

INTRODUCTION TO COMMAND AND CONTROL

Last Updated: 7 January 2020

THE AIR COMPONENT COMMANDER

Successful [command and control](#) (C2) of Air Force operations begins with the commander. Joint forces are made up of a mixture of Service component commanders assigned or allocated to the [joint force commander](#) (JFC) (e.g., the commander, Air Force forces [COMAFFOR]) and functional component commanders designated by the JFC (e.g., [joint force air component commander](#) [JFACC]).

Functional component commanders are designated by the JFC when forces of two or more Military Departments must operate within the same mission area or physical domain. The JFC designates a JFACC to establish [unity of command](#) and [unity of effort](#) for joint air operations. The Service component commander with the preponderance of forces and the ability to C2 joint air forces should be designated as the JFACC. The JFACC is normally designated as the [area air defense commander](#) (AADC) and the [airspace control authority](#) (ACA) because these three roles (JFACC, AADC and ACA) are integral to each other.

The COMAFFOR has responsibilities and authorities derived from his or her roles in fulfilling the Service's

It is a given in future conflicts that the joint force will be conducting operations in a contested environment. We must be prepared to execute in a degraded C2 environment where clearly delineated and forward thinking commander's intent will be a requirement. It is imperative senior leaders provide our commanders with conditions-based authorities delegated to the lowest capable and competent level, and empower command by negation to accept the appropriate level of risk, all while working toward moments of clear C2.¹

**- General Charles Q. Brown, Jr.,
Commander, Pacific Air Forces**

¹ Conditions-based authorities are procedures for predetermining delegation of authority to subordinate commanders in anticipation of degraded or lost communication with higher headquarters. Command by negation allows subordinate commanders to conduct operations as they see fit unless denied by their superior. Details for these procedures are provided in documents such as the air operations directive, area air defense plan, airspace control plan, special instructions, and other amplifying guidance.

[administrative control](#) (ADCON) function. ADCON is the authority necessary to fulfill Military Department Title 10² responsibilities for administration, support, and organizing, training and equipping Air Force forces and is normally the senior Airman in theater.

The JFC in almost all cases designates the COMAFFOR as the JFACC. In accordance with joint doctrine, the dual-designated air component commander will exercise [operational control](#) (OPCON) and ADCON over Air Force forces as the COMAFFOR, and [tactical control](#) (TACON) over Air Force forces and other Services' forces made available for tasking as the JFACC.

Since the COMAFFOR and JFACC are nearly always the same individual, this doctrine publication makes use of the term, “air component commander” when referring to duties or functions that could be carried out by either or both, clearly delineating COMAFFOR or JFACC (or their respective staffs) only when discussing functions that are unique to one or the other.

Control of Airpower in Contested Environments

Air operations against a peer adversary in a contested environment are C2 intensive, with a joint or combined air operations center orchestrating a multitude of simultaneous missions in support of the JFC. Using air, space, cyberspace and electromagnetic warfare assets, the mission commanders (TACON to the air component commander) plan different types of "packages" to defeat integrated air defense systems, interdict C2 and fielded forces, and gain control of the air. During these operations, forward based airpower can conduct air operations based on a standing "integrated tasking order" (ITO). In this air equivalent of mission command, forward based air expeditionary wings or task forces receive conditions based authorities with standing orders and commander's intent on the ITO. This empowers subordinate commanders with the flexibility to provide coverage of key defensive counterair combat air patrols (CAPs); air interdiction kill boxes; suppression of enemy air defense CAPs; close air support; or intelligence, surveillance, and reconnaissance in support of surface forces. This decentralized execution model enables local commanders to maintain pressure on the enemy even when disconnected from communications with higher headquarters due to a contested environment against a peer or near-peer adversary.

² See United States Code, Title 10, *Armed Forces*, [Subtitle D – Air Force](#).

KEY CONSIDERATIONS OF COMMAND AND CONTROL

Commanders should be cognizant of the authorities they are given and their relationships under that authority with superior, subordinate, and lateral force commanders. [Command relationships](#) should be clearly defined to avoid confusion. The command of [airpower](#) requires intricate knowledge of the capabilities and interdependencies of forces employed, and an understanding of the JFC's intent.

ORGANIZING FOR COMMAND AND CONTROL

Modern military operations must execute across the [competition continuum](#) in a complex global security environment. This requires the right mix of forces with clearly defined command relationships and appropriate command and control mechanisms.

C2 and organization are inextricably linked. Forces should be organized around the principle of unity of command. 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 clearly specified to integrate effects across Service lines. Air Force expeditionary organization and preferred command arrangements are designed to address unity of command.

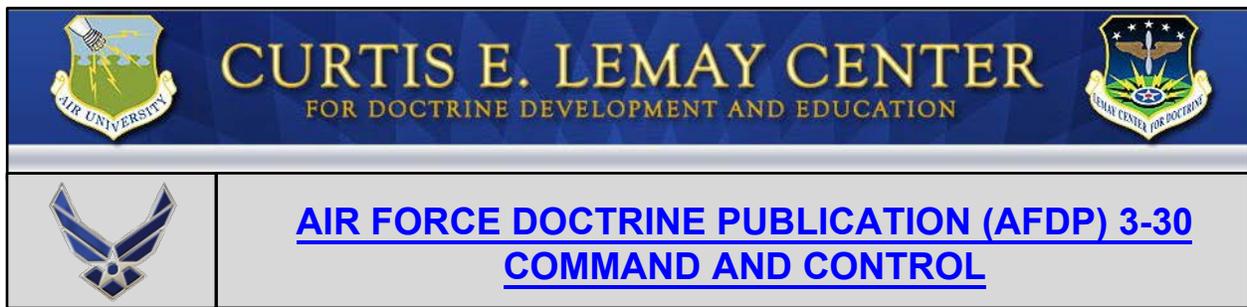
When Air Force forces are [assigned](#) or [attached](#) as part of a joint force at any level (i.e., combatant command, subordinate unified command or joint task force), they become the Air Force Service component to that JFC. All Air Force Service components have three common features: Air Force forces tailored to the needs of the JFC and the tasks to be performed, a single designated air component commander, and the appropriate mechanisms and authorities to command the Air Force forces.

The manner in which attached Air Force expeditionary forces are organized will depend upon whether or not there is an existing Air Force C2 structure in place. Combatant commands (e.g., [US Indo-Pacific Command](#)) and subordinate unified commands (e.g., [United States Forces Korea](#)) have Air Force Service components with an established Air Force C2 structure. Depending upon the combatant commander, the Air Force Service component may be either a component major command (e.g., Pacific Air Forces) or a component numbered air force (e.g., First Air Force [Air Forces Northern])

Additional Air Force expeditionary forces attached to a combatant commander should normally organize within the existing Air Force Service component. For instance, an F-16 squadron deployed from Shaw Air Force Base (AFB) for operations at Misawa Airbase, Japan, should normally be designated as an expeditionary fighter squadron (EFS), (e.g., 55 EFS) and should be organized under the in-place 35th Fighter Wing at Misawa. However, if the combatant commander elects to establish a [joint task force](#) (JTF) to include attached Air Force forces, there is no in-place Air Force command structure for the JTF. In this case, a temporary [air expeditionary task force](#) (AETF)

would be formed as the Air Force Service component to the JTF. The commander of the AETF would either be the COMAFFOR directly responsible to the JTF commander, or established in a supporting role to 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](#) command relationship, or be made available through [reachback](#) or distributed C2 arrangements.



PRESENTING AIR FORCE FORCES

Last Updated: 7 January 2020

Modern operations require flexibility in execution to adapt to a wide variety of scenarios, which drives a need to assemble the right mix of forces from the appropriate Services tailored to the operation. This flexibility drives a corresponding need for adjustable organization, [command and control \(C2\) mechanisms](#), and appropriate [command relationships](#).

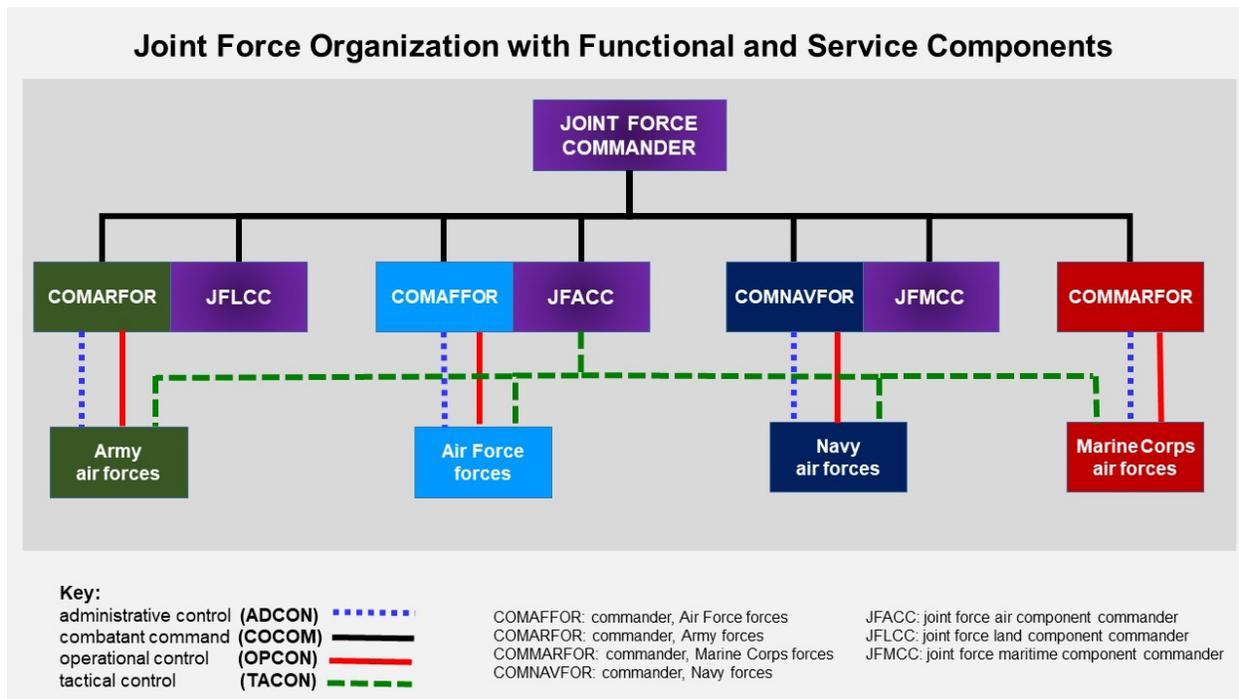
JOINT FORCE ORGANIZATIONAL BASICS

When a crisis requires a military response, the Secretary of Defense, [combatant commander](#) (CCDR), a subordinate unified commander, or an existing joint force commander can form a [joint task force](#) (JTF) tailored to address the crisis. If Air Force forces are attached to the JTF, they stand up as an [air expeditionary task force](#) (AETF). The [joint force commander](#) (JFC) at any echelon is responsible for delineating the [command relationships](#) between forces under his or her [operational control](#) (OPCON) and empowering subordinate commanders appropriately (see [Appendix A](#) for more detail). Normally, a subordinate JFC receives OPCON of [assigned](#) or [attached](#) forces and delegates OPCON to the appropriate Service component commanders.

Surface forces are usually assigned individual [areas of operations](#) (AOs) within the JFC's [joint operations area](#) (JOA); a less-than-total view of the theater. By comparison, an air component commander typically has an operational-level, JOA-wide perspective similar to the JFC's.

Because all four Services have forces that operate in the [air domain](#), the designation of functional commanders allows greater synergy by integrating similar activities across Service boundaries. The designation of joint force air, land, maritime and special operations component commanders (the [joint force air component commander](#) [JFACC], [joint force land component commander](#) [JFLCC], [joint force maritime component commander](#) [JFMCC], and [joint force special operations component commander](#) [JFSOCC] respectively) is at the discretion of the JFC. This functional component model most easily transitions to one that supports [combined](#) (or [coalition](#)) employment, and the functional component commanders become combined component commanders (e.g. combined force air component commander [CFACC], combined

force maritime component commander [CFMCC], etc.). See figure, “Joint Force Organization with Functional and Service Components.”



Joint Force Organization with Functional and Service Components

In accordance with joint doctrine, designation of a functional component commander (e.g., a JFACC) should not adversely affect the command relationship between the Service component (e.g., the [commander, Air Force forces](#) [COMAFFOR]) and the JFC. Normally, the JFC designates the COMAFFOR as the JFACC. The air component commander retains OPCON over Air Force forces and gains [tactical control](#) (TACON) over joint air forces made available for tasking. In practice, the JFACC commands and controls the joint air forces, including Air Force forces, through exercising TACON.

AIR COMPONENT RELATIONSHIPS WITHIN A JOINT FORCE

The JFC normally assigns broad missions to the component commanders; with each mission comes a specification of [supported commander](#) for that mission. As an example, the JFC may designate the air component commander as the supported commander for counter air, [strategic attack](#), [air interdiction](#), and theater airborne [intelligence, surveillance, and reconnaissance](#) (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. Subordinate commanders normally work out the support relationships.

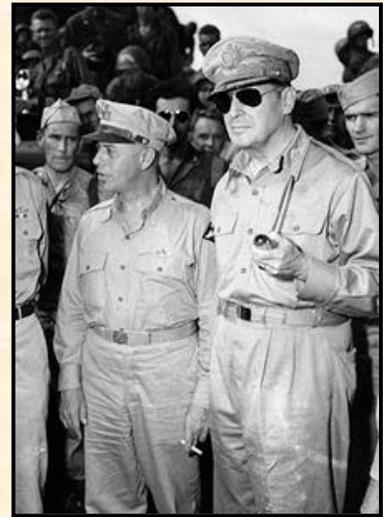
The commander responsible for a mission should be given the requisite authority to carry out that mission. For some missions or functions, specification of support alone may be insufficient in order for a functional component commander to fully integrate and employ forces made available. In such instances, the JFC may delegate to a subordinate commander TACON of specific elements of another component's resources (this, in fact, 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.

The air component commander should establish a close working relationship with the JFC to ensure the best representation of [airpower's](#) potential. When possible, the air component commander should collocate with, or at least be positioned close to, the JFC, so they may benefit from frequent personal interaction. It also helps keep a greater air component presence in the joint force headquarters, as well as aiding the joint force headquarters staff planning and running air component operations.

AIR FORCE COMPONENT PRESENTATION CONSIDERATIONS

There are three general models for presenting Air Force components in support of a JFC: ⁶

- ★ **Theater-level component.** This model establishes an Air Force component at the CCDR level, attached with specification of OPCON and commanded by a theater COMAFFOR who the CCDR will normally also designate as a theater JFACC.
- ★ **Sub-theater-level component.** There are two different sub-theater level component possibilities: a subordinate unified command or a joint task force. An Air Force component at the [subordinate unified command](#) will normally be attached with specification of OPCON and will include a COMAFFOR prepared to execute as a JFACC over assigned and attached joint forces. An Air Force component at the JTF level will normally be an AETF with a designated COMAFFOR, and will include a JACCE that is the theater level JFACC's liaison to the JTF commander.



During World War II, General MacArthur (right) and his senior Airman, Lt Gen Kenney (left), had a close working relationship. As a result, General Kenney enjoyed a high level of trust to employ air power as best fit his commander's objectives.

⁶ There may be additional considerations during homeland operations that impact command arrangements and command relationships. See AFDP 3-27, [Homeland Operations](#).

- ✦ **Sub-theater-level AETF in support of a JTF.** This model establishes an AETF, in [direct support](#) of a subordinate JTF, with OPCON retained by the theater COMAFFOR. In this model, the AETF commander is not a COMAFFOR or JFACC.

LEVELS OF FORCE PRESENTATION

Joint and Service doctrine explicitly describe three levels for organizing joint forces within a geographic CCDR's [area of responsibility](#) (AOR): the CCDR level (i.e., the CCDR acts as the JFC), the subordinate unified command, as in Korea; and at the subordinate JTF level. The three force presentation models discussed above are not meant to limit the CCDR's authority to organize forces to best accomplish assigned missions but instead to enable the Air Force to effectively support the CCDR and any subordinate organizations. The following discussion summarizes some of the considerations that may affect the CCDR's organizational construct and force attachment decisions, and require appropriately tailored C2.

Theater-Level Component

This unified command-level model establishes an air component commander (both Service component and JFACC) at the CCDR level. This model optimizes allocation of scarce airpower assets and commander's priorities across the AOR. As the JFC, the CCDR establishes priorities for employment of all assigned and attached forces, and resolves competing demands among the subordinate commands. In this model, the forces form up under the CCDR's Air Force component command.

When the CCDR decides the most effective way to accomplish the

“Deputy Commander—Air” in the Afghanistan Joint Operations Area

Due to the complexity of operations in the US Central Command's AOR, the US Air Forces Central Command commander created two subordinate AETFs (9 AETF-Iraq and 9 AETF-Afghanistan) to better focus airpower support in those two joint operations areas. In Afghanistan, a North Atlantic Treaty Organization operation, the International Security Assistance Force (ISAF) also required a clearly identified command relationship with Air Force forces.

To support US force presentation to ISAF, the commander of 9 AETF-Afghanistan was also designated as the “Deputy Commander-Air” to the commander, US Forces-Afghanistan, the US component to ISAF. This arrangement provided ISAF with an Air Force commander who could exercise command authorities over Air Force forces in support of ISAF.

While a non-standard organization structure, the Deputy Commander-Air leverages basic doctrinal concepts to achieve unity of command within a complex command structure.

mission is by retaining forces at the theater level, the theater-level air component commander will operate in support of the subordinate JTF commander(s) according to the CCDR's theater-wide priorities.

To support planning and operations with subordinate JTFs and other components, the theater-level air component commander may then deploy [joint air component coordination elements](#) (JACCEs) to ensure the JTFs receive appropriate support. The JACCE provides on-hand air component expertise and the direct link back to the theater air component commander and the [air operations center](#) (AOC).

Sub-Theater-Level Component

This model establishes an Air Force Service component and air component commander within a sub-theater level JFC (i.e., subordinate unified command or JTF commander), responsible for an operational area below the CCDR level. This model may be preferable when the span or scope of operations is less than theater-wide, or when operations are sufficiently fluid to require planning and execution at more tactical levels.

Under this model, the CCDR-level COMAFFOR, as directed by the CCDR, relinquishes OPCON of the forces attached to the sub-theater JFC, and the designated commander of the sub-theater JFC accepts OPCON for the duration of the attachment. In accordance with joint and Air Force doctrine, the sub-theater JFC then normally delegates OPCON of attached Air Force forces to the identified sub-theater COMAFFOR. [Administrative control](#) (ADCON) is retained within the Service chain from the CCDR-level COMAFFOR downward to the sub-theater level COMAFFOR. This COMAFFOR is poised to also act as a JFACC, if so designated by the sub-theater JFC.

The key advantage of this model is that it provides fully integrated airpower to a sub-theater JFC, while the theater air component commander maintains control of high-demand, low density capabilities. The key disadvantage is that Air Force forces attached to the sub-theater JFC are not normally available to address demands outside their operational area.

An AETF attached with specification of OPCON to a JTF will include a COMAFFOR under OPCON of that JTF commander. However, the AETF will not have a command and control capability adequate to being designated as a JTF-level JFACC. Under these conditions, the CCDR may direct the theater air component commander to retain TACON over joint air forces and be established in support to the JTF commander, exercised through the JACCE.

Mix of Theater- and Sub-Theater-Level Components

Some theater requirements may drive a mix of the two previous models. This may be desirable when there are competing requirements for low density/high demand Service capabilities (e.g., ISR, remotely piloted aircraft; and [air refueling](#)) across the AOR, yet

there is also sufficient demand for dedicated airpower at subordinate levels to drive attachment of Air Force forces to a subordinate JTF.

Sub-Theater-Level AETF In Support of a JTF

When the CCDR establishes one or more sub-theater JFCs but elects to retain all (or most) Air Force forces at the theater level, the size and complexity of the mission would typically drive establishment of subordinate AETFs in direct support of the sub-theater JFCs.

Under this construct, the theater COMAFFOR retains OPCON and delegates appropriate aspects of OPCON, TACON, and ADCON to the AETF commander while maintaining theater-wide perspective and responsibility for recommending apportionment of airpower capabilities across the theater of operations to the CCDR. The AETF commander remains subordinate to the theater COMAFFOR.

The key advantage of this model is that it provides an Airman empowered with command authorities to the sub-theater JFC while allowing the theater COMAFFOR to retain OPCON of forces across the AOR to address the CCDR's priorities. This model normally requires a significantly smaller command and control capability than would an AETF attached with specification of OPCON to a sub-theater JFC.

FORCE ATTACHMENT CONSIDERATIONS

When the operational mission at the JTF level outweighs competing missions at the CCDR's AOR level, the CCDR should consider attaching Air Force forces to the JTF commander. Considerations include:

- ★ Do the operational tempo, intensity, duration, and scope warrant near full-time use of an attached AETF?
- ★ Do the operational tempo, intensity, duration, and scope justify a dedicated AETF that, once attached to the JTF, may not be available to support operations elsewhere?
- ★ Does the priority of the JTF mission, relative to other theater missions, justify a dedicated AETF that, once attached to the JTF, may not be available to support operations elsewhere?
- ★ If the choice is to attach an AETF to a JTF, does the Air Force have the ability to provide the required C2 of Air Force forces?
- ★ Does the provision of forces to a subordinate JTF, either by attachment or direct support, effectively demonstrate and enable the Air Force component's commitment to the joint force effort?