Domain Operations*.

APPENDIX B: JOINT FUNCTIONS

The joint functions, as established JP 1 Volume 1, *Joint Warfighting,* and JP 3-0, *Joint Campaigns and Operations,* provide a common intellectual organization of capabilities available to commanders and staffs at all echelons and levels. There are seven functions common to joint operations: C2, information, intelligence, fires, movement and maneuver, protection, and sustainment. Through proper planning and a thorough understanding of USAF capabilities, the joint functions reinforce and complement one another. This integration is essential to mission accomplishment. Further, the effectiveness of airpower and joint force integration is the responsibility of A-Staff personnel across all echelons. An A-Staff's grasp of USAF capabilities can be understood in the context of the joint functions to make airpower relevant across the joint force.[35]



Mission command, as described in AFDP 1-1, provides the framework (CC-DC-DE) for authority delegation to conduct the C2 function.

The following section briefly defines the joint functions, connects them to the tenets of airpower and principles of joint operations, and broadly explains how the USAF contributes to the joint functions. **The following connections between USAF doctrine and the joint functions are not all-inclusive. Many capabilities are connected to several (or all) of the joint functions.**

Command and Control. C2 is the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. In addition to the commander, the C2 function encompasses the act of exercising authority, the framework to guide it, and the systems that support it. As discussed in Chapter 2, the USAF C2 function consists of the commander and three components: the mission command framework, the C2 process, and C2 systems. The airpower tenet of mission command requires that subordinates understand their commander's intent to ensure the principles of joint operations, especially unity of command, are appropriately applied. Airmen understand that C2 is the central joint function that integrates all the other functions and enables operations. AFDP 3-0.1, *Command and Control*, and AFDP 1-1, *Mission Command*, elaborate and expand on the C2 function.

Information. The information function encompasses the management and application of information to support the achievement of objectives, it is the deliberate integration with other joint functions to change or maintain perceptions, attitudes, and other elements that drive desired relevant actor behaviors and to support human and automated decision-making. Commanders use information to visualize and understand the operations environment and direct and coordinate actions. Capabilities that support and enable the

[35] For additional information on A-Staffs, see AFDP 3-0.1, *Command and Control*.

information function are captured in AFDP 3-13, *Information in Air Force Operations*, AFDP 3-61, *Public Affairs*, and AFDP 3-85, *Electromagnetic Spectrum Operations*.

Intelligence. The intelligence function informs JFCs about adversary intentions, capabilities, COGs, critical factors, vulnerabilities, and future COAs to help commanders and staffs understand friendly, neutral, and threat networks. The intelligence joint function enables airpower to establish priority and to react with flexibility and versatility to meet objectives and continue offensive and defensive operations. Examples of associated USAF capabilities are captured in AFDP 2-0, *Intelligence*, AFDP 3-59, *Weather Operations*, and AFDP 3-60, *Targeting*.

Fires. Fires is the use of weapon systems or other actions to create specific lethal or nonlethal effects on a target. The fire's function is supported by the airpower tenets of synergistic effects and concentration as airpower masses and maneuvers to surprise adversaries by creating effects at the times and locations of the JFC's choosing. USAF contributions to fires are primarily captured in AFDP 3-01, *Counterair Operations*, AFDP 3-03, *Counterland Operations*, AFDP 3-04, *Countersea Operations*, AFDP 3-12, *Cyberspace Operations*, AFDP 3-14, *Space Support*, AFDP 3-02, *Strategic Attack*, and AFDP 3-72, *Nuclear Operations*. In addition, for long-range fires considerations, see AFDP 3-52, *Airspace Control,* and AFDP 3-60, *Targeting*.

Movement and Maneuver. Movement and maneuver encompass the disposition of forces to conduct operations by securing positional or informational advantages across the competition continuum and exploiting tactical success to achieve operational and strategic objectives. Movement is deploying forces or capabilities into an operating area (OA) and relocating them within an OA without the expectation of contact with the enemy. Maneuver is the employment of forces for offensive and defensive purposes while in, or expecting, contact with the enemy. It also includes assuring the mobility of friendly forces. The airpower tenets of flexibility and versatility support the movement and maneuver function as airpower maneuvers the joint force in the OE to gain advantage. **Airpower itself is a form of maneuver that can achieve a positional advantage through exploitation of the air domain.** Movement and maneuver encompass most USAF capabilities and operations, but it is especially evident in AFDP 3-36, *Air Mobility Operations*, AFDP 3-34, *Engineer Operations*, and AFDP 3-05, *Special Operations*.

Expanded Concepts of Maneuver

Maneuver is typically associated to positioning forces in a physical domain. However, the idea of controlling key terrain or gaining advantage over an enemy or adversary may be applied to more than the traditional employment of forces. For example, maneuver theory can apply to cognitive applications and the development of innovative warfighting capabilities that deliver technological and informational advantage faster than an adversary can respond.

Protection. Protection is all efforts to secure and defend the effectiveness and survivability of mission-related military and non-military personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a

given OA to maintain mission effectiveness. The protection function is supported by the tenet of balance and synergistic effects to ensure security and maneuver, in both offensive and defensive operations. AFDP 3-10, *Force Protection*, AFDP 3-27, *Homeland Operations*, AFDP 3-22, *Foreign Internal Defense*, AFDP 3-40, *Counter-WMD Operations*, and AFDP 3-50, *Personnel Recovery*, provide examples of protection.

Sustainment. Sustainment is the provision of logistics and personnel services support to maintain operations through mission accomplishment and redeployment of the force. Sustainment provides the JFC the means for freedom of action and endurance and to extend operational reach. Sustainment enables the JFC to seize, retain, and exploit the initiative. Airpower provides a unique ability to enable persistent sustainment. These capabilities are captured in AFDP 4-0, *Combat Support*, AFDP 3-34, *Engineer Operations,* and AFDP 3-84, *Legal Support*.

APPENDIX C: AGILE COMBAT EMPLOYMENT

ACE is a proactive and reactive operational scheme of maneuver, executed within threat timelines to increase survivability while generating combat power.

ACE intends to complicate the enemy's targeting process, create political and operational dilemmas for the enemy, and create flexibility for friendly forces. To do so, ACE shifts operations from centralized physical infrastructures to a network of smaller, dispersed locations that can complicate adversary planning and provide more options for JFCs. Its value is derived from the ability to hold adversary targets at risk from multiple locations that are defensible, sustainable, and relocatable.

To effectively accomplish JFC objectives, ACE requires reexamining a wide variety of enabling systems, including C2, logistics under attack, counter-sUAS, air and missile defense, and offensive and defensive space and cyber capabilities.

ACE is an operational concept that supports JADO. Joint force operations are increasingly interconnected, interdependent, and challenged. Anti-access and area denial threats, reduced freedom of maneuver, and rapid proliferation of advanced technologies challenge the Air Force's ability to operate. The successful employment of ACE positions the force to observe, orient, decide, and act in concert across all domains. To achieve freedom of action, ACE presents and adversary with dilemmas at an operational tempo that complicates or negates adversary responses and enables the joint force to operate inside the adversary's decision-making cycle.

KEY TERMS

Agile: Able to outpace adversary action through movement and maneuver to achieve commander's intent.

Proactive Maneuver: A scheme of maneuver by which forces and assets are moved between operating locations to assure allies and partner nations of US support, alter adversary or enemy understanding of friendly intentions and capabilities, posture to deter aggression, or gain advantage.

Reactive Maneuver: A scheme of maneuver employed in response to observed, perceived, anticipated, or realized enemy aggression using mobility and dispersion of forces and assets to complicate enemy targeting, redistribute forces away from concentrated hubs, increase survivability, and reposition forces for follow-on operations.

Threat Timelines: Theater-specific planning factors based on the time required for an adversary to accomplish its find, fix, track, target, engage, and assess cycle.

ACE ENABLERS

Successful ACE operations during combat typically hinge on deliberate activities and investments throughout the competition continuum. Coordination with allies and partners, in addition to joint force processes, are necessary to develop the framework for ACE to minimize risk and maximize effectiveness. The table below includes some of the operations, activities, and investments commanders should consider throughout the

continuum.

Freedom of action and decision advantage can be achieved by forcing complex target situations to create multiple adversary dilemmas. ACE achieves this through mission ready airmen (MRA), mission command, and tailorable force packages.

MISSION READY AIRMEN

MRA enabling ACE are multi-skilled, expeditionary-trained members of teams tasked with solving complex problems under challenging conditions. Specifically, these personnel are often trained as a cross-functional team to provide support to ACE-capable force packages. They typically require more and different skills than what has been required in the past.

Commanders should ensure Airmen are proficient in the expeditionary skills necessary to operate outside of enduring locations. Many Airmen should have diverse foundational skills that enable them to generate combat power in a contested, degraded, and operationally limited (CDO-L) environment with minimal support.

ACE teams are tailored portions of force packages able to provide mission generation (MG), C2, and BOS as the mission dictates. Functional communities should identify how to minimize equipment and personnel footprints to increase dispersal capabilities and complicate adversary targeting. MRA enabling ACE can reduce the number of people to be put in harm's way to generate airpower.

MISSION COMMAND

By empowering subordinate commanders to make decisions and take decisive action at their level, mission command provides the flexibility and agility required to seize opportunities despite enemy denial or degradation of communications.

To actualize mission command and its precepts, USAF leaders should expand their operational perspective beyond their role in executing the air tasking order. Through clear communication of commander's intent, Airmen should develop a detailed understanding of the area of operations and how the senior commander envisions winning the fight. Airmen should understand the desired end state, methods, supporting relationships, and the resources available for execution. This shared understanding should be implemented with mission-type orders (MTOs).

TAILORABLE FORCE PACKAGES

To meet theater requirements, ACE requires tailorable force packages with the ability to execute across a range of operating locations. Force structure and UTCs should be designed to enhance agility while also balancing risk to mission and force. Functional communities work with commanders to define ACE-capable force packages that will be reflected in existing, new, or updated UTCs.

ACE CONSIDERATIONS

ACE considerations are presented through the elements of posture and joint functions. These elements enable air component commanders to relate ACE to the joint force using common terminology.

POSTURE

Posture is intrinsically tied to all other elements. It is the starting position from which subsequent actions take place. **Forces should be able to rapidly execute operations from various locations with integrated capabilities and interoperability across the core functions.** When executed properly, posture establishes a deterrent to conflict by being strategically predictable, but operationally unpredictable.

Posture includes **hub-and-spoke distribution,** a physical distribution system, in which a major port serves as a central point from which cargo is moved to and from several radiating points to increase transportation efficiencies and in-transit visibility.

An element of hub-and-spoke distribution is the creation of base clusters. **Base clusters** typically organize an enduring location with one or more contingency locations (CLs) to establish a regional boundary, wherein the enduring location commander commands one or more CLs with appropriate authorities to direct their activities. Base clusters are generally grouped for mutual protection and ease of C2.

Enduring locations should be robust and should have the ability to support further dispersion to smaller CLs while maintaining integrated capabilities and interoperability across MG, C2, and BOS functions.

Operational locations should be identified based on the ability to support warfighting requirements and sustainment opportunities while balancing risk to force. Risk to force may prohibit massing personnel at locations inside enemy weapon engagement zones (e.g., unconventional ground forces, small unmanned aircraft system (sUAS), ballistic missiles, cruise missiles, and hypersonic weapons).

Distributed operations typically exist on a spectrum, from well-developed enduring locations to potentially austere CLs. To ensure support to distributed forces, it is vital to understand the local and regional market's capacity to source critical operational requirements. When developing a new CL, planners should consider referencing multi-Service tactics, techniques, and procedures for airfield opening to determine planning considerations and improvements required.[36]

[36] For additional information on posture, see Air Force Tactics, Techniques and Procedures 3-2.68, *Multi-Service Tactics, Techniques, and Procedures for Airfield Opening*.

Common Types of Operating Locations

Enduring Locations	Contingency Locations
Main Operating Base (MOB) – A facility outside the United States and its territories with permanently stationed operating forces and robust infrastructure.	**Semi Permanent Contingency Location (SCL)** – A contingency location that provides support for a prolonged contingency operation and characterized by enhanced infrastructure and support services consistent with sustained operations.
Forward Operating Site (FOS) – A scalable location outside the United States and its territories intended for rotational use by operating forces.	**Temporary Contingency Site (TCL)** – A locale that provides near-term support for a contingency operation and characterized by expedient infrastructure and support services that have been expanded beyond Service-organic capabilities.
Cooperative Security Location (CSL) – A facility located outside the United States and its territories with little or no permanent United States presence that is maintained by periodic Service, contractor, or host nation support.	**Initial Contingency Location (ICL)** – A locale occupied by a force in immediate response to a contingency operation and characterized by austere infrastructure and limited services with little or no external support except through Service-organic capabilities.

COMMAND AND CONTROL

C2 challenges exist in all LSCO but are complicated further when forces disperse from enduring locations. CC-DC-DE provides the framework for the C2 of ACE. Airmen should be able to translate C2 information into action with sufficient speed and scale, regardless of the OE. Airmen should be trained and equipped to employ communications equipment to support distributed operations.

It should be expected and anticipated that FEs conducting ACE will lose connectivity with operational C2 nodes, therefore it is imperative that units be trained to operate via commander's intent with limited direction from air operations centers or air component staffs. Plans should be resilient and commander's intent conveyed to executing forces should provide the latitude needed to adapt to changing circumstances not foreseen beforehand. Codification of conditions-based authorities and delegated authorities will maximize the advantages provided by emergent opportunities.[37]

Effective ACE requires significant coordination across Service component commanders and industry partners to organize efficiently. These relationships and agreements should be established and rehearsed well ahead of any potential conflict. To contend with CDO-L environments, command authorities should be delegated to the lowest appropriate level. In an ACE scheme of maneuver, distributed control drives additional planning and coordination requirements at echelons below the operational level. Forces should have

[37] For additional information on conditions-based authorities and delegated authorities, see AFDP 3-0.1, *Command and Control*.

information that enables them to understand the current and expected threat environment, the overall plan, their role within it, the status of forces, available support relationships, and the means to be used for coordinating actions at the times and places required. Leveraging advances in automated systems from mission and industry partners (e.g., artificial intelligence, automation, and augmentation, and human-machine teaming) will play an important role in managing the increased workload.

MOVEMENT AND MANEUVER

ACE maneuver includes movement of forces to predetermined, dispersed locations and the flow of dispersed forces back to an enduring location. The maneuver of forces in this manner is intended to enhance MG efficiency and simplify sustainment. It can provide the ability to push combat and support elements forward for limited periods of time to accomplish offensive objectives.

Once dispersed, friendly forces maintain operational momentum via distributed control and mission command principles. Dispersal operations are augmented with other passive defense measures, such as hardening and camouflage.

ACE maneuver requires prioritization and sufficient coordination of theater assigned and inter-theater transportation to move the force at the proper time and with sufficient tempo to achieve desired effects. Early planning and posturing can ensure airlift, ground movement, and sealift are employed with sufficient quantity, speed, and flexibility. Properly integrated into the planning cycle, operational contract support planners can provide optimized sourcing recommendations and options for the use of commercial support to reduce air, ground, and sea transportation requirements. Dispersal plans from specific enduring locations to dispersed locations should be incorporated into theater operation plans to permit adequate equipment and personnel posturing as well as time-phased force deployment data development.

PROTECTION

Air bases are no longer considered a sanctuary from attack, regardless of their location. To stay in the fight, forces should operate in and through contested environments. A combination of active and passive defenses are necessary to counter threats in all domains. CL protection requirements, including base defense and DCA, are informed by operational risk assessments, mission requirements, and available protection capability and capacity. DCA is paramount to protect the force from present and future threats, including sUAS, cruise missiles, ballistic missiles, and hypersonic weapons.

Enduring location-focused force protection plans and strategies are insufficient to meet the needs of short-term or dispersed operations. Preplanned integration of joint or host nation security assets for dispersed operations is paramount. Additionally, force protection intelligence support is critical to ACE. Proactively providing planners and commanders with information enables quality basing and risk mitigation decisions. Continuance of intelligence and counterintelligence (CI) activities throughout the competition continuum informs commanders' risk calculus when executing reactive maneuvers or other protection actions. Air Force intelligence, CI, force protection, emergency management, and law enforcement entities should leverage existing

relationships with joint and host nation entities to coordinate supplementary force protection and intelligence support for ACE.

SUSTAINMENT

ACE will challenge current logistics systems and transportation nodes. Supply and distribution systems need to transform from a fully connected "pull" system, optimized for efficient operations, to a "push" system that maximizes distributed mission effectiveness.[38] Leveraging local and regional commercial markets can alleviate distribution system stress and provide critical services and equipment to distributed forces.

As dispersed sites grow in number across a wider operational area, sustainment plans and systems should also be capable of scaling sustainment operations to match. ACE sustainment plans should focus primarily on aircraft sortie generation, but should also include the ability to execute implied tasks such as receiving airlift or sealift for resupply, executing BOS functions, and contracting local services, supplies, and equipment.

INFORMATION

Effective OIE is a key element of ACE. All ACE actions, including written or spoken words and displayed or related images, have informational aspects that communicate some message or intent. This message or intent can be leveraged to shape perceptions and behaviors in ways that support the achievement of friendly force objectives. Overt messaging about ACE can be used to communicate the ability to rapidly disperse assets, aircraft, and personnel across a wide range of potential forward operating locations and leverage host nation organic capabilities, assets, and partner nation cooperative agreements.

In the planning and execution of proactive or reactive ACE schemes of maneuver, the deceptive use of information can cause an adversary to errantly diffuse or concentrate forces, rendering them ineffective. Similarly, it can create a state of "analysis paralysis" about ACE maneuver that challenges an adversary's ability to make effective, timely decisions.

ACE supports information warfare's aim of shaping the perceptions, behaviors, and attitudes of relevant actors. The effective integration of information into ACE schemes of maneuver can bolster assurance and deterrence by revealing overall joint force capabilities to deny adversary benefits or punish aggression, conceal or obscure aspects that provide perishable advantage, or suggest elements that mislead adversaries. ACE preparation demonstrates and signals a combat-credible deterrent to adversaries and provides assurance to partners and allies.

[38] A pull system emphasizes efficiency through a "just in time" logistics system, where supplies are pulled forward on an as-needed basis. Whereas, a push system emphasizes effectiveness, at efficiency's expense, by anticipating the need and ensuring supplies are on hand before they are needed.

INTELLIGENCE

Intelligence and CI should be prepared to support operations in a CDO-L environment characterized by mission command and rapidly changing basing. As operations evolve, real time communications feedback with warfighters and the intelligence community needs to be agile and resilient. Mission report communications flow should be adapted for real time operations. Intelligence covering the full spectrum of ACE needs to adapt and evolve to meet dynamic C2 requirements.

Support to expeditionary MG units and the contingency intelligence network will further enable the ability to achieve desired airpower effects. Force protection intelligence and CI activities enable survivability of operations by providing commanders current, time-sensitive, critical information and intelligence necessary to make risk decisions regarding maneuver. This intelligence and CI gathering should precede operational ACE execution to identify all potential kinetic, nonkinetic, and foreign intelligence threats.

Intelligence preparation of the OE is employed to identify enemy capabilities and threats to proposed ACE operations and support their mitigation. The intelligence and CI community should also consider threats from commercial vendors and contractors. In locations without a current presence, the US should initiate and develop new relationships with individuals and organizations capable of providing desired information.

FIRES

ACE scheme of maneuver ensures the ability to mass fires to achieve convergence of effects in all domains, including coordinated ground-based fires in defense of an airfield and its ability to generate aircraft. The execution of fires does not fundamentally change in ACE execution but requires the use of MTO and delegation of authorities to the lowest appropriate level. Plans should account for the timelines that may be required to aggregate forces originating from different dispersed sites to create effects against a common target. Under the DoD's vision for JADO, fires may be delivered by air, space, cyberspace, land, maritime, and SOF.

REFERENCES

All websites accessed 28 November 2024.

Doctrine can be accessed through links provided at: https://www.doctrine.af.mil/

US AIR FORCE DOCTRINE: https://www.doctrine.af.mil

- AFDP 1, *The Air Force*
- AFDP 1-1, *Mission Command*
- AFDP 2-0, *Intelligence*
- AFDP 3-0.1, Command and Control
- AFDP 3-01, *Counterair Operations*
- AFDP 3-02, *Strategic Attack*
- AFDP 3-03, *Counterland Operations*
- AFDP 3-04, *Countersea Operations*
- AFDP 3-05, *Special Operations*
- AFDP 3-10, *Force Protection*
- AFDP 3-12, *Cyberspace Operations*
- AFDP 3-13 *Information in Air Force Operations*
- AFDP 3-14, *Space Support*
- AFDP 3-22, *Foreign Internal Defense*
- AFDP 3-27, *Homeland Operations*
- AFDP 3-34, *Engineer Operations*
- AFDP 3-36, *Air Mobility Operations*
- AFDP 3-40, *Counter-Weapons of Mass Destruction Operations*
- AFDP 3-50, *Personnel Recovery*
- AFDP 3-59, *Weather Operations*
- AFDP 3-60, *Targeting*
- AFDP 3-61, *Public Affairs*
- AFDP 3-72, *Nuclear Operations*
- AFDP 3-84, *Legal Support*
- AFDP 3-85, *Electromagnetic Spectrum Operations*
- AFDP 4-0, *Combat Support*
- AFDP 5-0, *Planning*

JOINT DOCTRINE

Joint Electronic Library (JEL) *https://www.jcs.mil/Doctrine/*

JEL+ *https://jdeis.js.mil/jdeis/index.jsp?pindex=2*

- JP 1 Volume 1, *Joint Warfighting*
- JP 1 Volume 2, *The Joint Force*
- JP 3-0, *Joint Campaigns and Operations*
- JP 3-01, *Countering Air and Missile Threats*
- JP 3-08, *Interorganizational Cooperation*
- JP 3-16, *Multinational Operations*
- JP 3-27, *Joint Homeland Defense*

- ✪ JP 3-30, *Joint Air Operations*
- ✪ JP 5-0, *Joint Planning*

MISCELLANEOUS PUBLICATIONS

Air Force Future Operating Concept Executive Summary, 6 March 2023

Department of Defense. Directive Number 5100.01, *Functions of the Department of Defense and Its Major Components*