The Air Force provides the United States with airpower. To achieve this, our Air Force doctrine provides Airmen with the historically proven best practices learned through experience. This document is the Air Force’s premier statement of leadership principles and beliefs.

Doctrine is authoritative, not directive, and requires judgment in its application. These foundational basics allow us to respond more quickly to operations in today’s changing world environment, freeing commanders and planners to think about larger issues such as strategy, operational art, and objectives. The ideas presented here should enable Airmen to better describe what the Air Force can provide to the joint effort.

The success of our Air Force in meeting the challenges of this rapidly changing world depends on understanding our doctrine. I encourage you to read it, discuss it, and apply it.

The principal audience for this publication consists of all Airmen, both uniformed and civilian.

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LEGEND

- Green underlined text denotes a link to glossary terms (definitions and acronyms).
- Blue underlined text denotes a link to another source document within the doctrine database.
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Air Force Doctrine Volume 1, *Air Force Basic Doctrine*, is the senior capstone document of Air Force doctrine. Volume 1 discusses the fundamental beliefs that underpin the application of Air Force capabilities across the range of military operations. Its six chapters range from the fundamentals of *airpower* to discussion on commanding and organizing Air Force forces. Volume 1 provides guidance on the proper employment of airpower, sets the foundation for educating Airmen on airpower, guides the development of all other doctrine, and provides insight where personal experience may be lacking.

Much has transpired in the overall operational environment since the previous basic doctrine publication, Air Force Doctrine Document 1, was published in 2003. The character of contemporary and immediately foreseeable conflict has driven a significant shift in the US approach to warfighting. The large-scale, complex, force-on-force scenarios that drove much of Cold War planning, which were seen during Operation DESERT STORM and in the opening stages of Operation IRAQI FREEDOM, are now viewed as the exception, replaced by the complex and unpredictable pace of *irregular war* against nontraditional enemies. Moreover, it appears that US engagement in such conflict may be ongoing for some time.

The *Joint Operating Environment* "provides a perspective on future trends, shocks, contexts, and implications" for the current and near-term security environment. Some of its key points are summarized as follows:

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The nature of the human condition guarantees that uncertainty, ambiguity, and surprise will likely dominate the course of events.

It is impossible to predict precisely how challenges may emerge and what form they might take. The United States may find itself caught off guard by changes in the political, economic, technological, strategic, and operational environments. The United States will likely find itself surprised by the creativity and capability of its adversaries.

Changes in the strategic landscape, the introduction and employment of new technologies, and the adaptation and creativity of our adversaries may alter the character of joint operations.

The causes of conflict will likely vary from rational political calculation to uncontrolled passion. The enemy’s capabilities may range from explosive vests worn by suicide bombers to long-range precision-guided cyberspace, space, and missile attacks. The threat of mass destruction from nuclear, biological, and chemical weapons will likely expand from stable nation-states to less stable states and even non-state networks.

It is also conceivable that combinations of regional powers with sophisticated regional capabilities could band together to form a powerful anti-US alliance.

The great difficulty US forces confront in facing irregular warfare is that irregular conflicts require a thorough understanding of the cultural, religious, political, and historical context within which they are being fought, as well as substantial commitments of “boots on the ground” for sustained periods of time. There are no “rapid decisive operations” in irregular warfare that can achieve swift victory.

A defining element in military effectiveness lies in the ability to recognize when prewar visions and understanding of war are flawed and must change.

These changes have significant, long-term implications for the planning and conduct of US operations. Air Force studies of the likely future operating environment, such as the Air Force Strategic Environmental Assessment, make the following key points:

The need for precision and detailed analysis has greatly expanded the scale of information collection and processing; extensive networks are as important as bullets or bombs. Sensors, shooters, and fusion centers are routinely interconnected worldwide in a unified battle rhythm.

The nature of irregular conflicts requires patient, long-term commitment to a consistent, coherent strategic and political approach that integrates the diplomatic, informational, military, and economic elements of US, ally, and partner nation power. This requires renewed emphasis on, and long-term institutional commitment to, investment in building and sustaining effective partnerships that assures allies and friends.
The diffusion of lethal technologies in general and proliferation of weapons of mass destruction (WMD) creates new challenges to deterrence. The Cold War-era model of deterring a small number of nuclear-armed states has been replaced by the need to develop a range of deterrence strategies against multiple potential adversaries, some of which are transnational non-state actors. Also, the proliferation of WMD may make the United States increasingly the subject of the deterrence operations of others. In spite of these changes, nuclear deterrence will remain relevant; US nuclear forces will continue to play a critical role in deterring, and possibly countering, threats to our vital interests.

Threats against the US homeland could very well increase. The United States should expect future opponents to launch both terrorist and unconventional attacks on the United States and its territories. Civil, military, and industrial cyberspace networks have, for example, already seen an upswing in probes and intrusions.

Despite the current low probability of conflict escalating to major combat operations, the United States should retain the capability to execute conventional campaigns. Peer and near-peer state actors will likely continue to challenge US access to the global commons. Non-state actors (and some state actors) will likely continue to seek asymmetric advantages. Their objectives may vary from regional hegemony to cultural and religious goals. Accordingly, the United States should maintain the capability to successfully project military power and maintain superiority in all domains.

The proliferation of technology may allow adversaries to develop niche capabilities that may threaten, in varying degrees, the successful conduct of operations in areas where US forces were previously unchallenged. Space and cyberspace networks are increasingly vulnerable to a wide array of new threats. Adversary anti-access capabilities will continue to improve, challenging our ability to project power and influence. The spread of increasingly effective surface-to-air defenses poses special problems for our Air Force.

These changes and challenges have a ripple effect on doctrine. To be effective—and most importantly, relevant—doctrine should adapt and evolve. The Air Force doctrine publication framework has transitioned to an A-staff framework, to better align Air Force doctrine documents conceptually with their joint counterparts, and to revise their content based upon the rethinking of our Service’s core functions. In the end, Air Force doctrine should provide a better, more relevant baseline for ongoing and future operations.

Following the recent example of combining Joint Publication (JP) 1, Doctrine for the Armed Forces of the United States, and JP 0-2, Unified Action Armed Forces, into a single joint capstone document, this revision to basic doctrine combines material from the previous AFDD 1 and organizational discussion in the previous AFDD 2, Operations and Organization, into a single Air Force capstone doctrine document.

As previously mentioned, a great deal of the material in this document is unchanged from the material in the previous editions of AFDDs 1 and 2; this is to be expected, if our
foundational precepts are indeed enduring. Examples to support discussion may have been updated to reflect recent experience.

A note on terminology in Air Force doctrine: The Air Force prefers—and in fact, plans and trains—to employ in the joint fight through a commander, Air Force forces (COMAFFOR) who is normally also dual-hatted as a joint force air component commander (JFACC); when involved in multinational operations, the JFACC may become a combined force air component commander (CFACC). However, to simplify nomenclature in doctrine, Air Force doctrine documents simply use the term "COMAFFOR" with the assumption that, unless stated otherwise, the COMAFFOR is dual-hatted as the JFACC and perhaps CFACC. Air Force doctrine recognizes that the two responsibilities are different and should be executed through different staffs. Similarly, Air Force doctrine recognizes that the air operations center (AOC), in joint or combined operations is correctly known as a joint AOC (JAOC) or combined AOC (CAOC). However, doctrine simply uses the term "AOC."

Air Force doctrine is compatible with existing joint doctrine, but expands and elaborates upon it, because joint doctrine does not explicitly describe the philosophical underpinnings of any one Service, nor does it describe how a Service organizes to support a joint force commander. These are Service, not joint, prerogatives. The ideas presented here should enable Airmen to better describe what the Air Force can provide to the joint effort. This document should influence creation of corresponding joint and North Atlantic Treaty Organization doctrine, and may inform the doctrine of other Services as well.

The principal audience for this publication consists of all Airmen, both uniformed and civilian.
DOCTRINE DEFINED

**Doctrine** is defined as “fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application” (Joint Publication [JP] 1-02, Department of Defense Dictionary of Military and Associated Terms). This definition is explained in more detail below.

“...fundamental principles...”

Doctrine is a body of carefully developed, sanctioned ideas which has been officially approved or ratified corporately, and not dictated by any one individual. Doctrine establishes a common frame of reference including intellectual tools that commanders use to solve military problems. It is what we believe to be true about the best way to do things based on the evidence to date.
We have identified danger, physical exertion, intelligence, and friction as the elements that coalesce to form the atmosphere of war, and turn it into a medium that impedes activity. In their restrictive effects they can be grouped into a single concept of general friction. Is there any lubricant that will reduce this abrasion? Only one: combat experience.

—Carl von Clausewitz, *On War*

**“…military forces…”**

For the purposes of Air Force doctrine, this includes all Airmen, both uniformed and Department of the Air Force civilians. These constitute the uniformed warfighters, their commanders, and the capabilities and support that they employ. They operate across the range of military operations (ROMO) and can be task-organized into the “right force” for any particular joint contingency.

**“…in support of national objectives…”**

Military forces should always conduct operations in order to support objectives that create continuing advantage for our nation.

**“…guide their actions… authoritative… judgment…”**

Doctrine is a guide to action, not a set of fixed rules; it recommends, but does not mandate, particular courses of action.

Air Force doctrine describes and guides the proper use of *airpower* in military operations. It is what we have come to understand, based on our experience to date. The Air Force promulgates and teaches its doctrine as a common frame of reference on the best way to prepare and employ Air Force forces. Subsequently, doctrine shapes the manner in which the Air Force organizes, trains, equips, and sustains its forces. Doctrine prepares us for future uncertainties and provides a common set of understandings on which Airmen base their decisions. Doctrine consists of the fundamental principles by which military forces guide their actions in support of national objectives; it is the linchpin of successful military operations. It also provides us with common terminology, conveying precision in expressing our ideas.

In application, doctrine should be used with judgment. It should never be dismissed out of hand or through ignorance of its principles, nor should it be employed blindly without due regard for the mission and situation at hand. On the other hand, following doctrine to the letter is not the fundamental intent. Rather, *good doctrine is somewhat akin to a good “commander’s intent:”* it provides sufficient information on what to do, but does not specifically say how to do it. Airmen should strive above all else to be doctrinally sound, not doctrinally bound.
In the current turbulent environment of expeditionary operations and the arena of homeland security, *doctrine provides an informed starting point* for the many decisions Airmen make in what seems to be a continuous series of deployments. Airmen no longer face the challenge of starting with a blank sheet of paper; *with doctrine, Airmen now have a good outline that helps answer several basic questions*:

- What is my mission? How should I approach it?
- What should my organization look like, and why?
- What are my lines of authority within my organization and within the joint force?
- What degrees of control do I have over my forces?
- How am I supported? Who do I call for more support?
- How should I articulate what the Air Force provides to the joint force?

*From one operation to the next, many things are actually constant. Doctrine, properly applied, often can provide a 70-, 80-, or even 90-percent solution to most questions, allowing leaders to focus on the remainder, which usually involves tailoring for the specific operation.* Good doctrine informs, provides a sound departure point, and allows flexibility.

A study of airpower doctrine should draw a distinction between theory and practice. Theory is less constrained by limited empirical context, and designed to encourage debate and introspection with an eye towards improving military advantage. It is part of a vital, iterative investigation of what works under particular circumstances, and why. Theoretical discussion is critical to a successful military. To date, however, a truly enduring, all-encompassing theory of airpower—one that is not merely a point in time—has yet to be developed. Thus, this publication does not present a comprehensive theory for airpower. Instead, it focuses on those ideas and validated concepts, grounded in experience and Service consensus. This is the heart of doctrine.

Finally, a study of airpower doctrine should also distinguish between doctrine and public relations-like pronouncements concerning the Air Force’s role. There have been many of the latter since the Air Force’s inception. Some have been developed with an eye towards influencing public and congressional perception of the Air Force’s role and value. Others have been made in a strategic planning context (e.g., a “vision-mission-goals” development process) that are a normal part of formal, long range corporate planning. Such statements are not enduring and not doctrine; they should be viewed in the context in which they were created.
The term “doctrine” is frequently (and incorrectly) used when referring to policy or strategy. These terms are not interchangeable; they are fundamentally different. Because policy and strategy may impact each other, it is important to first understand their differences before delving into a discussion of doctrine.

- **Policy is guidance that is directive or instructive, stating what is to be accomplished.** It reflects a conscious choice to pursue certain avenues and not others. Thus, while doctrine is held to be relatively enduring, policy is more mutable and also directive. Policies may change due to changes in national leadership, political considerations, or for fiscal reasons. At the national level, policy may be expressed in such broad vehicles as the National Security Strategy or Presidential Executive Orders. Within military operations, policy may be expressed not only in terms of objectives, but also in rules of engagement (ROE)—what we may or may not strike, or under what circumstances we may strike particular targets.

- **Strategy defines how operations should be conducted to accomplish national policy objectives.** Strategy is the continuous process of matching ends, ways, and means to accomplish desired goals within acceptable levels of risk. Strategy originates in policy and addresses broad objectives, along with the designs and plans for achieving them.

- **Doctrine presents considerations on how to accomplish military goals and objectives.** It is a storehouse of analyzed experience and
In practice, as leaders develop strategies for particular contingencies, political, economic, or social considerations may dictate strategic and operational approaches that modify or depart from accepted doctrine. As an example, doctrine may support long-range, air-to-air engagements beyond visual range, or high altitude interdiction of surface targets, both using long-range sensors; ROE, however, may require visual identification of all targets before firing due to political concerns over fratricide or collateral damage. If policy seriously affects the application of doctrine, military commanders should describe for political leaders the military consequences of those adaptations. However, because war is “an instrument of policy,” military commanders should ensure that policy governs the employment of military power and thus tailor their operations accordingly.
USES OF DOCTRINE

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One way to explore good doctrine is to use a “compare and contrast” model to walk through some key issues. This technique also amplifies the point that doctrine should be written broadly, allowing decision makers latitude in interpretation and flexibility in application, yet be specific enough to provide informed guidance. This technique also illustrates the use of doctrine in explaining contentious issues and how doctrine can be used to think more effectively about the best means to integrate various aspects of military power and organization. In the following discussion, there may be overlap among some of the principles expressed; this is desirable in that often there are different aspects or nuances to a particular issue. In doctrine, language is important. Finally, the following discussion presents an Air Force perspective; not all Services may entirely agree with these points.

Doctrine is about warfighting, not physics. This principle specifically addresses the perceived differences between operations in air, space, and cyberspace. Air, space, and cyberspace are separate domains requiring exploitation of different sets of physical laws to operate in, but are linked by the effects they can produce together. To achieve a common purpose, air, space, and cyberspace capabilities need to be integrated. Therefore, Air Force doctrine focuses on the best means to obtain warfighting effects regardless of the medium in which a platform operates. As an example, Airmen should be concerned with the best means of employing intelligence, surveillance, and reconnaissance (ISR) capabilities, not whether a particular ISR platform is airborne or in orbit. This is requisite to achieving true integration across any given collection of forces.

Doctrine is about effects, not platforms. This focuses on the desired outcome of a particular action, not on the system or weapon itself that provides the effect. For example, doctrine states that Airmen should seek to achieve air superiority, but doctrine does not focus on which platforms should be used to achieve that effect. A parallel example of this is seen in the recognition that bombers are not “strategic,” nor are fighters “tactical.” Similarly, it does not matter if an F-16 or a B-52 accomplishes a given task, or whether a particular platform is manned or unmanned, or whether a C-17 or a C-130 delivers a certain load; the outcome of the mission, the effect achieved, is what’s important. Thus, Air Force doctrine does not explicitly tie specific weapon systems to specific tasks or effects.

Doctrine is about using mediums, not owning mediums. This illustrates the importance of properly using a medium to obtain the best warfighting effects, not of carving up the battlespace based on Service or functional parochialism. Focusing on
using a medium is a vital first step to integration of efforts. “Ownership” arguments eventually lead to suboptimal (and usually at best tactical) application of efforts at the expense of the larger, total effort.

Doctrine is about **organization**, not **organizations**. Modern warfare demands that disparate parts of different Services, different nations, and even differing functions within a single Service be brought together intelligently to achieve **unity of effort** and **unity of command**. However, merely placing different organizations together in an area of operations is insufficient to meet these demands. A single, cohesive organization is required with clearly defined lines of command and commanders with requisite authorities at appropriate levels. Doctrine explains why certain organizational structures are preferred over others and describes effective command relationships and command authorities; this facilitates the rapid standup of joint and Service organizations during rapidly evolving situations. Ultimately, doctrine is not about whether one particular element of a joint force is more decisive than another, nor about positing that element as the centerpiece of joint operations; it’s the total, tailored joint force that’s decisive. Getting to that effective joint force requires smart organization and a thorough understanding of Service and joint doctrine.

Doctrine is about **synergy**, not **segregation**. True integration of effort cannot be achieved by merely carving up the operational environment. While segregation may have some benefit and may appear the simplest way, from a command and control viewpoint, to manage elements of a diverse joint force, it may actually suboptimize the overall effort. It guarantees that the whole will never be greater than the sum of its parts. For example, Airmen should have access to the entire theater of operations to maximize their ability to achieve **joint force commander** (JFC) objectives; they should not be restricted from any area due to unnecessarily restrictive fire control measures. Also, segregating the battlespace into smaller **areas of operation** may create competition for scarce, high-demand, low-density capabilities and reduce combat effectiveness.

Doctrine is about **integration**, not just **synchronization**. **Synchronization** is “the arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time” (JP 1-02). **Integration**, by comparison, is “the arrangement of military forces and their actions to create a force that operates by engaging as a whole” (JP 1-02). Synchronization is, in essence, deconfliction in time and space between different units. It is a useful means to plan and execute operations and to prevent fratricide. However, it doesn’t scale up to the **operational level** and hence is not the best means for achieving the maximum potential of a joint force. Synchronization emphasizes timing, while integration considers priority and effect to be both efficient and effective with scarce resources. Synchronization is bottom-up; integration, on the other hand, starts at the top with a single cohesive plan and works downward. Synchronization is an additive “sum of the parts” model, while integration may produce geometric results.
Doctrine is about the right force, not just equal shares of the force. This addresses the proper mix of Service components within a joint force. Some believe that a joint force requires equal parts of all the Services. This is an incorrect view. As one senior Air Force officer said, “joint warfighting is not like Little League baseball, where everybody gets a chance to play.” Any given joint force should be tailored appropriately for the task at hand. Some operations will be land-centric, others air-centric, others maritime-, cyberspace-, or information-centric. The composition of the joint force and the tasks assigned its various elements should reflect the needs of the situation.
Doctrine should be based in critical analysis and the lessons of warfare rather than driven by rapidly changing policies, promising technologies, individual personalities, budget battles, and politically trendy catch-phrases. Doctrine should not be written to backwards-justify a policy position or codify a uniquely-tailored organization. As such, doctrine reflects what has worked best with full consideration of what has worked poorly. In those less frequent instances in which experience is lacking or difficult to acquire, doctrine may be developed through analysis of exercises, wargames, and experiments. The military experience of other nations should also be considered.

It should be emphasized that doctrine development is never complete. Any given doctrine document is a snapshot in time—a reflection of the thinking at the time of its creation. Innovation has always been a key part of sound doctrinal development and continues to play a central role. Doctrine should evolve as new experiences and advances in technology point the way to the operations of the future.

Three constantly evolving variables affect doctrine: theory, experience, and technology. Sound doctrine strikes a balance among all three.

 THEORY may be an excellent starting point, but doctrine based solely on theory may not survive contact with reality. An

—Maj Gen I.B. Holley, Technology and Military Doctrine
example of this is the Army Air Corps’ advocacy of daylight precision bombing; bombers initially had neither the necessary precision nor the survivability required to implement the theory. On the other hand, theory can support technological investment and experimentation, as in the German Wehrmacht’s decision in the interwar years to pursue air-ground integration. A good grasp of operational art can provide the flexibility to adapt new theories within real-world situations, and prevent doctrine from becoming dogma.

While experience plays a major role in doctrine formulation, too great a reliance on past experience leaves one open to always fighting the last war. Experience must be tempered with current realities to develop future plans. New technology can provide solutions to long-standing problems, as the advent of mobile, mechanized forces and aviation overcame the stalemate of trench warfare. Theories of war, sufficiently taught, should be open to reinterpretation in light of current circumstance. The US military experienced this in its recent formulation of doctrine for irregular warfare.

Technology constantly evolves, but by itself is not a panacea. While technology alone may be good at providing single-point solutions, technology should be acquired with due consideration for operational art and design, taking into consideration theory and experience; sound reasoning must accompany realistic projections of what capabilities will actually be available to warfighters. Discussion in the 1990s of the “Revolution in Military Affairs” pointed to a similar interplay of ideas involving technology, organization, and doctrine. Thinking at that time held that all three were necessary to achieve a “revolution.” Thus, technology should not be acquired in isolation.
As implemented in the Air Force, doctrine affects operations at three levels: basic, operational, and tactical. These levels speak to the intellectual content of the doctrinal concepts, not to the architectural structure of doctrine publications.

- **Basic doctrine** states the most fundamental and enduring beliefs that describe and guide the proper use, presentation, and organization of forces in military action. It describes the “elemental properties” of airpower and provides the Airman’s perspective. Because of its fundamental and enduring character, basic doctrine provides broad and continuing guidance on how Air Force forces are organized, employed, equipped, and sustained. Because it expresses broad, enduring fundamentals, basic doctrine changes relatively slowly compared to the other levels of doctrine. As the foundation of all doctrine, basic doctrine also sets the tone and vision for doctrine development for the future. Air Force Doctrine Volume 1 is the Air Force’s basic doctrine publication.

- **Operational doctrine** contained in doctrine annexes describe more detailed organization of forces and applies the principles of basic doctrine to military actions. Operational doctrine guides the proper organization and employment of air, space, and cyberspace forces in the context of distinct objectives, force capabilities, broad functional areas, and operational environments. Operational doctrine provides the focus for developing the missions and tasks to be executed through tactical doctrine. Doctrine at this level changes a bit more rapidly than basic doctrine, but usually only after deliberate internal Service debate.

- **Tactical doctrine** describes the proper employment of specific Air Force assets, individually or in concert with other assets, to accomplish detailed objectives. Tactical doctrine considers particular objectives (stopping the advance of an armored column) and conditions (threats, weather, and terrain) and describes how Air Force assets are employed to accomplish the tactical objective (B-1 bombers dropping antiarmor cluster munitions). Air Force tactical doctrine is codified as tactics, techniques, and procedures (TTP) in Air Force TTP (AFTTP) -3 series manuals. Because tactical doctrine is closely associated with the employment of technology and emerging tactics, change will likely occur more rapidly than other levels of doctrine. Also, due to their sensitive nature, many TTPs are classified.
There are three types of doctrine: Service, joint, and multinational.

- **Service doctrine** outlines Service capabilities and guides the application of Service forces.

- **Joint doctrine**, as it applies to **airpower** in joint operations, describes the best way to integrate and employ air, space, and cyberspace capabilities with land, maritime, and special operations forces in military action.

- **Multinational doctrine**, as it applies to airpower, describes the best way to integrate and employ US air forces with the forces of allies in coalition warfare. It establishes principles, organization, and fundamental procedures agreed upon between or among allied forces. When developed as a result of a treaty, as in North Atlantic Treaty Organization (NATO) doctrine, multinational doctrine is directive.
The doctrinal maxims of this document are based on experience, hard-won with the blood of Airmen, and tempered by advances in technology. If properly employed, doctrine can lead to great success, and if ignored, can lead (and has led) to disaster. Therein lies the challenge: doctrine should convey the lessons of the past to guide current operations, but should still be flexible enough to adapt to change. Yet while forming that baseline for current operations, doctrine also provides a baseline for future thinking. One way to put this relationship into perspective is to understand the different uses of vision, operating concepts, and doctrine.

If placed along a continuum, doctrine, operating concepts, and vision provide a model for thinking about future technology, operating constructs, and doctrine in a coherent temporal framework.

 Doctrine is focused on near-term operational issues and describes the proper employment of current capabilities and current organizations. Doctrine addresses how best to employ, how to organize, and how to command today’s capabilities. Doctrine is examined and validated during training, exercises, contingency operations, and times of war. Exercises, wargaming, and experiments allow us to test emerging doctrinal concepts and better align predicted capabilities with sound operational practices. Experience during conflict refines doctrine in real time. Encounters with unpredictable adversaries often highlight doctrinal gaps and provide fresh perspectives on historic and future challenges.

 Operating concepts generally look out from five to fifteen years, and postulate reasonable operating scenarios that, through a combination of analysis and the use of descriptive examples, examine a range of issues such as employment, operating environment, command and control, support, organization, and planning considerations. As new technologies mature to the point where their performance can be reasonably bounded as a new, separate system or part of another system, they can be
examined within the framework of an operating concept. Depending on their purpose, operating concepts can speak to the present, near future, or distant future. Operating concepts define the parameters of envisioned capabilities. Experiments, wargames, and historical study, when honestly and rigorously conducted, are useful methods for evaluating new operating concepts and providing a basis for doctrinal considerations.

Vision statements describe key operating constructs and desired operational capabilities well in the future, usually fifteen years out and beyond. Vision serves to focus technology investments toward achieving these capabilities. Emerging concepts and technologies are best investigated through experimentation and wargaming techniques. As future concepts are envisioned, it is important to also examine doctrine to support these potential capabilities. Vision provides the basis for wargaming, and the results of wargaming may point to doctrinal considerations requiring further examination.

Using doctrine, operating concepts, and vision, the Air Force can look toward the future and consider the long-term impacts of advanced technologies such as directed energy weapons, new unmanned systems, new space capabilities, and conceptual advancements. As this framework builds from the general (long term) to the specific (near term), Airmen can investigate a wide range of doctrine, organization, training, materiel, logistics, personnel, and facilities issues at the appropriate point during technology development, concept exploration, and systems acquisition.
This section introduces the fundamentals that guide the application of airpower. It is written primarily for members of the US Air Force, but it is also applicable to anyone with the appellation of "airman," including those of other Services and nations who share the Air Force's perspective articulated in this document. Accordingly, the following discussion of airpower is intentionally not Service-specific; aspects of airpower are used across the joint force and by coalition partners. However, Airmen have a special appreciation for airpower's broader potential. Unlike our counterparts in the other Services, Airmen do not view or study airpower as an auxiliary or complementary capability subordinate to some other branch of our Service necessary to accomplishing assigned functions or tasks. Instead, we view our expertise in the application of airpower as the main reason for the existence of an Air Force. The Air Force does not view or use airpower organically to support Service component objectives; the Air Force employs airpower to achieve the JFC's objectives and to complement the other components of the joint force.
Airpower is the ability to project military power or influence through the control and exploitation of air, space, and cyberspace to achieve strategic, operational, or tactical objectives. The proper application of airpower requires a comprehensive doctrine of employment and an Airman’s perspective. As the nation’s most comprehensive provider of military airpower, the Air Force conducts continuous and concurrent air, space, and cyberspace operations. The air, space, and cyberspace capabilities of the other Services serve primarily to support their organic maneuver paradigms; the Air Force employs air, space, and cyberspace capabilities with a broader focus on theater-wide and national-level objectives. Through airpower, the Air Force provides the versatile, wide-ranging means towards achieving national objectives with the ability to deter and respond immediately to crises anywhere in the world.

Airpower exploits the third dimension of the operational environment; the electromagnetic spectrum; and time to leverage speed, range, flexibility, precision, tempo, and lethality to create effects from and within the air, space, and cyberspace domains. From this multi-dimensional perspective, Airmen can apply military power against an enemy’s entire array of diplomatic, informational, military, and economic instruments of power, at long ranges and on short notice. Airpower can be applied across the strategic, operational, and tactical levels of war simultaneously, significantly increasing the options available to national leadership. Due to its range, speed, and flexibility, airpower can compress time, controlling the tempo of operations in our favor. Airpower should be employed with appropriate consideration of land and maritime power, not just during operations against enemy forces, but when used as part of a team that protects and aids friendly forces as well.

Much of what airpower can accomplish from within these three domains is done to critically affect events in the land and maritime domains—this is the heart of joint-domain integration, a fundamental aspect of airpower’s contribution to US national interests. Airmen integrate capabilities across air, space, and cyberspace domains to achieve effects across all domains in support of joint force commander objectives. For example, a remotely piloted aircraft operating from a ground station in the continental US (CONUS) relies on space and cyberspace capabilities to support operations overseas. While all Services rely more and more on such integration, cross-domain integration is fundamental to how Airmen employ airpower to complement the joint force.
Airmen exploit the third dimension, which consists of the entire expanse above the earth’s surface. Its lower limit is the earth’s surface (land or water), and the upper limit reaches toward infinity. This third dimension consists of the air and space domains. From an operational perspective, the air domain can be described as that region above the earth’s surface in which aerodynamics generally govern the planning and conduct of military operations, while the space domain can be described as that region above the earth’s surface in which astrodynamics generally govern the planning and conduct of military operations. Airmen also exploit operational capabilities in cyberspace. Cyberspace is “a global domain within the information environment consisting of the interdependent network of information technology infrastructures, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers.” In contrast to our surface-oriented sister Services, the Air Force uses air, space, and cyberspace capabilities to create effects, including many on land and in the maritime domains, that are ends unto themselves, not just in support of predominantly land or maritime force activities.

The evolution of contemporary airpower stems from the Airman’s original vision of combat from a distance, bypassing the force-on-force clash of surface combat. Originally manifest in long-range aircraft delivering kinetic weapons, airpower has evolved over time to include many long-range supporting capabilities, notably the conduct of networked information-related operations. This evolution has accelerated as Airmen conduct a greater percentage of operations not just over-the-horizon but

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1 JP 3-30, Command and Control for Joint Air Operations, formally defines the air domain as “the atmosphere, beginning at the Earth’s surface, extending to the altitude where its effects upon operations become negligible.” The description offered above is used to more easily illustrate the difference between the air and space domains using parallel language.
globally, expanding operations first through space and now also in cyberspace. Just as airpower grew from its initial use as an adjunct to surface operations, space and cyberspace have likewise grown from their original manifestations as supporting capabilities into warfighting arenas in their own right.
Airpower provides the Nation and the joint force with unique and valuable capabilities. **Airmen should understand the intellectual foundations behind airpower and articulate its proper application at all levels of conflict; translate the benefits of airpower into meaningful objectives and desired effects; and influence the overall operational planning effort from inception to whatever post-conflict operations are required.**

Airpower stems from the use of lethal and nonlethal means by air forces to achieve strategic, operational, and tactical objectives. The Air Force can rapidly provide national leadership and joint commanders a wide range of military options for meeting national objectives and protecting national interests.

Elevation above the earth’s surface provides relative advantages and has helped create a mindset that sees conflict more broadly than other forces. Broader perspective, greater potential speed and range, and three-dimensional movement fundamentally change the dynamics of conflict in ways not well understood by those bound to the surface. The result is inherent flexibility and versatility based on greater mobility and responsiveness. Airpower’s speed, range, flexibility, and versatility are its outstanding attributes in both space and time. This combination of attributes provides the foundation for the employment concepts of airpower.

With its speed, range, and three-dimensional perspective, **airpower operates in ways that are fundamentally different from other forms of military power.** Airpower has the ability to conduct operations and impose effects throughout an entire theater and across the **range of military operations** (ROMO), unlike surface...
forces that typically divide up the battlefield into individual operating areas. Airmen generally view the application of force more from a functional than geographic standpoint, and classify targets by generated effects rather than physical location.

By making effective use of the third dimension, the electromagnetic spectrum, and time, airpower can seize the initiative, set the terms of battle, establish a dominant tempo of operations, better anticipate the enemy through superior observation, and take advantage of tactical, operational, and strategic opportunities. Thus, airpower can simultaneously strike directly at the adversary’s centers of gravity, vital centers, critical vulnerabilities, and strategy. Airpower’s ability to strike the enemy rapidly and unexpectedly across all of these critical points adds a significant impact to an enemy’s will in addition to the physical blow. This capability allows airpower to achieve effects well beyond the tactical effects of individual actions, at a tempo that disrupts the adversary’s decision cycle.

Airpower can be used to rapidly express the national will wherever and whenever necessary. Within 36 hours of the deployment order, Air Force F-15s were flying combat air patrols over Saudi Arabia in response to the Iraqi invasion of Kuwait in 1990. More recently, Air Force forces demonstrated that same rapid-response capability by airlifting desperately needed supplies into tsunami-stricken areas of South and Southeast Asia and earthquake-stricken Haiti. The world at large perceives American airpower to be a politically acceptable expression of national power which offers reasonable alternatives to long, bloody ground battles while making an impact on the international situation. While a “boots-on-the-ground” presence may often be required, airpower makes that presence more effective, in less time, and often with fewer casualties. Increasingly, US national power and international influence are gauged in terms of what we can or cannot accomplish with this capability.

The Air Force provides national leadership and joint commanders with options, the threat of which may accomplish political objectives without the application of lethal force. The means is embedded in the ability to respond rapidly to crises anywhere in the world and across the ROMO. An obvious example is the deterrent role played by the Air Force’s nuclear-armed bombers and intercontinental ballistic missiles against the Soviet Union during the Cold War. More recently, B-52 and B-2 bombers have rotated into Guam to provide a ready and visible presence.

The Air Force provides the unique ability to hold at risk a wide range of an adversary’s options and possible courses of action; this is increasingly the key to successful joint campaigns. Airpower is increasingly the first military instrument brought to bear against an enemy in order to favorably influence the overall campaign. Frequently, and especially during the opening days of a crisis, airpower may be the only military instrument available to use against an enemy; this may be especially true if friendly ground forces are not immediately present in a given region.

Air Force forces can respond rapidly to apply effects. The same spacecraft which Airmen employ to observe hostile territory prior to the outbreak of hostilities provide key
intelligence to battle planners. The same aircraft which provide visible deterrence to a potential aggressor can be employed immediately to defend or attack should deterrence fail. The shift from deterrent force to combat power is near-instantaneous. From ready deterrent to bombs-on-target is only a question of command and control and flight time.

Airpower is more than dropping bombs, strafing targets, firing missiles, providing precision navigation and timing, or protecting networks. It is also a way of influencing world situations in ways which support national objectives. To most observers in the post-Cold War world, the use of military power is politically less acceptable than in previous times. This is true even if we act in a purely humanitarian endeavor or influence a given international political situation with a modest show of force. In international disasters, natural or man-made, from the Berlin Airlift to earthquake relief operations in Pakistan, the Air Force is the only military force in the world which has the airlift and air refueling capability to provide immediate relief supplies and personnel in response to global emergencies. Air Force aircraft delivering relief supplies serve not only to alleviate the immediate situation, but also to provide a visible symbol of the care, concern, and capability of the United States. Through careful building of partnerships, Air Force forces can favorably shape the strategic environment by assessing, advising, training, and assisting host nation air forces in their efforts to counter internal or external threats. The perception of credible US forces underpins many deterrence and assurance strategies. Such activities lead to greater regional stability and security.

Within the broad sweep of history, the benefits of this instrument of military power are relatively new. Up until the latter part of the 20th century, naval forces provided the primary symbol of American military power and resolve; powerful warships making port calls throughout the world were visible symbols of the strength and capability of the US. Today, airpower plays a very similar role—and not just in those nations with major seaports. In numerous humanitarian operations, Airmen have provided relief, demonstrated resolve, and helped to shape the attitudes of world leaders and their people.

This influence is more than just airplanes. US space-based assets are a non-intrusive method of providing up-to-the-minute warning and information on the maneuver of hostile military forces or other potentially dangerous actions. The United States often shares this information with friendly nations in response to potential adversaries to defuse points of conflict before they result in hostilities. US air, space, and cyberspace capabilities provide the means to alert allies of a potential aggressor's hostile intentions or impending attack when in-country physical presence is unwarranted. They can influence potential adversaries by stripping them of the ability to hide hostile military activity without violating national sovereignty.

Airpower’s speed, range, flexibility, precision, and lethality provide a spectrum of employment options with effects that range from tactical to strategic. This range of effects is an important contribution. A surface-centric strategy often seeks its outcome through the destruction of hostile land forces and the occupation of territory.
However, destruction of hostile land forces may be only a tactical or operational objective and may not achieve the desired strategic outcome. Further, territorial occupation, with its attendant large cultural footprint, may not be feasible or politically acceptable. Sea power, with its ability to project force and disrupt the economic lifeline of a maritime-capable adversary, also provides the potential for strategic results. However, slow surface speeds can constrain its capability to respond rapidly from one theater to another. In addition, it may be extremely vulnerable in littoral regions. Often, in such circumstances, the political risks outweigh the actual military risks.

Airpower, on the other hand, has been successfully used to influence strategic political outcomes in many world crises since the Berlin Airlift of 1948. Throughout the Cold War, and continuing under various international arms control agreements, Air Force assets have been used to observe and verify compliance, leveraging our ability to negotiate and influence diplomatically. If force becomes necessary, Air Force assets can secure strategic outcomes at any time by overflying surface forces and thus bypassing geographical boundaries, or striking with precision at the critical vulnerabilities within an adversary's political, military, and industrial centers of gravity. Even in situations when joint strategy requires large-scale destruction of enemy surface forces, Air Force forces can deliver the bulk of that destruction. It can do these things sooner than can other military forces, and it has been demonstrated that the earlier the application of effects, usually the less total force required. In humanitarian cases, the earlier the relief, the better the effect.

Operating in a seamless medium, there are no natural boundaries to constrain air, space, and cyberspace operations. Through centralized control and decentralized execution of Air Force assets, commanders reap the benefits of airpower throughout the ROMO, wherever most needed at any given time.

**Airpower has a degree of versatility not found in any other force.** Many aircraft can be employed in a variety of roles and shift rapidly from the defense to the offense. Aircraft may conduct a close air support mission on one sortie, then be rearmed and subsequently used to suppress enemy surface-to-surface missile attacks or to interdict enemy supply routes on the next. In time-sensitive scenarios, aircraft en route to one target, or air mobility aircraft in support of one mission, can be reassigned new targets or re-missioned as new opportunities emerge. Multirole manned and unmanned platforms may perform intelligence, surveillance, and reconnaissance, command and control, and attack functions all during the same mission, providing more potential versatility per sortie. Finally, aircraft can be repositioned within a theater to provide more responsiveness, while space and cyberspace capabilities can be reprioritized.

Joint campaigns rely upon this versatility. However, many airpower capabilities are limited in number; dividing or parceling out airpower into "penny-packets" violate the tenet of synergy and principle of mass. To preserve unity of effort, joint force commanders normally vest a single air commander with control of all airpower capabilities.
Historically, armies, navies, and air forces massed large numbers of troops, ships, or aircraft to create significant impact on the enemy. Today, the technological impact of precision guided munitions enables a relatively small number of aircraft to directly achieve national as well as military strategy objectives. When combined with stealth technologies, airpower today can provide shock and surprise without unnecessarily exposing friendly forces. To destroy a single target, we no longer need the thousand-plane bomber raids of World War II or the hundreds of sorties of Vietnam. Today’s air forces can provide accurate and assured destruction of vital targets with far fewer aircraft, sometimes multiple targets with a single aircraft. Moreover, that capability can be delivered from within the theater or around the globe if necessary. Whether in the skies of Iraq and Afghanistan, delivering United Nations peacekeeping troops to Africa, or monitoring nuclear weapons proliferation and development, Air Force forces have a far-reaching presence and the ability to produce direct and immediate effects.

With all those characteristics considered, one should remember that **air, space, and cyberspace superiority are the essential first ingredients in any successful modern military operation**. Military leaders recognize that successful military operations can be conducted only when they have gained the required level of control of the domains above the surface domains. Freedom to conduct land and naval operations is substantially enhanced when friendly forces are assured that the enemy cannot disrupt operations from above.

Control of the air, space, and cyberspace domains is not a goal for its own sake, but rather a prerequisite for all other military operations. Air mastery has allowed American land, naval, and air forces to operate where they want, at their own tempo, while creating the environment for success.
“AIRMINDEDNESS”

The perspective of Airmen is necessarily different; it reflects a unique appreciation of airpower’s potential, as well as the threats and survival imperatives unique to Airmen. The study of airpower leads to a particular expertise and a distinctive point of view that General Henry H. “Hap” Arnold termed “airmindedness.”

Airmen normally think of airpower and the application of force from a functional rather than geographical perspective. Airmen do not divide up the battlefield into operating areas as some surface forces do; airmindedness entails thinking beyond two dimensions, into the dimensions of the vertical and the dimension of time. Airmen think spatially, from the surface to geosynchronous orbit. Airmen typically classify targets by the effect their destruction would have on the adversary instead of where the targets are physically located. This approach normally leads to more inclusive and comprehensive perspectives that favor strategic solutions over tactical ones. Finally, Airmen also think of power projection from inside the United States to anywhere on the globe in hours (for air operations) and even nanoseconds (for space and cyberspace operations).

Airmindedness impacts Airmen’s thoughts throughout all phases of operations. It is neither platform- nor situation-specific. Airmindedness enables Airmen to think and act at the tactical, operational, and strategic levels of war, simultaneously if called for. Thus, the flexibility and utility of airpower is best fully exploited by an air-minded Airman.

“[Airmindedness] is a global, strategic mind-set providing perspective through which the battlespace is not constrained by geography, distance, location, or time. The air-mindedness lens enables Airmen to think about conflict in which force-on-force and armies in the field are only one element. It implies the ability to influence the links between adversary materiel and moral strength. Although Airmen rarely claim to target the enemy’s will, they perceive a direct connection between his physical capacity and desire to continue the fight.”

The practical application of “airmindedness” results in the Airman’s unique perspective, which can be summarized as follows.

Control of the vertical dimension is generally a necessary precondition for control of the surface. The first mission of an air force is to defeat or neutralize the enemy air forces so friendly operations on land, sea, in the air, and in space can proceed unhindered, while at the same time one’s own military forces and critical vulnerabilities remain safe from air attack.

Airpower is an inherently strategic force. War and peace are decided, organized, planned, supplied, and commanded at the strategic level of war. Air Force forces can hold an enemy’s strategic centers of gravity and critical vulnerabilities directly at risk immediately and continuously. Airpower also has great strategic capability for non-lethal strategic influence, as in humanitarian relief and building partnership activities.

Airpower can exploit the principles of mass and maneuver simultaneously to a far greater extent than surface forces. There are no natural lateral boundaries to prevent air, space, and cyberspace capabilities from quickly concentrating their power (physically or in terms of delivered effects) at any point, even when starting from widely dispersed locations. Airpower dominates the fourth dimension—time—and compresses the tempo of events to produce physical and psychological shock.

Airpower can apply force against many facets of enemy power. Air Force-provided capabilities can be brought to bear against any lawful target within an enemy’s diplomatic, informational, military, economic, and social structures simultaneously or separately. They can be employed in support of national, combined/joint, or other component objectives. They can be integrated with surface power or employed independently.

Air Force forces are less culturally intrusive in many scenarios. Surface forces are composed of many people and vehicles which, when arrayed for operations, cover a significant area. Thus, their presence may be very visible to local populations and may create resentment during certain types of stability operations and in counterinsurgency operations. Air Force forces, operating from bases over the horizon or from just a few bases in-country, have a smaller footprint for the effects they provide. Space and cyberspace forces have a negligible in-theater footprint relative to the capabilities they provide.
Airpower’s inherent speed, range, and flexibility combine to make it one of the most versatile components of military power. Its versatility allows it to be rapidly employed against strategic, operational, and tactical objectives simultaneously. The versatility of airpower derives not only from the inherent characteristics of air forces themselves, but also from the manner in which they are organized and controlled.

Airpower results from the effective integration of capabilities, people, weapons, bases, logistics, and all supporting infrastructure. No one aspect of air, space, and cyberspace capabilities should be treated in isolation since each element is essential and interdependent. Ultimately, the Air Force depends on the performance of the people who operate, command, and sustain air, space, and cyberspace forces.

The choice of appropriate capabilities is a key aspect in the realization of airpower. Weapons should be selected based on their ability to create desired effects on an adversary’s capability and will. Achieving the full potential of airpower requires timely, actionable intelligence and sufficient command and control capabilities to permit commanders to exploit precision, speed, range, flexibility, and versatility.

Supporting bases with their people, systems, and facilities are essential to launch, recovery, and sustainment of Air Force forces. One of the most important aspects of the Air Force has proved to be its ability to move anywhere in the world quickly and then rapidly begin operations. However, the need for mobility should be balanced against the need to operate at the deployment site. The availability and operability of suitable bases can be the dominant factor in employment planning and execution.

Airpower’s unique characteristics necessitate that it be centrally controlled by Airmen. Airpower can quickly intervene anywhere, regardless of whether it is used for strategic or tactical purposes. Thus, Airmen tend to take a broader view of war, because the capabilities they command have effects at broader levels of war. Airmen apply airpower through the tenet of centralized control and decentralized execution.
Because war underpins the reason for the Air Force’s existence, an understanding of doctrine should also include an understanding of war. The ultimate objective of peacetime preparation of forces is their employment as instruments of national power to deter or win wars. Therefore, Airmen should understand the nature and consequences of war.

War is a violent struggle between rival parties to attain competing objectives. War is just one means used by nation-states, sub-national groups, or supranational groups to achieve disputed objectives. War has been a basic aspect of human affairs throughout history. The modern Western tendency to view war as an aberration in human affairs, only occasionally necessary as an operation with limited aims or an all-out campaign to destroy a clearly recognized evil, often distorts our understanding of warfare and its purposes. Warfare is ingrained in the very nature of certain cultures. While for nation states, war is an instrument of policy aiming at political objectives; it is also, even within this context, a phenomenon involving the full range of human emotions and irrationalities. War has a dynamic of its own, often fueled by pressures of the irrational: anger, fear, revenge, and hatred. Thus, the resort to violence rarely remains for long tied to cold, clear political objectives; it can—and has—moved in unexpected directions.

Military professionals operate in war within an environment that cannot be replicated in peacetime. They are asked to perform their work perhaps only a few times in their careers and then under very different circumstances from those for which they have prepared. Moreover, the arena in which military professionals operate is a deadly one.
Not only are they attempting, as General George Patton stated, to “make the other poor bastard die for his country,” the enemy is attempting to do the same to us. Consequently, war is an arena characterized by extraordinary fear, pain, and suffering and is further complicated by the effects of weather and terrain.
Three enduring truths describe the nature of war. Despite technological advances and the best of plans and intentions, war will never be as straightforward in execution as planned, nor free of unintended consequences. The particular characteristics usually change from conflict to conflict, but the nature of war remains eternal.

**War is an instrument of policy, strategy, or culture.** Victory in war is not measured by casualties inflicted, battles won or lost, number of tanks destroyed, or territory occupied, but by the achievement of (or failure to achieve) the strategy and policy objectives of nation states, and often the cultural objectives of all actors (including non- or supra-state entities). More than any other factor, these objectives—one's own and those of the enemy—shape the scope, intensity, and duration of war. To support US national policy objectives, military objectives and operations should be coordinated and orchestrated with nonmilitary and partner nation instruments of power. Prussian philosopher of war Carl von Clausewitz emphasized that war is a continuation of the policies of nations, but not all belligerents in war are organized nation states.

**War is a complex and chaotic human endeavor.** Irrational and non-rational human impulses and human frailties shape war’s nature—it is not deterministic. Uncertainty and unpredictability—what many call the “fog of war”—combine with danger, physical stress, and human fallibility to produce what Clausewitz called “friction,” which makes even simple operations unexpectedly and sometimes even insurmountably difficult.

**War is a clash of opposing wills.** War is collision of two or more living forces. War is not waged against an inanimate or static object, but against a living, calculating, interactively complex, adaptive opponent. The enemy often does not think as we think and often holds different values, motivations, and priorities than ours. Victory results from creating advantages against a thinking adversary bent on creating his own advantages. This produces a dynamic interplay of action and reaction. While physical factors are crucial in war, the will of the people and the character of their leaders are also critical components of war. Allied and enemy resolve—the determination to enforce ones will on one side and to resist on the other—can be the decisive element.

Success in war requires mastery of the art of war as well as the science of war. Warfare is one of the most complex of human activities. Success depends more on intellectual superiority, morale, and determination than it does on numerical and technological
superiority. Success thus demands an intricate combination of science (that which can be measured, studied, and controlled) and art (creativity, flexibility, intuition, and the ability to adapt). Sound doctrine, good leadership, effective organization, moral values, and realistic training can lessen the effects of uncertainty, unpredictability, and unreliability that are always present in war.
TRADITIONAL AND IRREGULAR WAR

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The US’ overwhelming dominance in recent conventional wars has made it highly unlikely that most adversaries would choose to fight the United States in a traditional, conventional manner. Thus, for relatively weaker powers (including non-state entities) irregular warfare has become an attractive, if not more necessary, option. Irregular warfare presents different challenges to our military and to the Air Force.

Traditional warfare is characterized as “a confrontation between nation-states or coalitions/alliances of nation-states”¹ (Joint Publication [JP] 1, Doctrine for the Armed Forces of the United States). This confrontation typically involves force-on-force military operations in which adversaries employ a variety of conventional military capabilities against each other in the air, land, maritime, space, and cyberspace domains. The objective may be to convince or coerce key military or political decision makers, defeat an adversary’s armed forces, destroy an adversary’s war-making capacity, or seize or retain territory in order to force a change in an adversary’s government or policies.

Irregular warfare is defined as “a violent struggle among state and non-state actors for legitimacy and influence over the relevant populations” (JP 1). Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capabilities in order to erode an adversary's power, influence, and will.

Traditional warfare and irregular warfare differ primarily by the approach and strategy used to achieve the effects desired. Traditional warfare seeks a change in the policies and practices, if not in the outright existence, of a government by coercing key government leaders or defeating them militarily. Irregular warfare, conversely, seeks to undermine a group, government, and/or ideology by influencing the population, which is often the center of gravity. The focus of irregular warfare is not primarily on the military or destructive capability of an adversary (state or non-state).

Irregular warfare is not a lesser-included form of traditional warfare. Rather, irregular warfare encompasses a variety of operations where the nature and characteristics are significantly different from traditional war. There are principally five activities or operations that are undertaken in sequence, in parallel, or in blended form

¹ Joint doctrine does not formally define traditional war. However, JP 1 contains this characterization.
in a coherent campaign to address irregular threats: counterterrorism, unconventional warfare, foreign internal defense, counterinsurgency, and stability operations.

Traditional warfare and irregular warfare are not mutually exclusive; both forms of warfare may be present in a given conflict. Airmen should understand that the character of war may often change in the course of a conflict. This is especially true in irregular warfare where the conflict is often protracted and varies in intensity. Traditional warfare can rapidly evolve into an irregular war and vice versa, requiring the military force to adapt from one form to the other.

Refer to Annex 3-2, Irregular Warfare, for detailed discussion on irregular warfare.
The role of culture in establishing the terms of conflict is another vital component that has increased in importance in recent operations. War among Western powers has always been seen as an adjunct to politics and commerce, and often as a dangerous distraction from them. The rewards of war are physical; psychological reinforcement comes predominantly from war’s spoils, not from war itself. In general, this view has led Western powers to try to force resolution as quickly and “cheaply” as practicable (in all but comparatively rare civil and religious wars), to seek decisive engagement with the enemy when possible, and to focus warfare upon defeat of the enemy’s fielded military forces. This was true even during Industrial Age conflicts, where the total moral and physical power of the nation-state was mobilized for war. This is the cultural legacy that has most heavily influenced the modern use of airpower.

People in other cultures often view things differently, and Airmen should be sensitive to these differences. In a number of non-Western societies around the globe, the cultural motivation for war is more deeply felt, causing them to fight in ways and for reasons that may seem strange to Americans. Some adhere to a warrior ethos, in which the act of waging war provides its own important psychological reinforcements. Some do not separate church, state, and popular culture in the Western manner, but see religion, politics, warfare, and even trade as part of a seamless whole. Thus, the wars they wage may take on the single-mindedness and ferocity of religious or civil wars.

US commanders should consider these factors when devising strategies to deal with adversaries from such cultures. They should seek to understand how the adversary thinks and not “mirror-image.” For example, during the Vietnam War the United States assumed that North Vietnamese motivations, priorities, and interests were similar to our own. This incorrect assumption significantly hampered the process of devising a winning strategy and prolonged the war. The United States should also carefully plan for stability and other operations that follow major combat, and constantly keep the conflict’s ultimate
end state in mind during combat operations, considering all possible means for creating effects and achieving objectives, not just those conventionally used for destruction of fielded forces.
Levels of War

Warfare is typically divided into three levels: strategic, operational, and tactical. These divisions have arisen because traditional war constrained forces to engage force-on-force, on the surface, at the tactical level, allowing effects to aggregate up from that level to the level of campaigns and other major operations, and finally to the level directly affecting an adversary’s ability to wage war altogether. However, Airmen should not define a given level by the specific weapons used, or on the targets attacked, but on the level of desired effects one wishes to create. A given aircraft, dropping a given weapon, could conduct a “tactical,” “operational,” or “strategic” mission, depending on the planned results. Given airpower’s inherent flexibility, any tactical mission with a given aircraft dropping given weapons can deliver a mix of intended effects, at all levels, from tactical to strategic.

Effects at the strategic level of war impair the adversary’s ability to carry out war or hostilities in general. Strategic effects should neutralize the adversary’s centers of gravity. At this level, the United States determines national or multinational (alliance or coalition) security objectives and guidance and uses all national resources to achieve objectives and desired end states. These national objectives in turn provide the direction for developing overall military objectives, which in turn are used to develop the military objectives and strategy for each theater or operation. Strategy is aimed at outcomes, thus strategic ends define this level. In some circumstances, there may be value in distinguishing between the nation’s strategy as a whole and what might be termed the “theater-strategic” level, at which particular combatant commanders determine and direct the overall outcomes of major operations (or “wars”) taking place within their particular areas of responsibility, explicitly tying these “theater-strategic” aims to overarching national strategy and policy. In general terms, the strategic level of war addresses the issues of WHY and WITH WHAT we will fight and WHY the enemy fights against us.

The operational level of war lies between the strategic and tactical levels. At this level, campaigns and major operations are designed, planned, conducted, sustained, assessed, and adapted to accomplish strategic goals within theaters or areas of operations. These activities imply a broader dimension of time or space than do tactics; they orchestrate tactical successes to achieve objectives at higher levels. The decision-making products at this level of planning identify required forces and resources balanced against operational risk. Operational effects such as air superiority, space superiority, cyberspace superiority, defeat of enemy surface forces, isolation of enemy forces in the battlespace, and disruption or destruction of enemy leadership functions...
are the means with which the operational commander supports the overall strategy. Operations involve the integration of tactical military missions and engagements to achieve strategic ends. Planning at **the operational level of war determines WHAT we will affect, with WHAT courses of action, in WHAT order, for WHAT duration, and with WHAT RESOURCES.**

At the lowest end of the spectrum lies the **tactical level of war**, where individual battles and engagements are fought. While resulting effects may be described as operational or strategic, military *actions* occur almost entirely at the tactical level. Thus, even a global strike mission intended to produce a direct strategic effect on an adversary COG is ultimately a tactical action. To the Airman, the distinction between this level and higher levels of war is fairly clear-cut; Airmen tend not to fight large-scale battles (as surface forces use the term) but focus at the tactical level on individual engagements and “missions.” The tactical level of air, space, and cyberspace warfare deals with how forces are employed, and the specifics of how engagements are conducted. Tactics are concerned with the unique employment of force, so application defines this level. In short, **the tactical level of war deals with HOW we fight.**
Military operations slide along an imprecise scale of violence and scale of military involvement, from theater-wide major operations and campaigns; to smaller scale contingencies and crisis response operations; to engagement, security cooperation, and deterrence operations. See figure, The Range of Military Operations. No two conflicts are alike; scope, duration, tempo, and political context vary widely. Some conflicts may even change from one form to another, either escalating or de-escalating; several may exist simultaneously. Military leaders carefully assess the nature of the missions they may be assigned, not only to properly determine the appropriate mix of forces but also to discern implied requirements. Some operations involve open combat between regular forces; in others, combat may be tangential to the main effort. In some operations, the US military’s contribution may not involve combat at all; simply providing an organizational framework for an interagency force and key elements of infrastructure may be all that’s required.

The various discrete military tasks associated with the ROMO are not mutually exclusive; depending on the scenario, there may be some overlap among the tasks. They may also occur within the context of a larger major operation. For example, some tasks, such as nation assistance or combating terrorism, may be required as part of the post-conflict stabilization phase immediately following a major conflict, and may even be initiated before the cessation of major operations. Even though there are many types of operations typically not involving combat, Airmen must understand that violence (and casualties) may occur in virtually any type of operation and, therefore, must be ready and able at all times to defend themselves and their units.

Many of the challenges our armed forces face today are more ambiguous and regionally focused than during the Cold War. These challenges address multiple risks, such as: economic and political transitions; repressive regimes; the spread of weapons of mass destruction; proliferation of cutting-edge military technology; violent extremists; militant nationalism; ethnic and religious conflict; refugee overflows; narcotics trafficking; environmental degradation; population displacement; and terrorism. The military instrument of national power, either unilaterally or in combination with the economic, informational, and diplomatic instruments, may be called upon to meet these challenges. Under such circumstances, early intervention through contingency operations may deter war, resolve conflict, relieve suffering, promote peace, or support civil authorities.
Military actions can be applied to complement any combination of the other instruments of national or international power. To leverage effectiveness, it is particularly important that actions be integrated, mutually reinforcing, and clearly focused on compatible objectives throughout the engaged force, whether US, allied, military, civilian, or nongovernmental organizations (NGOs). The overall goal of any operation, regardless of scale, is to pursue US national policy objectives and to counter potential threats to US national security interests.

Airpower capabilities are adaptable across the ROMO. Certain assets may be applied to attain strategic-, operational-, or tactical-level effects against limited objectives as effectively as those mounted against more “traditional” wartime targets. Whether providing rapid, focused global mobility; conducting information operations that shape and influence the situation; isolating operations from air or ground interference; or providing the eyes and ears of a sophisticated command and control system, the flexibility of air, space, and cyberspace forces is integral to all operations. Within the joint force, air component forces can be the supported force for specific tasks (strategic attack; airlift or special operations providing foreign humanitarian assistance or to conduct a limited raid; counterair to enforce an air exclusion zone; or information operations to determine treaty compliance), an enhancing force (air- and space-based intelligence, surveillance, and reconnaissance), or a supporting force (close air support, some interdiction, and some suppression of enemy air defenses). The specific tasks involved in any given operation vary greatly, depending on the context of the larger conflict or contingency, national policies and objectives, forces available to do the job,
and a host of other considerations. In a large, complex scenario, US forces may be performing several of these tasks simultaneously, in addition to combat operations.

For more detailed discussion on the ROMO, see Annex 3-0, *Operations and Planning*, and Joint Publication 1, *Doctrine for the Armed Forces of the United States*. 
The role of the Air Force is to defend the United States and protect its interests through airpower, guided by the principles of joint operations and the tenets of airpower. Airmen should understand these fundamental beliefs as they apply to operations across all domains, not just air, space, and cyberspace. This chapter presents these principles and tenets.

*The military student does not seek to learn from history the minutiae of method and technique. In every age these are influenced by the characteristics of weapons currently available and the means at hand for maneuvering, supplying, and controlling combat forces. But research does bring to light those fundamental principles, and their combinations and applications, which, in the past, have produced success.*

—General Douglas MacArthur
In conducting contemporary operations, commanders generally consider 12 broad principles collectively known as “the principles of joint operations.” They combine the long-standing principles of war and four other principles developed through recent experience in irregular warfare. See following figure, Principles of Joint Operations.

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1 Joint doctrine recognizes three additional principles. The Air Force recognizes Unity of Effort as a fourth additional principle to better highlight its importance.
Throughout the history of conflict, military leaders have noted certain principles that tended to produce military victory. From ancient times to today, certain “truths” of warfare have emerged. Known as the principles of war, they are “those aspects of warfare that are universally true and relevant” (Joint Publication 1, *Doctrine for the Armed Forces of the United States*). As members of the joint team, Airmen should appreciate how these principles apply to all forces, but should most fully understand them as they pertain to Air Force forces. Airpower, no matter which Service operates the systems and no matter which type of platform is used, provides unique capabilities. The principles of war—unity of command, objective, offensive, mass, maneuver, economy of force, security, surprise, and simplicity—are guidelines that commanders can use to form and select courses of action and concepts of operation.

These principles represent generally accepted “truths” which have proven to be effective throughout history. Of course, even valid principles are no substitute for sound, professional judgment—but to ignore them completely is to assume unnecessary risk. The complexity of war in general, and the unique character of each war in particular, preclude commanders from using these principles as a checklist to guarantee victory. Rather, they serve as valuable guides to evaluate potential courses of action. The principles are independent, but tightly fused in application. No one principle should be considered without due consideration of the others. These principles are not all-inclusive; the art of developing airpower strategies depends upon the Airman’s ability to view these principles from a three-dimensional perspective and integrate their application accordingly. The principles of war, combined with the additional tenets of airpower discussed later in this chapter, provide the basis for a sound and enduring doctrine for the air, space, and cyberspace forces of America’s joint force.

**Unity of Command**

*Unity of command ensures concentration of effort for every objective under one responsible commander.* This principle emphasizes that all efforts should be directed and coordinated toward a common objective. Airpower’s operational-level perspective calls for unity of command to gain the most effective and efficient application. Coordination may be achieved by cooperation; it is, however, best achieved by vesting a single commander with the authority and the capability to direct all force employment in pursuit of a common objective. In many operations, the wide-ranging interagency and nongovernmental organizations involved may dilute unity of command. Effective
Air operations, like any other military operations, are governed by the same fundamental principles that have governed warfare in the past. The selection of the objectives against which air operations are to be directed is thus of vital importance. Air operations must be pushed with energy and dispatch. Every opportunity must be seized to take full advantage of the element of surprise. Since the replacement of the personnel and equipment of air forces is both slow and costly, economy of force is specially important. Whereas it is always unwise to fritter away military forces, it is dangerous in the case of air forces. Air forces should accordingly be concentrated against the primary objective, the one most advantageous in the situation, and not dispersed or dissipated in minor or secondary operations.


Information-sharing arrangements may preserve unity of effort to ensure common focus and mutually supporting actions.

Unity of command is vital in employing airpower. Airpower is the product of multiple capabilities, and centralized control is essential to effectively fuse these capabilities and provide unity of command. Airmen inherently understand the entire range of airpower.

Objective

The principle of objective is to direct military operations toward a defined and attainable objective that contributes to strategic, operational, and tactical aims. In application, this principle refers to unity of effort in purpose, space, and time. In a broad sense, this principle holds that political and military goals should be complementary and clearly articulated. A clear National Military Strategy provides focus for defining campaign or theater objectives. At the operational level, campaign or theater objectives determine military priorities.

The objective is important due to the versatility of airpower. From the outset, airpower can pursue tactical, operational, or strategic objectives, in any combination, or all three simultaneously. By integrating the potential offered by air, space, and cyberspace capabilities, Airmen can overcome the challenges imposed by distance and time. From an Airman’s perspective, then, the principle of objective shapes priorities to allow airpower to concentrate on theater or campaign priorities and seeks to avoid the siphoning of force elements to fragmented objectives.

Offensive

The purpose of an offensive action is to seize, retain, and exploit the initiative. The offensive aim is to act rather than react and to dictate the time, place, purpose,
scope, intensity, and pace of operations. The initiative should be seized as soon as possible. The principle of the offensive holds that offensive action, or initiative, provides the means for joint forces to dictate operations. Once seized, the initiative should be retained and fully exploited.

This principle is particularly significant to airpower because it is best used as an offensive weapon. While defense may be dictated by the combat situation, success in war is generally attained only while on the offensive. Even highly successful defensive air campaigns such as the World War II Battle of Britain were based upon selective offensive engagements.

The speed and range of attacking airpower gives it a significant offensive advantage over other forces. In an air attack, for example, the defender often requires more forces to defend a given geospatial area than the attacker requires to strike a set of specific targets. The integration of air, space, and cyberspace capabilities enhances the advantages of speed, range and persistence found in airpower.

Although all military forces have offensive capabilities, airpower’s ability to mass and maneuver, and its ability to operate independently or simultaneously at the tactical, operational, and/or strategic levels of warfare, provides joint force commanders a resource with global reach to directly and rapidly seize the initiative. Whether deploying forces and supplies into a region, conducting combat operations, or maintaining information assurance, airpower provides the JFC the means to take the offensive. Through prompt and sustained offensive actions designed to attain operational and strategic objectives, airpower causes the enemy to react rather than act, denies them the offensive, and shapes the remainder of the conflict.

Mass

The purpose of mass is to concentrate the effects of combat power at the most advantageous place and time to achieve decisive results. Concentration of military power is a fundamental consideration in all military operations. At the operational level of war, this principle suggests that superior, concentrated combat power is used to achieve decisive results.

Airpower is singularly able to launch an attack from widely dispersed locations and mass combat power at the objective, whether that objective is a single physical location or a widely dispersed enemy system or systems. From an Airman’s perspective, mass is not based solely on the quantity of forces and materiel committed. Airpower achieves mass through effectiveness of attack, not just overwhelming numbers. Contemporary airpower has altered the concept of massed forces. The speed, range, and flexibility of airpower—complemented by the accuracy and lethality of precision weapons and advances in information technologies—allow it to achieve mass faster than other forces.

Air Force cyberspace capabilities, often enabled by space systems, allow dispersed forces to collaborate to rapidly find, fix, track, and target fleeting targets and mass a
response in new ways. Previously, operators and planners worked in relative proximity within the same theater of operations; today, those same planners and operators leverage distributed capabilities to apply precise effects around the globe.

_Airlift_ and _air refueling_ provide a significant and critical capability to mass lethal and nonlethal forces on a global scale. The capability of airpower to act quickly and mass effects, along with its capability to mass other lethal and nonlethal military power, combine the principle of mass with the next principle, maneuver.

**Maneuver**

**Maneuver places the enemy in a position of disadvantage through the flexible application of combat power in a multidimensional combat space.** Airpower's ability to conduct maneuver is not only a product of its speed and range, but also flows from its flexibility and versatility during the planning and execution of operations. Maneuver, like the principle of offensive, forces the enemy to react, allowing the exploitation of successful friendly operations and reducing friendly vulnerabilities. Airpower maneuver allows engagement anywhere, from any direction, at any time, forcing the adversary to be on guard everywhere.

The principle of maneuver is not limited to simple weapons delivery. Maneuver may involve the strategic positioning of capabilities that bring potential airpower to bear within striking distance of potential or actual adversaries. Forward deployment of airpower assets is one example of maneuver that by its very presence can reassure allies and deter aggressors. Also, in airlift operations such as SUPPORT HOPE in Rwanda, PROVIDE HOPE in the former Soviet Union, or PROVIDE PROMISE in Bosnia; focused _civil-military operations_ and exercises that support theater security cooperation goals, such as PACIFIC ANGEL; or combat operations such as ALLIED FORCE in Serbia, ENDURING FREEDOM in Afghanistan, or IRAQI FREEDOM in Iraq, airpower has played a critical role in American national security by providing unmatched maneuverability. Whether it involves airlift or attack aircraft, in small or large numbers, the versatility and responsiveness of airpower allow the simultaneous application of mass and maneuver.

**Economy of Force**

_Economy of force_ is the judicious employment and distribution of forces. Its purpose is to allocate minimum essential resources to secondary efforts. This principle calls for the rational use of force by selecting the best mix of air, space, and cyberspace capabilities. To ensure overwhelming combat power is available, maximum effort should be devoted to primary objectives. At the operational level, commanders ensure that any effort made towards secondary objectives does not degrade achievement of the larger operational or strategic objectives. This principle requires Airmen to maintain a broader operational view even as they seek to obtain clearly articulated objectives and priorities.
Economy of force may require a commander to establish a balance in the application of airpower between attacking, defending, delaying, or conducting other operations such as information operations, depending on the importance of the area or the priority of the objective or objectives. Also, priorities may shift rapidly; friendly troops in contact might drive a change in priority from one type of mission (e.g., interdiction) to another (e.g., close air support). Although this principle suggests the use of overwhelming force in one sense, it also recommends guarding against the "overkill" inherent in the use of more force than reasonably necessary. This is particularly relevant when excessive force can diminish the legitimacy and support for an operation.

**Security**

**The purpose of security is to never permit the enemy to acquire unexpected advantage.** Friendly forces and their operations should be protected from enemy action that could provide the enemy with unexpected advantage. The lethal consequences of enemy attack make the security of friendly forces a paramount concern.

Critical to security is the understanding that it embraces physical security, operations security, and security of the information environment. Information has always been part of air, land, and sea warfare; now, with the proliferation of advanced communications and computer technologies, it becomes even more central to the outcome of a conflict.

Aircraft are most vulnerable on the ground. Thus, force protection is an integral part of airpower employment. Fixed bases are especially vulnerable as they not only should withstand aerial, ground, and cyberspace attacks, but should also sustain concentrated and prolonged air, space, and cyberspace activities against the enemy.

From an Airman’s perspective, security also may be obtained by staying beyond the enemy’s reach, physically and virtually. Airpower is uniquely suited to capitalize on this through its ability to operate over the horizon. Not only can airpower reach and strike at extended range, but it also can distribute data and analysis as well as command and control across a worldwide span.

Security from physical and electronic enemy intrusion conceals our capabilities and intentions, while allowing friendly forces the freedom to gather information on the adversary—the type of information that creates the opportunity to strike the enemy where they least expect it. By exploiting the vertical mediums of air and space, Airmen provide security for our nation and friendly forces by detecting enemy actions and determining intentions even in denied areas.

Commanders have an obligation to protect their forces, but the threat and the means for countering it are quite different in contingency operations. The threat varies depending on local circumstances, but the commander must be aware that it always exists. Although US forces have a right to self-defense, Airmen must bear in mind the concepts of necessity and proportionality when exercising that right (as discussed in the standing
rules of engagement). Necessity exists when a hostile act occurs or when a force demonstrates hostile intent, and use of force is then authorized while the force continues to commit hostile acts or exhibit hostile intent. Proportionality means the use of force should be sufficient to respond decisively, and may exceed the means and intensity of the hostile act/intent, but the nature, duration and scope of force should not exceed what is required.

The concepts of necessity and proportionality as applicable to self-defense should not be confused with those of military necessity and proportionality as applicable in the law of armed conflict, which together seek to minimize collateral damage during offensive or defensive operations during armed conflict. Indeed, the defense of friendly forces against enemy attack during armed conflict would not (subject to prevailing ROE) involve the concept of self-defense at all.

**Surprise**

Surprise leverages the security principle by attacking the enemy at a time, place, or in a manner for which they are not prepared. The speed and range of air, space, and cyberspace capabilities, coupled with their flexibility and versatility, allow air forces to achieve surprise more readily than other forces. The final choice of timing and tactics rests with the air component commander, because terrain and distance are not inhibiting factors.

Surprise is one of airpower's strongest advantages. Operation EL DORADO CANYON (the US raid on Libya) and the opening day of the air campaign during Operation DESERT STORM highlight examples where airpower achieved surprise.

Airpower can enhance and empower other forces to achieve surprise as well. The rapid global reach of airpower can enable surface forces to reach foreign destinations quickly, thus seizing the initiative through surprise.

**Simplicity**

Simplicity calls for avoiding unnecessary complexity in organizing, preparing, planning, and conducting military operations. Simplicity ensures that guidance, plans, and orders are as simple and direct as the objective allows. Simple guidance allows subordinate commanders the freedom to operate creatively within their portion of the operational environment, supporting the concept of decentralized execution. Common equipment, a common understanding of Service and joint doctrine, and familiarity with procedures through joint exercises and training, can help overcome complexity. Straightforward plans and unambiguous organizational and command relationships are central to reducing complexity as well.
An additional set of principles has been developed as a result of experience in contingency operations. These were first cast as “principles of military operations other than war” and later as “the political dimension of smaller-scale contingencies.” A distinguishing characteristic of such operations has been the degree to which political objectives influence operations and tactics. In addition to the traditionally-held principles of war, the political considerations and the nature of many of these operations require an Airman’s understanding of several additional principles: unity of effort, restraint, perseverance, and legitimacy. (Note that joint doctrine does not contain unity of effort as an additional principle.)

Unity of Effort

Often the military is not the sole, or even the lead, agency in contingency operations. Some operations are, by their nature, predominantly military. In most situations, however, the military will likely be one agency of many. As is especially common in stability operations, military forces often find themselves supporting the other instruments of national power. While unity of command is critical within the military forces, most of these operations demand unity of effort among a wide range of agencies to ensure that they coordinate their resources and focus on the same goal. Unity of effort becomes critical during interagency operations and can best be achieved through consensus building. Whereas the main effort in military planning is on developing courses of action, the main effort in interagency planning should be to develop a shared, detailed understanding of the situation. This allows the various agencies to better understand how they can best apply their respective capabilities and measure success.

Restraint

Restraint is the disciplined application of military force appropriate to the situation. Commanders should recognize that in some types of operations, use of more force than the minimum that is reasonably necessary (even though under or at the maximum permissible) may lead to escalation to a higher intensity conflict; could adversely affect efforts to gain or maintain legitimacy; and may impede the attainment of both short- and long-term goals. Air component commanders should begin developing a force structure by outlining the necessary capabilities needed for an operation and then follow up by deploying the appropriate “tailored” air, space, and cyberspace force mix. In order to maintain effective security while also exercising restraint, commanders
should develop very clear rules on the use of force and rules of engagement (ROE). ROE for contingency operations often are more restrictive, detailed, and sensitive to political concerns than in sustained combat operations. Moreover, these rules may change frequently during operations. For all operations, Airmen should understand that restraint in the use of force is appropriate and more easily justified. However, restraint does not preclude the ability to use armed force, both lethal and nonlethal, when necessary in self-defense.

**Perseverance**

The principle of perseverance encompasses the patient, resolute, and persistent pursuit of national goals and objectives, for as long as necessary to achieve them. Some contingency operations involve a one-time occurrence or a short-term operation to maintain stability until local authorities can take over. Many missions, however, especially peace operations and building partner capacity, require a long-term commitment. The United States should be prepared to stay involved in a region for a protracted time in order to achieve its strategic goals. Complex problems often cannot be solved quickly; if a situation has been building for a long time, it may take the same amount of time or longer to resolve it. With this in mind, objectives should be established for the conditions under which forces may leave, rather than simply by a timetable for departure.

**Legitimacy**

In order to reduce the threat to US forces and to enable them to work toward their objective, the United States should be viewed as a legitimate actor in the mission, working towards multi-lateral interests including our own. While legitimacy is principally generated by US political leadership, legitimacy in the eyes of the host nation could be affected more by the actions of the military. One key means of promoting legitimacy for certain types of contingency operations is through robust and effective military public affairs operations. Commanders should work closely with the host-nation government (if, in fact, there is one) at all levels to help preserve and foster the sense of legitimacy of mission.
The application of airpower is refined by several fundamental guiding truths. These truths are known as tenets. They reflect not only the unique historical and doctrinal evolution of airpower, but also the specific current understanding of the nature of airpower. The tenets of airpower complement the principles of war. While the principles of war provide general guidance on the application of military forces, the tenets provide more specific considerations for the employment of air, space, and cyberspace capabilities. They reflect the specific lessons of air, space, and cyberspace capabilities throughout history. See figure, Tenets of Airpower.

The tenets of airpower employment are interconnected, overlapping, and often interlocking. Flexibility and versatility necessitate priorities. Priorities determine synergies, levels of concentration, and degrees of persistence. Balance calculations influence all operations. The combinations and permutations of interrelationships between the tenets are nearly endless, but none of the tenets is more than an empty phrase without the master tenet: centralized control and decentralized execution. The oldest tenet of airpower remains the keystone of success in modern warfare.

As with the principles of war, these tenets require informed judgment in application. They require a skillful blending to tailor them to the ever-changing operational environment. The competing demands of the principles and tenets (for example mass versus economy of force, concentration versus balance, and priority versus objective) require an Airman’s expert understanding in order to strike the required balance. In the last analysis, commanders accept the fact that war is incredibly complicated and no two operations are identical. Commanders should apply their professional judgment and experience to the principles and tenets as they employ airpower in a given situation.
Centralized Control and Decentralized Execution

Centralized control and decentralized execution of airpower are critical to its effective employment. Indeed, they are the fundamental organizing principles for airpower, having been proven over decades of experience as the most effective and efficient means of employing it.

Because of airpower’s unique potential to directly affect the strategic and operational levels of war, it should be controlled by a single Airman who maintains the broad, strategic perspective necessary to balance and prioritize the use of a powerful, highly desired yet limited force. A single air component commander, focused on the broader aspects of an operation, can best mediate the competing demands for tactical support against the strategic and operational requirements of the conflict.

Centralized control is commanding airpower and should be accomplished by an Airman at the air component commander level who maintains a broad focus on the joint force commander’s (JFC’s) objectives to direct, integrate, prioritize, plan, coordinate, and assess the use of air, space, and cyberspace assets in any contingency across the range of operations. Centralized control empowers the air component commander to respond to changes in the operational environment and take advantage of fleeting opportunities. Some would rather this be just “centralized planning and direction.” From an Airman’s perspective, “planning and directing” do not convey all aspects of control implied in “centralized control,” which

Decentralized versus Centralized Execution

Some recent operations have caused some to perceive an apparent disconnect regarding the Airman’s stated preference for decentralized execution. Airmen should not misconstrue a given situation with what the Air Force generally believes about decentralized execution. Discipline demands that senior leaders resist the temptation to get involved with execution decisions that are normally best left to subordinate commanders and forward decision makers.

In general, once a sortie has been tasked through the air tasking order, a JFACC and AOC staff should not normally get involved in how the mission is executed. Even though the AOC may have planned most of the details, this does not constitute “centralized execution” since the operational unit accomplishes the full range of execution tasks necessary for the sortie to meet the commander’s objectives.

The challenge is most apparent when a decision is made to re-role a sortie. At such time, the JFACC is balancing campaign requirements against an unplanned need, such as prosecution of pop-up time-sensitive targets. In such cases, the JFACC and AOC may have information not immediately available to the sortie leader. In other instances, missions with the potential for yielding high-visibility strategic effects might also merit similar attention.
maximizes the flexibility and effectiveness of airpower. Centralized control thus maximizes the flexibility and effectiveness of airpower; it is pivotal to the determination of continuing advantage. However, it should not become a recipe for micromanagement, stifling the initiative subordinates need to deal with combat’s inevitable uncertainties.

Decentralized execution is the delegation of authority to designated lower-level commanders and other tactical-level decision makers to achieve effective span of control and to foster disciplined initiative and tactical flexibility. It allows subordinates, all the way down to the tactical level, to exploit situational responsiveness and fleeting opportunities in rapidly changing, fluid situations. The benefits inherent in decentralized execution, however, are maximized only when a commander clearly communicates intent.

Centralized control and decentralized execution of airpower provide broad global or theater-wide focus while allowing operational flexibility to meet military objectives. They assure concentration of effort while maintaining economy of force. They exploit airpower’s versatility and flexibility to ensure that it remains responsive, survivable, and sustainable.

Execution should be decentralized within a command and control architecture that exploits the ability of front-line decision makers (such as strike package leaders, air battle managers, forward air controllers) to make on-scene decisions during complex, rapidly unfolding operations. Modern communications technology may tempt commanders to take direct control of distant events and override the decisions of forward leaders, even when such control is not operationally warranted. This should be resisted at all costs in all functional components—not just air. Despite impressive gains in data exploitation and automated decision aids, a single person cannot, with confidence, achieve and maintain detailed situational awareness when fighting a conflict involving many simultaneous engagements taking place throughout a large area.

That said, there may be some situations where there may be valid reasons for control of specific operations at higher levels, most notably when the JFC (or perhaps even higher authorities) may wish to control strategic effects, even at the sacrifice of tactical efficiency. However, such instances should be rare, as in the short notice prosecution of high-value, time-sensitive targets, or when the operational climate demands tighter control over selected missions due to political sensitivities, such as the potential for collateral damage or mistargeting, or in the case of nuclear employment. In all cases, senior commanders balance overall campaign execution against the pressing need for tactical effectiveness. As long as a subordinate’s decision supports the superior commander’s intent and meets campaign objectives, subordinates should be allowed to take the initiative during execution.
**Flexibility and Versatility**

Although often used interchangeably, flexibility and versatility are different. **Flexibility allows airpower to exploit mass and maneuver simultaneously.** Flexibility allows airpower to shift from one campaign objective to another, quickly and decisively; to “go downtown” on one sortie, then hit fielded enemy forces the next; to re-role assets quickly from a preplanned mission to support an unanticipated need for close air support of friendly troops in contact with enemy forces. **Versatility is the ability to employ airpower effectively at the strategic, operational, and tactical levels of war and provide a wide variety of tasks in concert with other joint force elements.** Airpower has the potential to achieve this unmatched synergy through asymmetric and parallel operations. Space and cyberspace capabilities are especially able to simultaneously support multiple taskings around the globe and support tasks at all levels of warfare.

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**Synergistic Effects**

The proper application of a coordinated force across multiple domains can produce **effects that exceed the contributions of forces employed individually.** The destruction of a large number of targets through attrition warfare is rarely the key objective in modern war. Instead, the objective is the precise, coordinated application of the various elements of airpower and surface power to bring disproportionate pressure on enemy leaders to comply with our national will (affecting their intent) or to cause functional defeat of the enemy forces (affecting their capability). Airpower’s ability to observe adversaries allows JFCs to counter enemy movements with unprecedented speed and agility. Airpower is unique in its ability to dictate the tempo and direction of an entire warfighting effort regardless of the scale of the operation.

**Persistence**

Air, space, and cyberspace operations may be conducted continuously against a broad spectrum of targets. **Airpower’s exceptional speed and range allow its forces to visit and revisit wide ranges of targets nearly at will.** Airpower does not have to occupy terrain or remain constantly in proximity to areas of operation to bring force upon targets. Space forces in particular hold the ultimate high ground, and as space systems continue to advance and proliferate, they offer the potential for persistent overhead access; unmanned aircraft systems offer similar possibilities from the atmosphere. Examples of persistent operations might be maintaining a continuous flow of materiel to peacetime distressed areas; Air Force intelligence, surveillance, and reconnaissance
capabilities monitoring adversaries to ensure they cannot conduct actions counter to those agreed upon; assuring that targets are kept continually out of commission; or ensuring that resources and facilities are denied an enemy or provided to an ally during a specified time. The end result would be to deny the opponent an opportunity to seize the initiative and to directly accomplish assigned tasks.

Concentration

One of the most constant and important trends throughout military history has been the effort to concentrate overwhelming power at the decisive time and place. The principles of mass and economy of force deal directly with concentrating overwhelming power at the right time and the right place (or places). The versatility of airpower with its lethality, speed, and persistence makes it an attractive option for many combat tasks. With capabilities as flexible and versatile as air, space, and cyberspace forces, the demand for them often exceeds the available forces and may result in the fragmentation of the integrated airpower effort in attempts to fulfill the many demands of the operation. Depending on the operational situation, such a course of action may court the triple risk of failing to achieve operational-level objectives, delaying or diminishing the attainment of decisive effects, and increasing the attrition rate of air forces—and consequently risking defeat. Airmen should guard against the inadvertent dilution of airpower effects resulting from high demand.

Priority

Commanders should establish clear priorities for the use of airpower. Due to its inherent flexibility, the demands for airpower may likely exceed available resources. If commanders fail to establish priorities, they can become ineffective. Commanders of all components need to effectively prioritize their requirements for coordinated airpower effects to the JFC, and only then can effective priorities for the use of airpower flow from an informed dialogue between the JFC and the air component commander. The air component commander should assess the possible uses of component forces and their strengths and capabilities to support the overall joint campaign. Limited resources require that airpower be applied where it can make the greatest contribution to the most critical current JFC requirements. The application of airpower should be balanced among its ability to conduct operations at all levels of war, often simultaneously. The principles of mass, offensive, and economy of force, the tenet of concentration, and the Airman’s strategic perspective all apply to prioritizing airpower.

Balance

Balance is an essential guideline for air commanders. Much of the skill of an air component commander is reflected in the dynamic and correct balancing of the principles of war and the tenets of airpower to bring Air Force capabilities together to produce a synergistic effect. An air component commander should balance combat opportunity, necessity, effectiveness, efficiency, and the impact on
accomplishing assigned objectives against the associated risk to friendly forces. An Airman is uniquely—and best—suited to determine the proper theater-wide balance between offensive and defensive air operations, and among strategic, operational, and tactical applications. Air, space, and cyberspace assets are normally available only in finite numbers; thus, balance is a crucial determinant for an air component commander.
This chapter presents the basics of commanding and organizing Air Force forces; the following chapter presents further considerations for organizing and presenting Air Force forces in the joint context.

Organization is critically important to effective and efficient operations. Service and joint force organization and command relationships—literally, who owns what, and who can do what with whom, and when—easily create the most friction within any operation. Therefore, it is absolutely essential that Airmen understand the fundamentals of Air Force and joint organization, command relationships, and responsibilities of the senior Air Force commander.

Air Force organization and preferred command arrangements are designed to address unity of command, a key principle of war. 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. During numerous deployments in the last decade, the Air Force has learned a great deal about the nuances of commanding Service operations afield.

The key to successful employment of Air Force forces as part of a joint force effort is providing a single Air Force commander with the responsibility and authority to properly organize, train, equip and employ Air Force forces to accomplish assigned functions and tasks. The title of this commander is Commander, Air Force Forces (COMAFFOR). Operationally, the COMAFFOR should
be prepared to employ Air Force forces as directed by the joint force commander (JFC), and if directed be prepared to employ joint air forces as the joint force air component commander (JFACC). In either event, the COMAFFOR should also ensure that Air Force forces are prepared to execute the missions assigned by the JFC. The requirements and responsibilities of the COMAFFOR and JFACC are inextricably linked; both are critical to operational success.
Although all Air Force units, regardless of level, have an Air Force commander, the title of Commander, Air Force Forces (COMAFFOR) is reserved exclusively to the single Air Force commander of an Air Force Service component command assigned or attached to a joint force commander (JFC) at the unified combatant command, subunified combatant command, or joint task force (JTF) level. At the unified combatant command level, the combatant commander’s (CCDR’s) Air Force Service component is specified in the Secretary of Defense’s (SecDef’s) “Forces for Unified Commands” memorandum. The SecDef/CCDR may elect to permanently establish a subordinate unified combatant command (subunified command) or temporarily establish a subordinate JTF as part of his/her organizational structure. The commanders of these subordinate joint forces are, by joint and Air Force doctrine, JFCs at a lower level than the CCDR. If Air Force forces are assigned or attached to these subordinate JFCs, that action creates an Air Force Service component with a separate COMAFFOR directly responsible to the appropriate JFC.

If Air Force forces are attached to a JFC, they should be presented as an air expeditionary task force (AETF). The AETF becomes the Air Force Service component to the JTF and the AETF commander is the COMAFFOR to the JTF commander. Thus, depending on the scenario, the position of COMAFFOR may exist simultaneously at different levels within a given theater as long as each COMAFFOR is separately assigned or attached to and under the operational control (OPCON) of a different JFC. In the case where Air Force forces are operating in support of a JTF but are not attached to it, they do not constitute a separate JTF-level Service component under a separate COMAFFOR. In this instance, there remains a single COMAFFOR at the theater level.

The COMAFFOR provides unity of command. To a JFC, a COMAFFOR provides a single face for all Air Force issues. Within the Air Force Service component, the COMAFFOR is the single commander who conveys commander’s intent and is responsible for operating and supporting all Air Force forces assigned or attached to that joint force. Thus, the COMAFFOR commands forces through two separate branches of the chain of command: the operational branch and the administrative branch. The operational branch runs through joint channels from the JFC and is expressed in terms such as OPCON, tactical control (TACON), and support. The administrative branch runs through Service channels only, from the AETF, up through the appropriate component numbered Air Force (C-NAF), major command (MAJCOM), to the Air Force Chief of Staff (CSAF) and Secretary of the Air Force (SECAF); this
authority is expressed as administrative control (ADCON). Command authorities are explained in more detail in Appendix A.

The COMAFFOR should normally be designated at a command level above the operating forces and should not be dual-hatted as commander of one of the subordinate operating units. This allows the COMAFFOR to focus at the operational level of war, while subordinate commanders lead their units at the tactical level of war.

Operational Responsibilities of the COMAFFOR

When Air Force forces are assigned or attached to a JFC, the JFC normally receives OPCON of these forces. This authority is best exercised through subordinate JFCs and Service component commanders and thus is normally delegated accordingly. If not delegated OPCON, or if the stated command authorities are not clear, the COMAFFOR should request delegation of OPCON. When the COMAFFOR is delegated OPCON of the Air Force component forces, and no joint force air component commander (JFACC) has been designated, the COMAFFOR has the following operational and tactical responsibilities: (Note: if a JFACC is designated, many of these responsibilities belong to that functional component commander. Refer to JP 3-30, Command and Control for Joint Air Operations, for more complete discussion of the JFACC’s role and the planning processes that support joint air component employment. Also see related JFACC discussion in the next chapter.)

- Prepare component plans to support the JFC’s estimate.
- Develop and recommend courses of action (COAs) to the JFC.
- Develop a strategy and operation plan that states how the COMAFFOR plans to exploit Air Force capabilities to support the JFC’s objectives.
- Establish (or implement, when passed down by the JFC) theater rules of engagement (ROE) for all assigned and attached forces. For those Service or functional components that operate organic air assets, it should be clearly defined when the air component ROE also apply to their operations (this would normally be recommended).
- Make air apportionment recommendations to the JFC.
- Task, plan, coordinate, and allocate the daily Air Force component effort.
- Normally serve as the supported commander for counterair operations, strategic attack, the JFC’s overall air interdiction effort, most space control operations, theater airborne reconnaissance and surveillance, and other operations as directed by the JFC. As the supported commander, the COMAFFOR has the authority to designate the target priority, effects, and timing of these operations and attack targets within the entire joint operations area (JOA).
Function as a supporting commander, as directed by the JFC, for operations such as close air support (CAS), air interdiction within other components’ areas of operations (AOs), and maritime support.

Act as airspace control authority (ACA), area air defense commander (AADC), and space coordinating authority (SCA), if so designated.

Coordinate personnel recovery operations, including combat search and rescue (CSAR).

Direct intratheater air mobility operations and coordinate them with intertheater air mobility operations.

Conduct joint training, including the training, as directed, of components of other Services in joint operations for which the COMAFFOR has or may be assigned primary responsibility, or for which the Air Force component’s facilities and capabilities are suitable.

Service Responsibilities of the COMAFFOR

Commanders of Air Force components have responsibilities and authorities that derive from their roles in fulfilling the Service’s ADCON function. Within the operational branch, the JFC normally conducts operations by delegating OPCON of the Air Force component forces to the COMAFFOR. Within the administrative branch, the COMAFFOR has complete ADCON of all assigned Air Force component forces and specified ADCON of all attached Air Force component forces. The specified responsibilities listed below apply to all attached forces, regardless of MAJCOM or Air Force component (regular, Guard, or Reserve). The COMAFFOR also has some ADCON responsibilities for Air Force elements and personnel assigned to other joint force components (such as liaisons). The Air National Guard (ANG) and Air Force Reserve Command retain all other ADCON responsibilities, such as Reserve Component activation, inactivation, partial mobilization, and length of tour. Additionally, intertheater forces, such as intertheater airlift and forces transiting another COMAFFOR’s area of interest, are subject to the ADCON authority of the respective COMAFFOR while transiting that COMAFFOR’s area for administrative reporting and for TACON for force protection requirements derived from the CCDR.

As the Service component commander to a JFC, the COMAFFOR has the following responsibilities:

- Make recommendations to the JFC on the proper employment of the forces in the Air Force component.

- Accomplish assigned tasks for operational missions.

- Organize, train, and sustain assigned and attached Air Force forces for CCDR-assigned missions.
Prescribe the chain of command within the AETF.

Maintain reachback between the Air Force component and other supporting Air Force elements. Delineate responsibilities between forward and rear elements.

Provide training in Service-unique doctrine, tactical methods, and techniques.

Provide for logistics and mission support functions normal to the command.

Inform the JFC (and the CCDR, if affected) of planning for changes in logistics support that would significantly affect operational capability or sustainability sufficiently early in the planning process for the JFC to evaluate the proposals prior to final decision or implementation.

Provide lateral liaisons with Army, Navy, Marines, special operations forces, and coalition partners.

Maintain internal administration and discipline, including application of the Uniform Code of Military Justice (UCMJ).

Establish force protection and other local defense requirements.

Provide Service intelligence matters and oversight of intelligence activities to ensure compliance with laws, executive orders, policies, and directives.

At the CCDR level, the Air Force Service component commander also has the following additional responsibilities:

Develop program and budget requests that comply with CCDR guidance on war-fighting requirements and priorities.

Inform the CCDR (and any intermediate JFCs) of program and budget decisions that may affect joint operation planning.

The COMAFFOR is responsible for overseeing the morale, welfare, safety, and security of assigned and attached forces. Subordinate commanders issue orders and direct actions in support of those responsibilities and ensure these orders and directives are consistent with the policies and directives of the COMAFFOR exercising ADCON of those forces. The responsibilities of lead commands are to organize, train, equip, and provide forces; the responsibility of the COMAFFOR is to ensure specialized training is conducted based on mission needs. The COMAFFOR and properly designated subordinate commanders exercise disciplinary authority in accordance with the UCMJ and relevant Air Force Instructions. These commanders advise parent MAJCOMs of
any disciplinary action taken against deployed personnel. Because of the overlapping
and interconnecting areas of ADCON that are shared among the various commanders,
it is essential that the appropriate written orders clearly state which elements of ADCON
authority and responsibility are executed by which commander.
To address growth in diverse regional commitments, the Air Force established the air expeditionary force (AEF) concept as a means to provide Air Force forces and support on a rotational, and thus, a relatively more predictable basis. These AEFs, however, only provide a source of readily trained operational and support forces. Because they do not provide for a commander (specifically, a commander, Air Force forces) or the necessary command and control mechanisms, AEFs, by themselves, are not discrete, employable entities. Forces sourced from AEFs should fall in on in-theater command structures, which are usually provided by regional numbered Air Forces (NAFs), and may link up with in-theater Air Force forces. Thus, while AEF forces may deploy, they stand up as part of an air expeditionary task force, not as their own warfighting entity. In short, the AEF is the mechanism for managing and scheduling forces for expeditionary use; the AETF is the Air Force warfighting organization attached to a JFC.

The air expeditionary task force (AETF) is the organizational structure for Air Force forces in response to operational tasking. The AETF provides a task-organized, integrated package with the appropriate balance of force, sustainment, control, and force protection. While the task force model itself is not new, its emphasis within the Air Force is recent. To understand its basis, one should first look at the definition of a task force:

1. A temporary grouping of units, under one commander, formed for the purpose of carrying out a specific operation or mission. 2. A semi-permanent organization of units, under one commander, formed for the purpose of carrying out a continuing specific task.

The AETF leverages this fundamental concept, presenting a scalable, tailor able organization with three elements: a single, clearly designated commander; appropriate command and control mechanisms; and tailored and fully supported forces. Each of these elements will be examined in detail.

AETFs may be established as an Air Force Service component to a joint task force (JTF), or as a subordinate task force within a larger Air Force Service component to address specific internal tasks. If an AETF is formed as the former, the AETF commander is also a commander, Air Force forces (COMAFFOR). Otherwise, the AETF commander is not a COMAFFOR, but reports to a COMAFFOR.

“Single Commander . . .”

In the context of joint organization, a single commander presents a single Air Force face to the joint force commander (JFC) and results in clear lines of authority both ways. Internal to the task force, there is only one person clearly in charge; for a JFC, there is only one person to deal with on matters regarding Air Force issues. The AETF commander is the senior Air Force warfighter and exercises the appropriate degree of control over the forces assigned, attached, or in support of the AETF. Within the joint force, these degrees of control are formally expressed as operational control (OPCON), tactical control (TACON), or support. Within Service lines, the AETF commander exercises administrative control (ADCON).
The Air Expeditionary Task Force

The Air Expeditionary Task Force (AETF) is a scalable, tailorable organization with three components: a single, clearly designated commander; appropriate command and control mechanisms; and tailored and fully supported forces. The elements of an AETF may be deployed forward into a theater, or some may be available elsewhere, either in theater or even in the CONUS, available via reachback.

The AETF may be a fully combat capable, numbered Air Force-sized composite force fighting a major operation with a substantial in-theater presence, as in Operation IRAQI FREEDOM.

It may be a few squadrons of combat aircraft with associated support as part of a standing operation, as in Operation NOBLE EAGLE.

It may be an air mobility-centric operation delivering food and medical supplies in a relief operation, as in Operation UNIFIED RESPONSE, the 2010 earthquake relief effort in Haiti.

An AETF’s desired effect might not directly involve combat airpower. After supporting the initial insertion of forces into Haiti in 1994, the Air Force’s main element in Operation UPHOLD DEMOCRACY was a medical unit.

AETFs will be sized for the assigned mission and force size, and may be as small as a group or as large as an expeditionary air force consisting of multiple wings. Thus, depending on the size of the AETF, the rank of the AETF commander may run from general to colonel. Within the AETF, units form up as expeditionary air forces, wings, groups, squadrons, flights, detachments, or elements, as necessary to provide reasonable spans of internal control and maintain unit cohesion. The AETF commander commands the AETF with authorities as delegated from the JFC (the operational branch of command) and from the superior Air Force command (the administrative branch of command).
“Appropriate Command and Control Mechanisms . . .”

The AETF commander requires command mechanisms to exercise appropriate operational control and Service control. If acting as a COMAFFOR, the AETF commander exercises command in both the operational and administrative branches of the chain of command through an air operations center (AOC), an Air Force forces (AFFOR) staff (sometimes colloquially called an “A-staff”), and appropriate subordinate C2 elements. Because air, space, and cyberspace forces are not monolithic in execution and force presentation—some are organized regionally, others functionally—the nature of AOCs has been tailored to better plan and execute this mix. For regionally-oriented Air Force components, the AOC may be one of the large, fixed combined AOCs (CAOCs) found overseas, or a tailored AOC or AOC slice deployed for that operation. For functionally-oriented components (e.g., space, air mobility), the AOC should be tailored accordingly. C2 elements subordinate to the AOC should also be appropriately tailored.

Within the authorities and responsibilities of ADCON, the COMAFFOR oversees the deployment and sustainment of Air Force forces, normally through the AFFOR staff and subordinate Service organizations (e.g., wings, groups, squadrons, etc.). These sustainment activities, sometimes referred to as “beds, beans, and bullets,” are critical to the successful accomplishment of operational functions. These activities should be fully integrated with and complementary to the AOC’s operational activities.

The AOC and the AFFOR staff are discussed in more detail later in this chapter. Also see Annex 3-30, Command and Control.

“Tailored and Fully Supported Forces . . .”

The AETF should be tailored to the mission; this includes not only forces, but also the ability to command and control those forces for the missions assigned. It should draw first from in-theater resources, if available. If augmentation is needed, or if in-theater forces are not available, the AETF will likely draw as needed from the air expeditionary force currently on rotation. These forces, whether in-theater or deployed from out of theater, should be fully supported with the requisite maintenance, logistical, health services, and administrative elements. These forces form up within the AETF as expeditionary wings, groups, squadrons, flights, detachments, or elements, as necessary to provide reasonable spans of control and command elements at appropriate levels.

In summary, the AETF is an expeditionary force established for a temporary period of time to perform a specified mission. The AETF provides a tailored package of air, space, and cyberspace capabilities in a structure that preserves Air Force unity of command. An AETF can be tailored in size and composition as appropriate for the mission.
It is important to understand that airpower is flexible in organization and presentation. Because it encompasses a wide range of capabilities and operating environments, it defies a single, general model for organization, planning, and employment. Some assets and capabilities provide relatively localized effects and generally are more easily deployable, and thus may organize and operate within a regional model. Other assets and capabilities transcend geographic areas of responsibility simultaneously, and thus have global responsibilities. Such forces may be better organized and controlled through a functional model.

However, at the focus of operations within any region, it is possible to place the collective capabilities of airpower in the hands of a single Airman through skillful arrangement of command relationships, focused expeditionary organization, reachback, and forward deployment of specialized talent.

Regional Organization and Control

All military missions are ultimately under the authority of a joint force commander (JFC) at the appropriate level. If the entire theater is engaged, the combatant commander (CCDR) may be the JFC. If the situation is less than theater-wide, the CCDR may establish a subordinate joint task force (JTF) commanded by a subordinate JFC. In either case, the CCDR should first look to assigned, in-theater forces. If augmentation is required, the JFC should request additional forces through the Secretary of Defense (SecDef). Upon SecDef approval, additional forces transfer into the theater and are attached to the gaining CCDR. The degree of control gained over those forces (i.e., OPCON or TACON) should be specified in the deployment orders. The gaining CCDR then normally delegates OPCON of these forces downward to the JTF commander who should, in turn, delegate OPCON to the Service component commanders within the gaining JTF. All Air Force forces should be organized and presented as an AETF.

Within a joint force, the JFC may organize forces in a mix of Service and functional components. All joint forces contain Service components, because administrative and logistics support are provided through Service components. Therefore, every joint force containing assigned or attached Air Force forces...
will have an Air Force Service component in the form of an AETF with a designated COMAFFOR.

The JFC may also establish functional component commands when forces from two or more military Services operate in the same dimension or domain or there is a need to accomplish a distinct aspect of the assigned mission. Functional component commanders, such as the joint force air component commander (JFACC), are established at the discretion of the JFC.

If functional component commands are established, the Service component commander with the preponderance of forces to be tasked, and with the requisite ability to provide command and control, will normally be designated as that functional component commander. Functional component commanders normally exercise TACON of forces made available for tasking. Through the Air Force component, the Air Force provides a COMAFFOR who is trained, equipped, and prepared to also be the JFACC if so designated by the JFC to whom he/she is assigned or attached. This has been the normal and highly successful method of providing and employing air forces since Operation DESERT STORM.

Functional Organization and Control

Not all Air Force forces employed in an operation may be attached forward to a geographic CCDR. Several aspects of airpower are capable of serving more than one geographic CCDR at a time. Such forces are organized under functional CCDRs to facilitate cross-area of responsibility (AOR) optimization of those functional forces. When such forces are deployed in a geographic CCDR's AOR, they may remain under the OPCON of their respective functional CCDR and operate in support of the geographic CCDR. Within a theater, this support relationship is facilitated through specially designated representatives attached to regional AETFs. In some circumstances, after coordination with the owning commander and upon SecDef approval, control of such functional forces may be transferred to a geographic commander and attached with specification of OPCON or TACON. Detailed discussion of specific functional forces and their command relationships and liaisons are found later in this chapter.

There will usually be a tension between regionally-organized forces and functionally-organized forces. The former seek effectiveness at the point of their operation, while the latter seek effectiveness and efficiency across several regions. At critical times, the requirement for effectiveness may trump efficiency, and additional functional forces may be transferred to the regional command and organized accordingly (see related discussion on transferring forces later in this chapter). These situations require careful and continuing dialogue between competing senior commanders and their common superior commander.
Air expeditionary task forces (AETFs) can be sized and tailored to meet the specific requirements of the mission. The basic building block of an AETF is the squadron; however, a squadron normally does not have sufficient resources to operate independently. Thus, the smallest AETF is normally an air expeditionary group; larger AETFs may be composed of several expeditionary wings. Within an AETF, the AETF commander organizes forces as necessary into wings, groups, squadrons, flights, detachments, or elements to provide reasonable internal spans of control, command elements at appropriate levels, and to retain unit identity.

Numbered Expeditionary Air Force

Numbered expeditionary Air Force (NEAF) is the generic title for an AETF made up of multiple expeditionary wings and is the largest sized AETF. NEAFs normally carry an appropriate numerical designation based on numbered Air Forces (NAFs) historically associated with the region or command. Subordinate expeditionary units may retain their own numerical designations. Use of the NEAF designation is also intended to provide appropriate unit awards and honors credit for the units and staffs within the NEAF. The NEAF commander is normally a commander, Air Force forces (COMAFFOR).

Air Expeditionary Task Force-X

“Air Expeditionary Task Force-X” (AETF-X) is the generic title used when a provisional Air Force command echelon is needed between a NEAF and an air expeditionary wing (AEW). AETF-X is used when a NEAF-level AETF establishes a subordinate provisional command echelon consisting of two or more AEWs. An example of this usage is when the Commander, US Air Forces Central (USAFCENT) established two subordinate AETFs, AETF-Iraq (AETF-I) and AETF-Afghanistan (AETF-A), to provide command over multiple AEWs 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. See “Air Force Component Presentation Considerations” in chapter 6 for further discussion.

Air Expeditionary Wing

AEW is the generic title for a deployed wing or a wing slice within an AETF. An AEW normally is composed of the wing command element and subordinate groups and
squadrons. AEWs normally carry the numerical designation of the wing providing the command element. Subordinate expeditionary groups and support squadrons carry the numerical designation of the parent AEW. Subordinate mission squadrons and direct combat support units retain their numeric designation in an expeditionary status. Use of the AEW designation is also intended to provide appropriate unit awards and honors credit for the parent unit. An AEW may be composed of units from different wings, but where possible, the AEW is formed from units of a single wing. AEW commanders report to the COMAFFOR.

**Air Expeditionary Group**

Air expeditionary group (AEG) is the generic title for a deployed group assigned to an AEW or a deployed independent group assigned to an AETF. Unlike traditional “home station” groups, which are functionally organized (i.e., operations group, maintenance group, etc.), expeditionary groups that are deployed independent of a wing structure should contain elements of all the functions to conduct semi-autonomous operations. An AEG is composed of a slice of the wing command element and some squadrons. Since Air Force groups are organized without significant staff support, a wing slice is needed to provide the command and control for echelons smaller than the normal wing. An AEG assigned to an AEW carries the numeric designation of the AEW. An independent AEG normally carries the numerical designation of the unit providing the command element and/or the largest portion of the expeditionary organization. Deployed squadrons (assigned or attached) retain their numerical designation and acquire the “expeditionary” designation. Use of the AEG designation is also intended to provide appropriate unit awards and honors credit for the parent unit. An AEG may be composed of units from different wings, but where possible, the AEG is formed from units of a single wing. If deployed as an independent group as part of a larger AETF with other AEGs and/or AEWs, the AEG commander normally reports to the COMAFFOR. If deployed as a group subordinate to an expeditionary wing, the AEG commander reports to the AEW commander. The AEG is normally the smallest independently deployable AETF.

**Air Expeditionary Squadron**

Air expeditionary squadron (AES) is the generic title for a deployed squadron within an AETF. Squadrons are configured to deploy and employ in support of taskings. However, an individual squadron is not designed to conduct independent operations; it normally requires support from other units to obtain the synergy needed for sustainable, effective operations. As such, an individual squadron or squadron element should not be presented by itself without provision for appropriate support and command elements. If a single operational squadron or squadron element is all that is needed to provide the desired operational effect (for example, an element of C-130s performing humanitarian operations), it should deploy with provision for commensurate support and C2 elements. The structure of this AETF would appear similar to an AEG. In some operations, not all support and C2 elements need to deploy forward with the operational squadron. Some may be positioned “over the horizon,” constituting capabilities provided through reachback. A single squadron or squadron element may deploy without full support.
Historically, when Airmen talked about augmentation, discussion was generally limited to augmenting the AOC or a joint staff. Recent experience has provided new examples of augmentation between Services, either to round out manpower or provide specific skills at a low echelon. Examples include Airmen supplementing Army convoy operations in Iraq and Army Guardsmen backfilling deployed Air Force security forces at Air Force installations in the CONUS.

When Airmen are tasked to augment another Service, the AETF model should be applied as a template to help focus discussion of organization and command arrangements. The operational (OPCON/TACON) and administrative (ADCON) chains of command should be carefully specified, and an Air Force element, with an Airman in charge, should be identified to fulfill ADCON responsibilities.

Expeditionary Elements below Squadron Level

In addition to expeditionary wings, groups, and squadrons, the Air Force may deploy elements below the squadron level for specific, limited functions. These include individuals and specialty teams such as explosive ordnance disposal (EOD) teams, military working dog teams, security forces, liaison teams, etc. They may deploy as part of an AETF or independently of other Air Force units, in remote locations, and may operate directly with other Services. For administrative control (ADCON) purposes, these elements should normally be attached to the commander of a recognizable Air Force entity in the region, either a deployed AETF, the Air Force Service component to the engaged CCDR, or an Air Force entity specifically established for this purpose. Examples of such deployed elements might be an Air Force military information support planner augmenting a joint military information support task force, an EOD team augmenting a predominately surface force, or an Air Force element supplementing Army convoy operations. Air Force personnel assigned to a joint staff may also fall in this category.

In many circumstances, elements below squadron level and even individual persons may deploy to provide a specific capability. In such cases, formal establishment and designation of an AETF may not be warranted. However, the Air Force contingent should still be organized as a single entity (perhaps named simply an “Air Force element”) and led by the senior Airman in the contingent. In any case, the AETF model should still be used as a template to answer some basic questions:

- Elements if it is planned to augment a deployed AEW or AEG, and would thus obtain necessary support from the larger units.
What is the operational branch of the chain of command? Who is in charge of the operational mission and to whom does the Air Force contingent report?

What is the Service administrative branch of the chain of command? Who is in charge of the Air Force contingent and to whom does that senior Airman look for Service support (which Air Force installation or unit)?

What command and control mechanisms does the contingent need? A small planning cell? A slice of a squadron or wing operations center? Or just a cell phone or radio link back to the home station?

What formal orders are required to attach the contingent or personnel to another agency? Deployment orders, G-series orders or simple temporary duty orders?

What additional Service and joint training may be required to enable the deploying Airmen to properly accomplish the mission?

For such small deployments, even though an AETF has not been formed, the senior Airman should still be identified to provide a clear chain of command. The senior Airman may be designated as, for example, detachment commander, team chief, or officer or noncommissioned officer in charge. This formally identifies the senior Air Force member as leader of the deployed element.

Recent experience has revealed that tracking small, remotely located Air Force elements, especially in the distributed environment encountered in irregular warfare, has posed challenges for the Air Force component headquarters. These challenges may range from lack of administrative support to improper employment of small units and individual Airmen in tasks for which they have not been trained. The AFFOR staff should take special efforts to maintain effective oversight of such elements in order to fulfill proper ADCON oversight.

Provisional Units

In some instances, expeditionary forces may not form around active numbered units. This may occur, for example, when there are insufficient active numbered units in the air expeditionary force rotation to satisfy a very large operation or a single major force provider cannot be identified. In such cases, provisional units may be created using predesignated inactive units. 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 NORTHERN and SOUTHERN WATCH, and IRAQI FREEDOM). Upon completion of the operation for which the unit was formed, the unit designation and history are inactivated. Provisional wings, groups, and squadrons are normally generically designated simply as AEWs, AEGs, and AESs.
Designation of Expeditionary Units

An AETF is named based on the unit providing the senior-echelon command function, its size, and the operation name.

- For a NAF-sized AETF, use the numerical designation of the engaged NAF, followed by “EAF,” then the name of the operation. For example, a NAF-sized AETF (two or more wings) established under 12 AF (AFSOUTH) for Operation SAMPLE NAME would be designated as “12 EAF—SAMPLE NAME.” A NEAF would normally be commanded by the component NAF commander.

- For AETF-X sized AETFs, use the term “AETF” followed by the operation name or regional identifier. For example, for an AETF-X established in Iraq, the title would be either AETF-Iraq or AETF-Operation NEW DAWN.

- For wing- or group-sized AETFs, use the number of the senior echelon, followed by “AEW” or “AEG,” then the name of the operation. Following the above example, a wing-sized AETF would be designated “XX AEW—SAMPLE NAME,” and a group-sized AETF would be “XX AEG—SAMPLE NAME.”

Wings, groups, and squadrons are designated “expeditionary” from the time they are attached until no longer attached to an AETF. Within the task force, numbered units simply add “expeditionary” to the normal designation of the unit. For example, the 123d Fighter Wing becomes the 123d Expeditionary Fighter Wing; the 456th Mission Support Group becomes the 456th Expeditionary Mission Support Group, and the 789th Air Refueling Squadron becomes the 789th Expeditionary Air Refueling Squadron. For planning purposes, wings, groups, and squadrons may be generically designated simply as AEWs, AEGs, and AESs.

Units operating from their normally assigned, in-place location, such as permanently assigned units in Korea under US Pacific Command (USPACOM), or North America-based Air National Guard units participating in homeland air defense within Operation NOBLE EAGLE, need not adopt expeditionary nomenclature since they are not truly expeditionary. The overall operation, however, should still be modeled as an AETF to delineate clear chains of operational and administrative authority. Other deployed wings, groups, and squadrons that are not assigned or attached to the AETF, but provide significant support (such as airlift and tanker units in the intertheater air bridge or space and special operations units in direct support), may be designated “expeditionary” at the discretion of their owning MAJCOM or Service component commander. Normally, these “expeditionary” forces provide their support through their functional chains of command.
EXAMPLES OF AETFs

This section presents three recent usages of air expeditionary task forces (AETFs). AETFs may be attached to a joint force as an Air Force Service component; provided in direct support of a joint force in lieu of attachment; or temporarily established to address an internal operational Service requirement.

❖ **Component AETF.** When directed, an AETF may be formally attached to a joint force at the combatant command, subunified combatant command, or joint task force (JTF) level, usually with specification of operational control (OPCON), forming Service component commands. In these cases, the AETF commander is a commander, Air Force forces, and a separate AOC and A-staff are normally required to employ and support the AETF. Examples of these components are found in the form of component major commands (MAJCOMs) and component numbered Air Forces (NAFs) established to support the CCDRs. Component AETFs may also be attached to JTFs. These have historically been the most usual manifestation of the AETF.

❖ **“Subordinate AETF.** During some operations, especially when there may be multiple joint operations areas with multiple JTFs, it may not be feasible to attach AETFs to each JTF due to C2 resource constraints. In such cases, subordinate AETFs may be established and placed in support of JTFs. Examples of this structure occurred in the later phases of Operations ENDURING FREEDOM and IRAQI FREEDOM (redesignated Operation NEW DAWN), USAFCENT established subordinate task forces to directly support sub-theater-level JTFs operating in separate JOAs within US Central Command (USCENTCOM). With the approval of Commander, USCENTCOM (CDRUSCENTCOM), these subordinate task forces were not attached as separate Air Force components to those JTFs, but were established as supporting forces with OPCON retained by the CCDR-level COMAFFOR (Commander, USAFCENT). In this case, the USAFCENT commander delegated specified elements of OPCON and administrative control (ADCON) over forces to the subordinate task force commanders. These task forces were then provided in direct support of their respective JTF commanders. The USAFCENT commander, as the theater COMAFFOR/CFACC to CDRUSCENTCOM, maintained a theater-wide perspective and the ability to re-apatron airpower across the USCENTCOM area of operations IAW CCDR priorities.

❖ **“ADCON-only” AETF.** On occasion, AETFs may be established to address a specific but purely internal Service challenge and may have no direct relation to a joint force. Examples can be found during the initial phase of Operation IRAQI
FREEDOM, the Air Force formed two task forces for ADCON purposes only, one in Pacific Air Forces (PACAF) under 13 AF on Guam and one in US Air Forces in Europe (USAFE) under 16 AF in Turkey. These AETFs were formed to provide more direct oversight of support activities of those forces bedded down in the USPACOM and USEUCOM AORs and supporting USCENTCOM’s main effort. The operational branch of the chain of command ran through the commander charged with accomplishing the operational mission (i.e., Commander, USAFCENT, as delegated from CDRUSCENTCOM) while the administrative branch ran through the Air Force commander best positioned to provide the necessary support (i.e., Commander, 13 AF as delegated from Commander, PACAF, and Commander, 16 AF as delegated from Commander, USAFE). This solution provided a closer degree of ADCON oversight due to size and complexity of the overall effort and, especially in PACAF’s case, the distance between Diego Garcia and PACAF headquarters in Hawaii. The designation of forward-located Air Force commanders provided more informed and timely decision making affecting those forward-based Air Force elements. In this case, these task forces commanders only exercised ADCON; they were not delegated any operational authorities.

(Note: the titles “subordinate AETF” and “ADCON-only AETF” above are descriptive, not formal.)

These are examples of extrapolating from baseline doctrinal concepts of organization and command relationships to tailor a solution to a particular set of circumstances. As with any tailored organization, there should be careful consultation among the Service and joint force commanders involved, and the CCDR retains final decision on the laydown of subordinate organization and distribution of command authorities.
COMMAND AND CONTROL MECHANISMS

Last Updated: 14 Oct 2011

The commander, Air Force forces (COMAFFOR) requires command and control (C2) assets to assist in exercising operational control (OPCON), tactical control (TACON), and administrative control (ADCON). The COMAFFOR normally uses some form of an air operations center (AOC) to exercise control of operations and a Service component staff, commonly called the AFFOR staff, to exercise support operations and administrative control.

The core capabilities of the AOC and AFFOR staff are well established, but they should be tailored in size and function according to the operation. Not all operations require a “full-up” AOC with over 1,000 people or a large AFFOR staff. Smaller operations, such as some humanitarian operations, can in fact make do with a small control center that does little more than scheduling and reporting. Also, not all elements of the operations center or AFFOR staff need be forward; some may operate “over the horizon,” using reachback to reduce the forward footprint. The goal is to maximize reachback and minimize forward presence as much as possible.

Air Operations Center

In general terms, an AOC is the Air Force component commander’s C2 center that provides the capability to plan, direct, and assess the activities of assigned and attached forces. AOCs do not work in isolation; they require appropriate connectivity to operations centers of higher headquarters (e.g., to the joint force headquarters for the operational branch, and to senior Air Force headquarters for the administrative branch), to lateral headquarters (e.g., other joint force components), to subordinate assigned and attached Air Force units, and to other functional and geographic AOCs as necessary. The overall C2 structure should make maximum use of reachback.

An AOC, along with subordinate C2 elements, should be tailored in size and capability to the mission. An AOC should generally be capable of the following basic tasks:

- Develop the component strategy and requisite planning products.
- Task, execute, and assess day-to-day component operations.
- Plan and execute intelligence, surveillance, and reconnaissance tasks appropriate to assigned missions.
The AOC is the senior element within the theater air control system (TACS). The TACS includes the AOC plus subordinate ground and airborne elements, and is directly involved in the command and control of most air missions. Collectively, the TACS has the capability to plan, direct, integrate, and control all air, space, and cyberspace forces assigned, attached, or made available for tasking; monitor the actions of both friendly and enemy forces; plan, direct, coordinate, and control air defense and airspace control; and coordinate for required space and cyberspace support.

While this discussion focuses on the AOC, it is important to remember that the entire TACS is necessary for the COMAFFOR’s effective command of airpower.

**Conduct operational-level assessment.**

Depending on the nature of the mission and the tailoring of the component, additional AOC tasks may include, but are not limited to, integrating intertheater air mobility support; developing and issuing airspace control procedures; and providing overall direction of defense appropriate for the operating domains (e.g., theater air and missile defense; cyberspace defense; space defense). While these operations centers are organic to Air Force operations, with proper augmentation from the other Services and coalition partners they may evolve into a joint or combined AOC (JAOC or CAOC), depending on the type of operation and nature of the forces within the air component, and whether the COMAFFOR is also acting as the joint or combined force air component commander (JFACC or CFACC).

AOCs and their subordinate C2 elements may be geographically oriented or functionally oriented. To bring all the Air Force’s capabilities together for a given operation or activity, the AOCs normally work together in a mutually supporting command arrangement, with one of them designated as the supported center.

See Volume 4 for a summary of baseline AOC organization. For more detailed guidance on internal structure and procedures, refer to AFI 13-1AOC, volume 3, Operational Procedures—Air and Space Operations Center.

**AFFOR Staff**

An air expeditionary task force (AETF) also needs a command entity responsible for the deployment and sustainment of Air Force forces. The AFFOR staff is the mechanism...
through which the COMAFFOR exercises Service responsibilities (See specific discussion within the larger COMAFFOR discussion). The AFFOR staff is also responsible for the long-range planning and theater engagement operations that fall outside the AOC’s current operational focus. The AFFOR staff should develop a habitual working relationship with the AOC to help fulfill the COMAFFOR’s full range of responsibilities and to integrate overall Service component staff efforts with the AOC battle rhythm.

An AFFOR staff should be ready to fill one or more roles: that of a theater-wide Air Force Service component, an Air Force warfighting component within a joint task force (JTF), or the core or “plug” within a JTF headquarters. The COMAFFOR should avoid dual- or triple-hatting the AFFOR staff to the maximum extent possible. Dual- or triple-hatting may have detrimental consequences as the staff struggles to focus at the right level of war at the right time. Manning and distribution of workload may limit the staff’s ability to cover all involved duties simultaneously and augmentation may be necessary.¹

The AFFOR staff’s function is to support and assist the COMAFFOR in preparing the Air Force component to carry out the functions and tasks assigned by the joint force commander (JFC). The exact nature of the AFFOR staff’s responsibilities will vary depending on the level of the JFC to which the Air Force component is assigned or attached. An AFFOR staff may support the COMAFFOR at either the theater or the JTF level and must be prepared to adapt its focus accordingly.

The structure and division of labor within an AFFOR staff that is dual-tasked as both a Service component to a unified combatant commander (CCDR) and a Service component headquarters AFFOR staff supporting a JTF (for example, as currently found within the Air Force component in USCENTCOM) may find itself split between the broad theater-level Service responsibilities and the JTF-level operational responsibilities. This would likely require two groups within the AFFOR staff, one to focus on theater component staff activities and the other on operational warfighting issues. In accordance with Service and joint doctrinal admonitions against dual-hatting a commander vertically across different levels of war, it would similarly be a mistake to dual-hat a single AFFOR staff for both of these functions, as one function invariably suffers due to the inability to properly focus at the correct level of war at the right time; differences in battle rhythms within the joint force; differing levels of connection within interagency processes; and other similar challenges.

An AFFOR staff may have a third role in addition to operational staff and Service staff: forming the core for a JTF headquarters staff, as in scenarios when the COMAFFOR is dual-hatted as the JFC. In such a scenario, the AFFOR staff, either in whole or in part, would be augmented by joint and coalition staff as required. Another option for staffing a JTF headquarters might be to pull a “plug” from the AFFOR staff as an add-on to another Service’s staff to form the core of the JTF staff. In either of these cases, the

¹ The note on workload distribution and the recommendation on augmentation are lessons observed during Exercise AUSTERE CHALLENGE 2010.
AFFOR staff would require augmentation from outside the theater to backfill the manning requirements. As with the previously-described division of labor between a theater-wide Service component and operational warfighting component, the same caveats apply: those AFFOR staff individuals functioning as a JTF headquarters should be separate from the other AFFOR staff activities.

See Volume 5 for a summary of baseline AFFOR staff organization.
Understanding distributed operations, split operations and reachback is important to a full understanding of command and control (C2) operations. Distributed operations involve conducting operations from independent or interdependent nodes in a teaming manner. Some operational planning or decision making may occur from outside the joint area of operations. Split operations is a type of distributed operations conducted by a single C2 entity separated between two or more geographic locations. A single commander must have oversight of all aspects of a split C2 operation. Reachback, which can be applied to both distributed, and the more specific case of split operations, is the process of obtaining products, services, and applications or forces, equipment, or materiel from Air Force organizations that are not forward deployed.

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

- The fewer the number of personnel/forces deployed forward, the less support is required to be pushed across great distances; however, face-to-face interaction between forward and rear decision makers may be limited, and decision making timelines may stretch.

- Fewer personnel/forces forward reduce security requirements; however, their expertise is no longer immediately at hand for ad hoc problem solving.

- Reachback requires more bandwidth for communications. These links then become vulnerabilities. However, a distributed operation may arguably be more survivable and less prone to single-point failure.

Refer to Annex 3-30, Command and Control, for further discussion of split and distributed operations.
COMMAND RELATIONSHIP MODELS FOR AIR FORCE FORCES

When employing military forces, a combatant commander (CCDR) first turns to those forces already assigned. Assigned forces are delineated in the SecDef’s “Forces for Unified Commands” memorandum, and the CCDR exercises combatant command (COCOM) over them. Additional forces beyond those assigned to the CCDR may be attached by SecDef action. These forces may come from one of two specific Global Force Management allocation supporting processes: rotational force allocation in support of CCDR annual force needs and emergent force allocation in support of CCDR emerging or crisis-based requests for capabilities and forces. Since the additional forces are normally assigned to a different CCDR, the deployment order should clearly delineate the degree of command authority to be exercised by the gaining commander. Forces temporarily transferred via SecDef action are normally attached with specification of operational control (OPCON) to the gaining CCDR.

The deployment order is the primary instrument for transferring forces and establishing supported and supporting relationships between CCDRs. Forces may also be transferred by an execute order which executes an approved operation plan. Other orders created during the planning process, such as warning orders, alert orders, planning orders, and fragmentary orders, may also specify or shape command relationships, but they do not transfer forces. The SecDef, as the only authority for transferring forces between CCDRs, normally approves deployment orders. This deployment order should specify to which CCDR the deployed forces are assigned or attached and the command relationship (OPCON or tactical control [TACON]) to be exercised by the gaining commander. Air Force component commanders may shape command and support relationships by working through their chains of command to shape the details of orders being drafted by the Joint Staff. While the joint force commander (JFC) ultimately has the authority to determine the delegation of command among subordinates, Air Force commanders should make consistent recommendations and present forces in a consistent manner to the JFC.

For Air Force forces, there are four general models for command relationships. Considerations for these relationships should include the ability of gaining commands to receive the forces and to command and control them appropriately; the characteristics and support requirements of the forces involved; and the operating locations of the forces.
Forces deployed and executing operations within the theater to which they are attached.

Forces executing missions inside the theater of operations but based outside the theater (i.e., across areas of operations [AORs]).

Functional forces with global missions.

Transient forces.

These four models illustrate the most probable combinations in assigning responsibility for operational and administrative control; however, many nuances are possible, and commanders must exercise sound professional judgment when setting up command relationships. (Note: In the following examples, “supported CCDR/JFC” specifically means the in-theater commander who is tasked with executing the operation for which the forces under discussion may be assigned or attached.)

In-Theater Forces

In general, when Air Force forces deploy into a theater to conduct operations, OPCON of those forces should normally go forward to the CCDR to whom the President or SecDef has assigned responsibility for accomplishing the mission. To the maximum extent possible, specified elements of administrative control (ADCON) should also go forward to the regional commander, Air Force forces (COMAFFOR) to whom the forces are attached. Since not all elements of ADCON authorities and responsibilities are transferred to the forward based gaining commander, ADCON can and does run concurrently between the gaining COMAFFOR and the parent organizations of the deployed forces. Which elements of ADCON are specified to the forward COMAFFOR and which are retained by the parent organization should be clearly specified in the G-series orders that establish the expeditionary organization and in the deployment orders that attach forces to that organization. The regional COMAFFOR already exercises OPCON and ADCON over forces assigned to that geographic CCDR.

Out-of-Theater Forces

There are two general cases in which Air Force forces may execute missions inside a theater of operations while based outside the theater. These cases involve CONUS-based forces, and forward-based forces operating outside the CONUS (OCONUS) and outside the AOR. In either case, OPCON of forces should transfer forward to the commander responsible for executing the mission while ADCON is dependent upon where the forces are based.

CONUS-Based Forces

CONUS-based forces that launch from their CONUS home station, conduct operations in another theater, and recover in CONUS should transfer OPCON to the supported CCDR/JFC upon sortie generation. ADCON should remain with the original component
command. An example would be a bomber launching from CONUS, striking a target overseas under the command of a regional force, and returning to CONUS. In this example, OPCON should transfer to the supported CCDR/JFC who is executing the mission; this is the preferred arrangement. However, if the tasked CCDR/JFC is only granted TACON of these forces, OPCON in this case remains with the CCDR to whom the forces are assigned and ADCON remains with that CCDR’s COMAFFOR.

**OCONUS Forces outside the AOR**

For OCONUS units stationed outside the theater of operations tasked to conduct sustained operations in that theater, OPCON should normally transfer forward to the geographic CCDR/JFC executing the mission while ADCON is best held by the COMAFFOR of the geographic region in which they bed down. An example of this situation would be bombers stationed at Diego Garcia (in the USPACOM AOR), but conducting operations under the command of USCENTCOM. The CDRUSCENTCOM would exercise OPCON of the bombers most likely through his COMAFFOR, the Commander, USAFCENT. The Commander, PACAF, would exercise ADCON through the established PACAF organizational structure but would have no operational responsibility or authority over the forces attached to CDRUSCENTCOM.

**Functional Forces**

Functional forces (such as air mobility and space forces) satisfy mission requirements across multiple AORs and are thus best centrally controlled. For such forces, the functional CCDR normally retains OPCON of assigned forces and executes as a supporting commander to the supported geographic CCDR.

In those cases where functional forces bed down in a geographic commander’s AOR, the Air Force host base command or senior Air Force officer present on the installation, if the Air Force is a tenant) normally exercises a minimum degree of ADCON, usually only for force protection, UCMJ, dining and lodging, and some limited force reporting. (See the discussion on the ADCON responsibilities of host installation commanders later in this volume). The extent and nature of the elements of ADCON to be exercised by the geographic commander should be specified in deployment orders and/or command-to-command agreements.

**Transient Forces**

Geographic or local commanders do not normally exercise OPCON of transient forces (i.e., forces merely transiting an AOR or JOA and not part of an AETF, and not participating in CCDR-sponsored joint exercises). However, such forces are subject to local force protection, UCMJ, lodging and dining, and administrative reporting requirements. Per Joint Publication 1, “Transient forces within the assigned AOR of a CCDR are subject to that CCDR’s orders in some instances (e.g., for coordination of emergency defense, force protection, or allocation of local facilities).” Transient forces
are not part of the area commander’s command, and the area commander is not in their normal chain of command.

**Forces in Exercises**

Forces participating in joint exercises under the orders of a CCDR or other SecDef directed training should normally be under the OPCON of the sponsoring CCDR. Forces participating in such joint training should normally be attached to the CCDR with specification of OPCON via SecDef approved deployment orders.

Unless otherwise specified by the SecDef, and with the exception of the US Northern Command (USNORTHCOM) AOR, a geographic CCDR has TACON for exercise purposes whenever forces not assigned to that CCDR undertake exercises in that CCDR’s AOR. TACON begins when the forces enter the AOR and is terminated upon completion of the exercise, after departing the AOR. In this context, TACON provides directive authority over exercising forces for purposes relating to that exercise only; it does not authorize operational employment of those forces. This blanket specification of TACON for exercise purposes does not apply to US Transportation Command (USTRANSCOM) assets within any AOR or to forces deployed for exercises in USNORTHCOM AOR. OPCON and TACON for USTRANSCOM forces or forces exercising in USNORTHCOM AOR remain as established by the SecDef.
TRANSFER OF FUNCTIONAL FORCES TO A GEOGRAPHIC COMMAND

In some situations, a geographic commander may request additional functional forces beyond those apportioned or allocated during deliberate or crisis action planning. The decision to transfer functional forces, with specification of operational control (OPCON), to a geographic combatant commander (CCDR) should be balanced against competing needs across multiple areas of operations (AORs). In some cases, the requirement for OPCON over specific forces to accomplish the geographic CCDR’s missions may be of higher priority than the competing worldwide mission requirements of the functional CCDR. Therefore, after coordination with the owning functional commander and upon SecDef approval, functional forces may be transferred to the geographic command and organized accordingly. The decision to attach additional functional forces has two parts. First, the decision should consider whether:

- The geographic CCDR will use the forces at or near 100 percent of their capability with little or no residual capability for other global missions.
- The forces will be used regularly and frequently over a period of time, not just for a single mission employment.
- The geographic commander has the ability to effectively command and control the forces.

If the answer to all three questions above is “yes,” then the functional forces should be attached to the geographic combatant command (CCMD). If any of the above questions are answered “no,” then the functional forces should remain under the OPCON of the functional CCDR’s commander, Air Force Forces (COMAFFOR) and be tasked in support.

If the decision is to attach forces, the second question is whether the forces should be attached with specification of either OPCON or tactical control (TACON).

**Specification of OPCON:** OPCON is the more complete—and preferred—choice of control. OPCON “normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions; it does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training.”
**Specification of TACON:** TACON is the more limited choice of control. It is “limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned.” JP 1 states “when transfer of forces to a joint force will be temporary, the forces will be attached to the gaining commands and JFCs, normally through the Service component commander, will exercise OPCON over the attached forces.” Thus, transfer and attachment with specification of TACON is not the expected norm. While it is possible for the SecDef to attach forces across combatant command lines with the specification of TACON in lieu of OPCON, such action would deviate from the joint doctrine and policy established in JP 1 and would result in a more confused chain of command with OPCON and TACON split between two different CCDRs.

Regardless of which form of control is transferred, regional COMAFFORs have inherent responsibilities for such issues as local force protection, lodging, and dining. Thus, if a regional COMAFFOR holds OPCON of forces outside the AOR, he or she is not responsible for such issues—that is the responsibility of the COMAFFOR in the region in which they are bedded down. In a parallel fashion, if such out-of-region forces divert into bases in his/her region (for example, for emergencies), that COMAFFOR is now responsible for basic support and protection.

As an example, a CCDR requests tankers in support of a regional operation. If the tankers are totally committed to that operation and are unavailable to perform any other missions, OPCON of these tankers may be transferred to the forward geographic CCDR/JFC. If, on the other hand, the tankers are only partially employed in that operation and thus are available for other missions (such as support to the intertheater air bridge), the Commander, USTRANSCOM (CDRUSTRANSCOM) should retain OPCON to optimize overall tanker utilization. As another example, missile warning satellites can provide warning to the geographic CCDR/JFC through a direct support relationship, but the Commander, US Strategic Command (CDRUSSTRATCOM) retains OPCON to optimize missile warning mission requirements globally.
INTEGRATING REGIONAL AND FUNCTIONAL AIR FORCE FORCES

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As previously stated, *airpower* is usually presented through a mix of regional and functional models, with the latter usually supporting the former. Functional forces usually maintain a separate organization from the supported regional organization, and are integrated in the theater through specially trained liaisons attached to the regional commander, *Air Force forces* (COMAFFOR). The most likely functional capabilities to be provided in such a supporting relationship are *air mobility operations*, *space operations*, *special operations*, *cyberspace operations*, and *nuclear operations*.

**Integrating Air Mobility Operations**

Because air mobility forces serve several regions concurrently, their employment should be balanced between regional and intertheater requirements and priorities. At the same time, the air mobility systems performing *intratheater* and *intertheater* missions within a given region should operate in close coordination to provide responsive and integrated aerial movement to the supported *combatant commander* (CCDR).

Carefully constructed command relationships can allow an interlocking arrangement to manage intratheater and intertheater air mobility operations. Normally, intratheater air mobility forces are attached to the *joint force commander* (JFC), with *operational control* (OPCON) as appropriate delegated to the COMAFFOR. Intertheater air mobility forces normally remain under the control of USTRANSCOM, delegated downward within Air Mobility Command (AMC) to Eighteenth Air Force (18 AF) as appropriate. Within a regional operation, the *Director of Mobility Forces* (DIRMOBFOR), with the air mobility division (AMD) in the AOC, provides the pivotal link between the intertheater and intratheater air mobility operations.

**The Director of Air Mobility Forces**

Within an AETF, the DIRMOBFOR is the COMAFFOR’s designated coordinating authority for air mobility operations. The DIRMOBFOR, normally a senior Air Force air mobility officer familiar with the *area of operations*, coordinates on behalf of the COMAFFOR/*joint force air component commander* (JFACC) with the AMD in the AOC. The DIRMOBFOR may be sourced by the theater Air Force component commander or nominated by the AMC commander. To ensure close coordination with the overall theater effort, the DIRMOBFOR is normally assigned to the COMAFFOR/JFACC’s special staff. In those instances when no JFACC is designated, or the JFACC is from
another Service, the DIRMOBFOR should normally report to the COMAFFOR. The DIRMOBFOR’s specific authorities and responsibilities include:

- Coordinate the integration of intertheater air mobility support provided by USTRANSCOM-assigned air mobility forces.
- Coordinate the tasking of USTRANSCOM air mobility forces (air and ground) assigned or attached to the JFC.
- Coordinate the tasking of intratheater air mobility forces (air and ground) attached to the theater or JTF.
- Coordinate with the AOC commander to ensure all air mobility operations attached to and supporting the JFC are fully integrated with the air tasking cycle and deconflicted with all other air operations.
- Coordinate with 18 AF, through the AMD and the 618 AOC (tanker/airlift control center) at Scott AFB, all intertheater air mobility missions to ensure the most effective use of these resources in accomplishing the JFC, theater, and USTRANSCOM missions.

Refer to Annex 3-17, Air Mobility Operations, for more information.

**Integrating Space Operations**

Space presents another form of military operations that, much like air mobility, usually are best presented functionally to a regional commander through a supporting relationship if they are not attached. Space command and control brings another level of complexity because many space assets that support military interests come from a variety of organizations, some outside of the Department of Defense (DOD). These capabilities often have nontraditional chains of command. In some cases, authority may be split between organizations due to shared interagency responsibilities. Much like air mobility through the DIRMOBFOR, space capabilities within a regional operation are normally focused within a JTF by the designation of a single authority for space operations.

**Space Coordinating Authority**

Within a regional operation, the JFC should designate space coordinating authority (SCA) to facilitate unity of effort with DOD-wide space operations and non-DOD space capabilities. Although JFCs may retain authority at the joint task force (JTF) level, they should normally designate as SCA the component commander who provides the preponderance of military space capabilities, the requisite ability to command and control them, and the resident space expertise. In most cases, the COMAFFOR provides these capabilities through the Air Force’s organic space C2 infrastructure. Responsibilities of SCA include:
Determine, deconflict, and prioritize military space requirements for the JTF.

Recommend appropriate command relationships for space to the JFC.

Help facilitate space target nomination.

Maintain space situational awareness.

Request space inputs from JTF staff and components during planning.

Ensure optimum interoperability of space assets with coalition forces.

Recommend JTF military space requirement priorities to JFC.

**The Director of Space Forces**

Within an AETF, the Director of Space Forces (DIRSPACEFOR) serves as the senior space advisor to the COMAFFOR. The DIRSPACEFOR, an Air Force space officer, coordinates, integrates, and staffs activities to tailor space support to the COMAFFOR (and the JFACC when the COMAFFOR is so designated). In addition, when the COMAFFOR/JFACC is designated SCA, the DIRSPACEFOR works the day-to-day SCA activities on behalf of the JFACC. If the COMAFFOR is neither SCA nor the JFACC, the COMAFFOR should establish a space liaison to the JFACC. The DIRSPACEFOR is part of the COMAFFOR’s special staff. As is the case with the DIRMOBFOR, the COMAFFOR may choose to make the DIRSPACEFOR available to the JFACC in those cases when the COMAFFOR is not dual designated as the COMAFFOR/JFACC. Whether a permanent member of the theater MAJCOM staff or provided to the theater by Air Force Space Command (AFSPC), the DIRSPACEFOR should be pre-identified to allow that officer time to become familiar with that theater’s space requirements. The DIRSPACEFOR’s specific responsibilities include:

- Provide senior space perspective for strategy and daily guidance development, target selection, force enhancement to terrestrial operations, and special technical operations activities relating to space operations.

- Facilitate AFSPC, US Strategic Command (USSTRATCOM), and national support to the JFC.

- Provide assistance to the COMAFFOR/JFACC in determining and achieving military space requirements.

- Assist regional AOC staff in developing and staffing space related operational requirements and policy matters.

- Recommend appropriate command relationships for space to the COMAFFOR/JFACC.

Refer to Annex 3-14, *Space Operations*, for more information.
**Integrating Special Operations**

The geographic CCDR normally exercises combatant command (command authority) (COCOM) of assigned Air Force special operations forces (AFSO) and OPCON of all attached AFSO through the commander of the theater special operations command. For conventional missions, the JFACC may receive OPCON or TACON of AFSO assets when directed by the JFC. However, in most cases, AFSO will only normally be in a direct support relationship with conventional assets. When SOF operate in concert with "conventional" JTFs, they normally take the form of a separate joint special operations task force (JSOTF) within the JTF, commanded by a joint force special operations component commander (JFSOCC). AFSO, like all Air Force units, organize using the AETF construct. Due to their unique relationship with US Special Operations Command, AFSO deployed unit designations differ slightly from the conventional Air Force model. Although the names differ (e.g., expeditionary special operations wing [ESOW] vice AEW), AFSO organizational patterns are similar to conventional unit orientation and functionality. Once deployed, JTF commanders establish appropriate command and control for SOF units. AFSOC force presentation is discussed in Annex 3-05, *Special Operations*.

SOF can enhance operations across the range of military operations during irregular or traditional warfare. SOF normally pursue SOF-unique objectives which prepare, shape or enhance broader JFC objectives. Due to specialized training which includes cultural, regional, and language orientation, SOF Airmen can provide key capabilities across the spectrum of irregular warfare tasks: foreign internal defense, counterinsurgency, counterterrorism, stability operations, and unconventional warfare. They may also be tasked to operate in support of conventional objectives or require conventional support of their objectives:

- SOF may act as an economy of force measure by applying SOF unique capabilities against conventional targets to enhance joint air asset efficiency and effectiveness.
- SOF may conduct specialized operations beyond the capabilities of joint air component forces. For example, they may strike against WMD production or storage facilities inaccessible to joint air due to environmental or dispersal concerns.
- Because of unique training and multiple air/ground combat power delivery capabilities, SOF may integrate with joint air component operations in a synergistic attack (e.g., terminal guidance operations).
- SOF may enhance joint air component operations with specialized personnel and platform capabilities to assist in locating deep targets.

Whether operating under control of the JFSOCC or in support of the COMAFFOR/JFACC, SOF aviation missions are integrated into other air activities supporting the theater campaign. Integration is crucial because the COMAFFOR/JFACC and the JFSOCC normally share common operational areas, and
their assets routinely operate in the deep battlespace. To ensure SOF aviation and surface assets are closely integrated in all joint air operations, from planning through execution, the JFSOCC provides the COMAFFOR/JFACC a special operations liaison element (SOLE) to coordinate, deconflict, and integrate SOF operations, strategy, and plans with other air operations. In return, the COMAFFOR/JFACC may provide a joint air component coordination element (JACCE) to the JFSOCC.

**The Special Operations Liaison Element**

Whether operating autonomously or in conjunction with conventional forces, SOF aviation and surface assets should be closely integrated into all joint air operations—from planning through execution—to provide coordination and deconfliction, prevent fratricide, and exploit synergistic effects.

The SOLE is a liaison team that represents the JFSOCC to the COMAFFOR/JFACC. The SOLE integrates all SOF air and surface operations with joint air operations via the air tasking process. Additionally, the SOLE deconflicts SOF operations with other component liaisons in the AOC. Specific functions include integration of SOF requirements into air tasking order (ATO) and airspace control order (ACO) generation; real time mission support within the AOC; operations and intelligence support for targeting; combat airspace control for prevention of fratricide; coordination with special plans functions; and coordination with the joint personnel recovery center. The SOLE also assists in the deconfliction of joint special operations areas and unconventional warfare operating areas with the COMAFFOR/JFACC.

**Integrating Cyberspace Operations**

As with air mobility and space operations, global cyberspace capabilities may be presented to a regional commander through a supporting relationship, to supplement regional cyberspace capabilities. US Cyber Command (USCYBERCOM), as a subordinate unified command under US Strategic Command (USSTRATCOM), is the focal point for providing cyberspace capabilities to other CCDRs. Within USCYBERCOM, the Air Force component is 24 AF (Air Forces Cyber [AFCYBER]). 24 AF provides support through the 624th Operations Center (624 OC). To support regional operations, USCYBERCOM may also provide cyberspace expertise to regional staffs if necessary.

The 624 OC uses a process similar to the air tasking cycle to develop a cyber tasking order (CTO) for planning, coordinating, apportioning, allocating, executing, and assessing cyberspace operations. The CTO is derived from Commander, USSTRATCOM and Commander, USCYBERCOM orders and supported JFC orders. Every cyberspace operation during that period should be on the CTO for situational awareness and deconfliction purposes.

When the 624 OC is supporting a theater operation, the CTO development process is coordinated and integrated with the theater ATO development process. The 624 OC,
using guidance from the supported COMAFFOR/JFACC, helps develop cyberspace courses of action in support of theater operations. During the planning phase, the 624 OC uses COMAFFOR/JFACC guidance, such as rules of engagement, the joint integrated prioritized target list, the target nomination list, and the approved master air attack plan, to finalize the CTO. After the ATO is finalized, the theater AOC disseminates it to all required users, including the 624 OC. 24 AF (AFCYBER) subsequently approves the CTO, ensuring it reflects theater taskings, and disseminates it to all required users including the theater AOC. The CTO tasks assigned and attached cyberspace forces to meet theater and global requirements for the next 24-hour period. Within the 24-hour period of execution, cyberspace tasking can occur dynamically to meet the supported commander’s requests.

For further discussion, see Annex 3-12, Cyberspace Operations.
NUCLEAR SUPPORT TO REGIONAL COMMANDS

Last Updated: 14 Oct 2011

The political and psychological effects of nuclear weapons confer upon them a unique nature. Therefore, the singular role of US Strategic Command during planning and employment necessitates close coordination with regional commanders to achieve desired results. Air Force nuclear capabilities are central to these considerations, and require precise integration to ensure effective employment within a particular region taking into account the larger political ramifications.

Refer to Annex 3-72, Nuclear Operations, for more information.
INTEGRATING THE AIR RESERVE COMPONENTS

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The Air Force, under the Total Force construct, has a substantial part of its forces in the Air Reserve Components (ARC), which consists of the Air Force Reserve (AFR) and the Air National Guard. The ARC provides a strategic reserve and a surge capacity for the Air Force; in some instances, the ARC has unique capabilities not resident within the regular component. The SecDef may make these forces available during the planning process. While they may seamlessly operate alongside the regular Air Force, they are subject to different levels of activation and different degrees of operational control and administrative control. Furthermore, differences in tour length availability pose continuity challenges for a commander, Air Force forces, and planners should carefully consider such issues for any category of activation (whether by volunteerism or mobilization).

See Appendix B for more discussion on ARC organization and accessing ARC forces.
Military operations inside the United States and its Territories fall into two mission areas: homeland defense, for which DOD serves as the lead federal agency and military forces are used to conduct military operations in defense of the homeland; and civil support for which DOD serves in a supporting role to other agencies at the federal, state, tribal, and local levels.

For most homeland scenarios, Air Force forces should be presented as an air expeditionary task force (AETF) under the operational control (OPCON) of a commander, Air Force forces (COMAFFOR), just as in any other theater. Air National Guard (ANG) forces, whether federalized and operating in Title 10 status or remaining under state control in Title 32 or state active duty status, should still be organized and presented within an AETF or equivalent structure.

For homeland operations, First Air Force (as Air Forces Northern [AFNORTH]), at Tyndall AFB, FL, fulfills the role of the Air Force component to USNORTHCOM, the supported combatant command (CCMD). The Commander, AFNORTH is also the COMAFFOR/joint force air component commander (JFACC) within the North American Aerospace Defense Command (NORAD) chain for the CONUS NORAD region.

The command relationships between a JFC and a COMAFFOR in a homeland context should be as previously described for any other region—although legal and interagency considerations may have significant impact, the CONUS is not a special case regarding command and control (C2) or organization of air, space, and cyberspace forces. The COMAFFOR should still be under direct operational control of a designated joint force commander (JFC), should still normally exercise OPCON and administrative control (ADCON) over the Air Force Service component forces, and should still coordinate activities with other components and outside agencies to achieve JFC objectives. Additionally, when the ANG is operating in Title 32 USC or state active duty status under the authority of a state governor, a similar command relationship exists between the state Adjutant General or joint task force (JTF) commander and the designated ANG air commander.

In some civil support operations, a JFC may elect to allocate combat support forces to subordinate functional task force commanders (TFCs) with a specification of OPCON to the TFC. For example, a JFC in a major disaster relief operation might organize his/her forces into separate engineering, transportation, and medical task forces. This organizational scheme—a legacy construct which sidesteps the role of Service
components and Service component commanders—divides Air Force assets among other component commanders and fractures Service unity of command. This is not the most operationally effective scheme for achieving unity of command and unity of effort under a single Airman. Ideally, the JFC allows the COMAFFOR to retain OPCON of all assigned and attached Air Force forces. The COMAFFOR then provides direct support to the various functional TFCs with the COMAFFOR as a supporting commander.

In disaster relief operations, particularly in consequence management of a manmade or natural disaster, the Air Force contribution will likely include a Total Force mix of capabilities. ANG forces may be federalized under Title 10 USC, or more normally operate under Title 32 USC or state active duty status under the authority of their governor.

Each state has a state joint force headquarters (JFHQ-State) that may provide a contingency C2 capability in support of homeland defense, civil support, and other related operations, and may thus function as a bridge between state and federal forces. Additionally, a governor may stand up a JTF-State to provide direction and control of assigned non-federalized National Guard forces and those attached from other states. ANG forces conducting operations in Title 32 or state active duty status should be organized as an AETF or equivalent within their state force structure to provide unity of command, with a single Airman in command of the ANG forces.

State and federal military forces may adopt a parallel or dual status command structure. A parallel command structure exists when state and federal authorities have separate chains of command, and retain control of their deployed forces. Unity of effort and decisions of mutual interest are handled through a coordinated liaison effort of the political and senior military leadership of state and federal forces.

Federal statute now provides the capability for a dual status command structure, in which a commander is subject to both federal and state chains of command. This allows National Guard officers, familiar with the state and local area of operations, to operate within both state and federal chains of command to provide unity of effort. Command authorities for federal and state chains of command remain separate. Additionally, the statute requires both presidential authorization and a governor’s consent to invest a commander with dual status.

A similar situation may occur in a civil support scenario when a mix of medical and line Air Force forces are presented to a JTF commander. Because medical officers cannot command line forces, a senior line officer may have to be designated to serve as COMAFFOR.

For more detailed discussion, see Annex 3-27, Homeland Operations.
Recent operations, notably Operations ENDURING FREEDOM and IRAQI FREEDOM, highlighted the nuances in on-base command arrangements and support requirements that result from mixed forces deploying forward, often to bare bases.

An installation commander, regardless of Service, always exercises some authority over and responsibility for forces on his/her base for protection of assigned forces and assets, lodging, dining, and administrative reporting, regardless of the command relations of those forces. These are inherent in his/her responsibilities as an installation commander.

Ultimately, the Air Force Service component commander within a region is responsible for fulfilling administrative control (ADCON) responsibilities and common logistics support for all Air Force forces within his/her region, regardless of organization of assignment of those forces. These ADCON responsibilities are exercised through commanders at subordinate echelons. The ADCON chain is clear for non-deployed forces at home station during peacetime. However, the ADCON chain during expeditionary operations requires some fundamental guidance, especially during those fluid times when forces are initially building up in remote deployed locations.

The senior Air Force commander on any base where Air Force forces are present has responsibilities for care and provisioning of the Air Force forces on that installation, regardless of organization. For example, a conceivable mix of host and tenant Air Force organizations at a single base could include:

- A small permanent party at the group or detachment level.
- A wing or group sized air expeditionary task force (AETF) conducting sustained operations from that base.
- Air Force Special Operations Command assets operating in-theater but not attached to the host AETF.
- Air mobility forces bedded down in-theater, supporting an air bridge under the operational control (OPCON) of US Transportation Command (through AMC).
- Transient forces using the base for a staging base for further deployment.
Other scenarios may have forces belonging to other Service components operating from an Air Force-owned base, such as Army special operations forces or Marine aviation units. Although the provision of logistics support is inherently a Service-specific responsibility, the senior Air Force commander, as the host base commander, has responsibility for providing protection and other base operating support as directed by the governing operations order or inter-service agreements. In scenarios where another Service is the host, clear lines of authority over critical issues, especially airfield operations, should be delineated, preferably in writing.

G-series orders should detail which commanders are responsible for providing specific elements of specified ADCON to deployed units and what authority that commander may use to carry out these responsibilities. The orders are not required to spell out all support and sustainment responsibilities. For a notional example, the orders might specify that lodging, dining, and force protection be provided by the 36 AEW from Air Forces Pacific (AFPAC) and Pacific Air Forces. The minimum ADCON responsibilities and authorities to go forward should be responsibility for UCMJ, protection of assigned forces and assets, lodging, dining, and force reporting. These responsibilities apply under a wide variety of basing situations:

- Whether the base is owned and operated by the Air Force, by another US Service, or by the host nation.
- Whether or not the senior Air Force officer on a given installation is the host installation commander.
- Whether or not the Air Force forces present on the installation are assigned or attached to the senior Air Force officer’s same expeditionary unit or even to the same AETF.
- Whether or not the Air Force forces present are regular, Guard, or Reserve, and regardless of whether or not the Guard forces are federalized.

For example, when Air Force aircraft are operating from a dual-use base where the installation commander is neither Air Force nor an Airman, clear lines of authority over airfield operations should be established.

To properly fulfill ADCON responsibilities on an installation, a senior Air Force line officer (preferably a commander of a designated echelon; that is, an “A-coded” commander) should be clearly identified. If such a senior officer is not clearly identified, either by position (as, for example, by his/her standing as the designated host installation commander) or otherwise in writing, the senior Air Force line commander present on an installation should assume responsibility for ADCON issues for all Air Force forces on that installation. The following guidelines are offered for further clarification:
Preferably, the designated senior officer should also be the commander of a clearly identifiable echelon, such as an AEW or AEG, and not lower than squadron level (AES).

When operational and support forces are present on the same base, the senior officer should normally be appointed or designated from the operational forces by the COMAFFOR.

When two or more equally-sized units are present on the same installation, and a single host installation commander has not yet been formally designated, the senior-ranking line officer commander should assume ADCON responsibilities for all Air Force forces on that installation until such time as either the COMAFFOR or joint force commander formally designates a host installation commander or host Service.

This senior officer is responsible for coordinating all required aspects of support with the host nation, any supporting Service, and the owning major command (MAJCOM) or combatant command as required.

Specified elements of ADCON should always be written in the G-series orders and clearly identify the support to be provided to a subordinate expeditionary or host unit.

A commander’s UCMJ authority only extends to regular, Reserve, and federalized Guard forces.

If support is provided to deployed units on a lengthy, recurring basis, Air Force MAJCOMs should specify ADCON relationships between MAJCOMs in standing command-to-command agreements.

Refer to AFI 38-101, Air Force Organization, for more specific policy guidance.
Modern warfare requires flexibility in execution to adapt to a wide variety of scenarios; this drives a need to assemble the right mix of forces from the appropriate Services to tailor the operation. This need to assemble the right forces drives a corresponding need for proper organization, command and control mechanisms, and appropriate command relationships. Current Service and joint doctrine provide much useful guidance on organization; however, assembling a joint organization demands careful, conscious thought. This chapter draws from doctrine and experience to provide the basics of setting up and commanding a joint air component within a joint force.
When a crisis requires a military response, the geographic combatant commander (CCDR) will usually form a tailored joint task force (JTF). If Air Force forces are attached to the JTF, they stand up as an air expeditionary task force (AETF) within the JTF. The AETF commander, as the commander, Air Force forces (COMAFFOR), provides the single Air Force face to the JTF commander. Other Services may also provide forces, and normally stand up as separate Army, Navy, and Marine forces, each with their respective commander (Commander, Army forces [COMARFOR]; Commander, Navy forces [COMNAVFOR]; and Commander, Marine Corps forces [COMMARFOR]). This JTF organization, along purely Service lines, is the most basic joint force organization. See figure, Joint Force Organization along Purely Service Lines. Each separate Service component commander normally exercises operational control (OPCON) over assigned and attached forces, as delegated from the joint force commander (JFC).

In all cases, the JFC is ultimately responsible for delineating the command relations of forces under his or her OPCON and empowering subordinate commanders appropriately. Normally, a JFC receives OPCON of assigned or attached forces and delegates that control (OPCON) to the appropriate Service component commanders.

Delegation of OPCON allows Service component commanders the necessary authority to fully organize and employ their forces:

"[Operational control] is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations and joint training necessary to accomplish the mission. It should be delegated to and exercised by the commanders of subordinate organizations; normally this authority is exercised through subordinate JFCs, Service, and/or functional component commanders." (Joint Pub 1, Doctrine for the Armed Forces of the United States) (Emphasis added)
Organizing and employing forces through Service component commands, however, does not allow for the true integration of key functional activities—especially airpower. Further, Army, Navy, and Marine forces are usually assigned individual areas of operations (AOs), which are subsets of the JFC’s joint operations area (JOA), which presents a less-than-total view of the theater. By comparison, an air component commander typically has a similar operational level, JOA-wide perspective as the JFC.

Because all four Services have forces that operate in the air domain, and two of them have land forces, the designation of functional commanders allows greater synergy by integrating similar activities across Service boundaries. Functional component commanders can also focus their planning and execution above the tactical level of war at the operational level of war. However, the designation of joint force air, land, maritime, and special operations component commanders (JFACC, joint force land component commander [JFLCC], joint force maritime component commander [JFMCC], and JFSOCC respectively) is at the discretion of the JFC. This functional component model has the added benefit in that, of all possible models, it most easily transitions to one that supports combined (coalition) employment, and the functional component commanders become combined component commanders (i.e., combined force air component commander [CFACC], combined force land component commander [CFLCC], combined force maritime component commander [CFMCC], and combined force special operations component commander [CFSOCC]). See figure, Joint Force Organization with Functional and Service Components.
Joint Force Organization with Functional and Service Components. This represents the Air Force’s preferred joint force organization.
The Joint Force Air Component Commander

Historically, when Air Force forces have been attached to a joint task force (JTF), the commander, Air Force forces (COMAFFOR) has normally been dual-hatted as the joint force air component commander (JFACC), not merely due to preponderance of forces but also due to the ability to command and control airpower through an air operations center (AOC), which forms the core of the JFACC’s joint AOC (JAOC). This is why the COMAFFOR trains to act as the JFACC. The instances when sizeable Air Force forces have been present in a JTF, and the COMAFFOR has not been the JFACC, are very rare. While joint doctrine discusses the roles and responsibilities of the JFACC in adequate detail, it is important to present a basic discussion here in Service doctrine in parallel with discussion in Joint Publication 3-30, Command and Control for Joint Air Operations.

If aviation assets from more than one Service are present within a joint force, the JFC normally designates a JFACC to exploit the full capabilities of joint air operations. The JFACC should be the Service component commander with the preponderance of forces to be tasked and the ability to plan, task, and control joint air operations (JP 3-30). If working with allies in a coalition or alliance operation, the JFACC may be designated as the CFACC. The JFACC recommends the proper employment of air component forces from multiple components. The JFACC also plans, coordinates, allocates, tasks, executes, and assesses joint air operations to accomplish assigned operational missions. Because of the wide scope of joint air operations, the JFACC typically maintains a similar theaterwide or joint operations area (JOA)-wide perspective as the JFC. The JFACC, as with any component commander, should not also be dual-hatted as the JFC, as the scope of command is usually too broad for any one commander and staff.

Functional component commanders normally exercise tactical control (TACON) of forces made available to them by the JFC. Thus, a COMAFFOR normally exercises operational control (OPCON) of assigned and attached Air Force forces and, acting as a JFACC, normally exercises TACON of forces made available for tasking (i.e., those forces not retained for their own Service’s organic operations).

The JFACC should be prepared to assume the following responsibilities, as assigned by the JFC:

- Organize a JFACC staff manned with personnel from each component to reflect the composition of capabilities and forces controlled by the JFACC.
Develop a **joint air operations plan** (JAOP) to support the JFC’s objectives.

Plan, coordinate, allocate, and task the joint capabilities and forces made available to the JFACC.

Develop the air operations directive (AOD).

Recommend **apportionment** of the joint air effort to the JFC.

Control execution of current joint air component operations to include:

- **Counterair**, to include **integrated air and missile defense**.
- **Strategic attack**.
- **Counterland**.
- **Countersea**.
- **Space control**.
- **Air mobility**.
- **Information operations**.
- **Personnel recovery** operations, including **combat search and rescue**, for assigned and attached forces.

Coordinate **special operations** with the **joint force special operations component commander** or the **joint special operations task force** commander.

Perform **assessment** of joint air component operations at the operational (component) and tactical levels.

Serve as **airspace control authority**, **area air defense commander**, and **space coordinating authority** and develop plans and products associated with these responsibilities.

Serve as the joint electronic warfare coordinator, if so appointed.

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[General MacArthur] had finished his talk, when one of the correspondents said, "General, what is the Air Force doing today?" General MacArthur said, "Oh, I don’t know. Go ask General Kenney." The newspaperman said, "General, do you mean to say you don’t know where the bombs are falling?" MacArthur turned to him, grinned, and said, "Of course I know where they are falling. They are falling in the right place. Go ask General Kenney where it is."

— George C. Kenney, *General Kenney Reports: A Personal History of the Pacific War*
Serve as the **supported commander** for counterair operations, strategic attack, the JFC’s overall air interdiction effort, and theater airborne intelligence, surveillance, and reconnaissance. As the supported commander, the JFACC has the authority to designate the target priority, effects, and timing of these operations and attack targets across the entire JOA in accordance with JFC guidance, to include coordinated targets within land and maritime areas of operations (AOs).

Serve as the **supporting commander** for operations such as close air support, air interdiction within the land and naval component AOs, and maritime support.

If the JFACC is appointed from another Service, the COMAFFOR passes control of air component forces to be made available to the JFACC as directed by the JFC. In such cases, the COMAFFOR maintains an effective C2 structure to perform Service-specific functions. In addition, the COMAFFOR should coordinate with the JFACC through a liaison element.

Refer to JP 3-30, *Command and Control for Joint Air Operations*, for more complete discussion of the JFACC’s role and the planning processes that support joint air component employment.
By definition, the joint force air component commander (JFACC) may control aviation assets of other Services, in whole or in part, depending on the situation. However, the JFACC only controls those capabilities "made available for tasking" as directed by the joint force commander (JFC). The other Services have developed their air arms with differing doctrinal and operating constructs in mind, and may retain control of some or all of their assets to perform their organic scheme of maneuver. These tactical mission priorities (primarily support of surface forces) may constrain their availability to conduct the broader scope of joint air component operations at the strategic and operational levels of war. Similar concerns also apply to the aviation arms of our allies. The JFACC should consider these differing philosophies when developing the air component portion of a joint campaign.

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Army aviation assets. These are normally retained for employment as organic forces within its combined arms paradigm. However, some Army helicopters could be employed in close air support, interdiction, or other missions, in which case they may come under the purview of the JFACC when the JFACC has been tasked to plan and execute the theater interdiction effort. The same can hold true for other systems (such as the Army Tactical Missile System) when employed for interdiction or offensive counterair, depending on tasking and target location. As a minimum, Army aviation elements, including some unmanned systems, should comply with the airspace control order (ACO) to deconflict airspace and friendly air defense planning. Placing Army aviation assets on the air tasking order (ATO)/ACO reduces the risk of fratricide and provides better overall integration with other joint air component operations.

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Navy aviation assets. These include carrier-based aircraft, land-based naval aircraft, and cruise missiles. They provide a diverse array of power projection capabilities. Such assets, beyond those retained as needed for fleet defense and related naval missions, are usually available for tasking via the air tasking process. Additionally, Navy AEGIS capabilities may be integrated into the overall theater defensive counterair effort and may operate in a direct support role to the JFACC/area air defense commander (AADC).

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Marine aviation assets. The primary mission of Marine aviation is support of the Marine air-ground task force (MAGTF) ground element. Sorties in excess of organic MAGTF direct support requirements should be provided to the JFC for ATO tasking through the JFACC. (Note: sorties provided to the JFC for tasking by the JFACC for
such theater missions as long range reconnaissance, theater air interdiction or
defensive counterair, are not considered “excess” sorties.)

Special operations forces (SOF) aviation assets. The JFC may assign control of
SOF aviation forces to either a Service or a functional component commander.
When SOF air assets are employed as part of joint SOF operations, the JFC may
assign control of those forces to the joint force special operations component
commander (JFSOCC), who may in turn designate a joint special operations air
component commander responsible for planning and executing joint special air
operations. However, if SOF aviation assets are assigned primarily in support of the
theater air operation, then the JFC should attach control of those assets to the
COMAFFOR as part of the air expeditionary task force. Whether operating
autonomously or in conjunction with conventional forces, special operations should
be integrated into, and closely coordinated with, other air activities supporting the
theater campaign. In order to coordinate and deconflict operations in their common
operating environment the JFSOCC and the JFACC exchange liaison teams. The
JFSOCC provides the air operations center (AOC) a special operations liaison
element to coordinate, deconflict, and integrate SOF operations, strategy, and plans
with conventional air, and the JFSOCC in turn receives a joint air component
coordination element from the JFACC, if required.

Regardless of whether the JFACC exercises tactical control of other Services’ forces,
the JFACC, in the normally expected multi-hatted roles of airspace control authority,
area air defense commander, and space coordinating authority, normally requires
inclusion of such forces on the ATO and ACO. This provides situational awareness of
all friendly aviation in the area of responsibility/joint operations area, prevents fratricide,
and deconflicts airspace.
There are many possible options for presenting forces in support of a joint force commander (JFC). To provide an initial baseline for organizational decisions, this section discusses three general models for presenting an Air Force component in support of a JFC: ¹

- **Theater-level component.** This establishes an air expeditionary task force (AETF) at the combatant commander (CCDR) level, attached with specification of operational control (OPCON) and commanded by a theater commander, Air Force forces (COMAFFOR)/joint force air component commander (JFACC).

- **Sub-theater-level component.** This establishes an AETF at the subordinate unified command or joint task force (JTF) level, attached with specification of OPCON, with a COMAFFOR (prepared to act as a JFACC) at a level below the CCDR.

- **Sub-theater-level AETF in support of a JTF.** This establishes a dedicated Air Force force in direct support of a subordinate JTF, with OPCON retained by the theater COMAFFOR/JFACC.

The placement of an Air Force component within the CCDR’s command structure, as well as the formal command relationships necessary to enable it to interface with other joint forces, requires careful deliberation based on the situation and capabilities available. At times, Air Force forces and capabilities may be best positioned at the theater (i.e., CCDR) level and at other times at the JTF level.

**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 (subunified command) level, 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 his/her forces to best accomplish assigned missions but instead to enable the Air Force to effectively support the CCDR and any subordinate organizations. Careful consultation between the respective JFCs and the Air Force component commanders is required. The

¹ There may be additional considerations during homeland operations that impact command arrangements and command relationships. See Annex 3-27, *Homeland Operations.*
following discussion summarizes some of the considerations that may affect the CCDR’s organizational construct and force attachment decisions. Each force presentation model will require an appropriately tailored C2 capability.

**Theater-Level Component**

This unified command-level model establishes an AETF and COMAFFOR at the CCDR level, with the COMAFFOR poised to act as a theater JFACC if so designated. This is known as the “theater COMAFFOR,” with the COMAFFOR poised to act as theater JFACC. This model optimizes allocation of scarce **airpower** assets against competing demands 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 AETF forms up under the CCDR’s Air Force component command.

The CCDR’s decision to use this model will likely incorporate many factors, including the demands of the strategic environment, the required integration of capabilities at the theater level, the character and availability of air, space, and cyberspace forces, and the ability to command and control those forces. When the CCDR decides the most effective way to accomplish the mission is by retaining forces at the theater level, the theater-level COMAFFOR/JFACC 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 JFACC 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 COMAFFOR and the air operations center (AOC).
The key advantage of this model is that it allows the COMAFFOR/JFACC to optimize CCDR priorities across the AOR. The key disadvantage is that the JACCE(s) may be inadequate if subordinate JTFs require detailed support and physical leadership presence.

**Sub-Theater-Level Component**

This model establishes a subordinate AETF and COMAFFOR within a subordinate JTF, responsible for an operational area below the theater (i.e., 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 subordinate AETF, and the designated commander of the JTF accepts OPCON for the duration of the attachment. In accordance with joint and Air Force doctrine, the JTF commander then normally delegates OPCON of attached Air Force forces to the JTF COMAFFOR (i.e., the AETF commander). Administrative control (ADCON) is retained within the Service chain from the CCDR-level COMAFFOR downward to the JTF-level COMAFFOR. The JTF-level COMAFFOR is poised to also act as the JFACC within the JTF, if so designated by the JTF commander.

The key advantage of this model is that it provides fully integrated airpower to a subordinate JTF, while the theater COMAFFOR/JFACC maintains control of high-demand, low density capabilities. The key disadvantage is that Air Force forces attached to the JTF are not normally available to address demands outside their JTF.

**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., intelligence, surveillance, and reconnaissance; 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.

In these circumstances, the theater COMAFFOR, as directed by the CCDR, relinquishes OPCON over those Air Force forces that are attached to the JTF as an AETF, but retains OPCON over all other Air Force forces assigned or attached to the CCDR. As a reminder, the theater COMAFFOR retains ADCON over all Air Force forces assigned or attached to the CCDR, either through the JTF level COMAFFORs for AETFs attached to the JTF or through established commanders for those Air Force forces that are retained at the CCDR level.
The key advantage of this model is that it provides fully integrated airpower to a subordinate JTF, while the theater COMAFFOR/JFACC maintains control of high-demand, low density capabilities. The key disadvantage is this model creates coordination challenges between the theater- and JTF-level COMAFFOR/JFACCs and their staffs. There may also be a scarcity of AOC and A-staff resources/JFACCs and their staffs. There may also be a scarcity of AOC and A-staff resources.

**Sub-Theater-Level AETF in Support of a JTF**

When the CCDR establishes one or more sub-theater JTFs, but elects to retain all (or most) Air Force forces at the theater level, the size and complexity of the mission may lead the theater COMAFFOR/JFACC to determine the best way to support the JTF(s) is by establishing subordinate AETF(s) and designating them in direct support of the sub-theater JTF commander(s).

When employing this construct, the theater COMAFFOR retains OPCON and delegates appropriate aspects of OPCON or tactical control (TACON) 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 (who is not a separate COMAFFOR) remains subordinate to the theater COMAFFOR.

The key advantage of this model is that it provides an Airman empowered with command authorities to the JTF commander, vice a liaison role, while allowing the theater COMAFFOR/JFACC to retain OPCON of forces across the AOR to address the CCDR’s priorities. The key disadvantage to this model is that there is usually no dedicated AOC to fully integrate airpower with JTF operations; reachback to the theater AOC and A-staff are still required.

**Force Attachment Considerations**

The CCDR decides whether effective accomplishment of the operational mission at the JTF level outweigh competing missions at the CCDR’s AOR level and can best be accomplished by attaching Air Force forces with specification of OPCON to a JTF commander. Deliberations should examine the interplay of priority, tempo, intensity, duration, and scope of operations. For example:

- 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 command and control 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?

If the decision is to attach forces, the follow-on question is whether the forces should be attached with specification of either OPCON or TACON.

**Specification of OPCON:** OPCON is the more complete—and preferred—choice of control because it includes organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission.

**Specification of TACON:** TACON is the more limited choice of control, as it is limited only to the detailed direction and control of movements or maneuvers. TACON may provide sufficient authority for controlling and directing the application of force or tactical use of combat support assets within the assigned mission or task. Attaching forces with specification of only TACON may make for a more confused chain of command since OPCON and TACON would be split between two different commanders. However, that must be balanced against other needs, for example, the ability to quickly swing the forces elsewhere, based on the CCDR’s directions.

**These situations require careful and continuing dialogue between the respective joint and Service component commanders and their common superior commander.** Finally, the decisions, including the delineation of operational and administrative authorities to be held among the involved commanders, should be captured in written orders such as operation orders, execute orders, or fragmentary orders; Air Force decisions may also be captured in G-series orders, such as those appointing the COMAFFOR.

**Achieving Unity of Effort**

To achieve unity of effort across an AOR, the CCDR should provide the requisite guidance for the interaction between theater-level and subordinate components. This should include clarity of supported and supporting command relationships between the JTFs and theater COMAFFOR/JFACC, together with clear priorities of effort and support, and apportionment. The theater COMAFFOR/JFACC should then allocate effort across the AOR using CCDR guidance and priorities.

The CCDR sets the conditions for success by clearly stating and emphasizing the supported command status of subordinate JTFs and the supporting command role of a
theater-level COMAFFOR/JFACC and by providing sufficient guidance for the theater
COMAFFOR/JFACC's subsequent *allocation* decision. The CCDR is the ultimate
arbiter for prioritization and *apportionment* decisions among subordinate JTF
commanders.
The joint force air component commander (JFACC) may establish one or more joint air component coordination elements (JACCEs) with other component commanders’ headquarters to better integrate the air component’s operations with their operations, and with the supported joint task force (JTF) headquarters (if the theater JFACC is designated in support to a JTF) to better integrate air component operations within the overall joint force. When established, these elements act as the JFACC’s primary representatives to the respective commanders and facilitate interaction among the respective staffs. (Note: in previous Air Force doctrine, the JACCE was simply known as the ACCE.)

The JACCE facilitates integration by exchanging current intelligence, operational data, and support requirements, and by coordinating the integration of JFACC requirements for airspace coordinating measures, fire support coordinating measures, close air support, air mobility, and space requirements. As such, the JACCE is a liaison element, not a C2 node; thus, the JACCE normally has no authority to direct or employ forces. The make-up of the JACCE is dependent on the scope of the operation and the size of the staff they liaise with. Element expertise may include plans, operations, intelligence, airspace management, logistics, space, and air mobility, as needed. The JACCE also communicates the JFC’s or component commander’s decisions and interests to the JFACC. However, the JACCE should not replace, replicate, or circumvent normal request mechanisms already in place in the component/JTF staffs, nor supplant normal planning performed by the air operations center (AOC) and AFFOR staff. The JACCE director is the JFACC’s personal and official representative, and as such should have sufficient rank to effectively work with the component or JTF commander to which he or she is attached. Finally, to maintain proper perspective and focus, the JACCE director should not normally be dual-hatted as the commander of a tactical unit.

Normally, the JACCE should:

- Ensure the JFACC is aware of each commander’s priorities and plans.
- Ensure the JFACC staff coordinates within their surface component/JTF headquarters counterparts to work issues.
- Ensure appropriate commanders are aware of the JFACC’s capabilities and limitations (constraints, restraints, and restrictions).
Ensure appropriate commanders are aware of the JFACC’s plan to support the surface commander’s scheme of maneuver and the JFC’s intent and objectives.

Facilitate JFACC staff processes with the surface/JTF commanders. Provide oversight of other JFACC liaisons to component/JTF headquarters staffs, if directed.

Ensure information flows properly between the JAOC, sister components, and JFC.
AIR COMPONENT RELATIONSHIPS WITHIN A JOINT FORCE

The joint force commander (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 commander, Air Force forces (COMAFFOR)/joint force air component commander (JFACC) as the supported commander for strategic attack, air interdiction, and theater airborne intelligence, surveillance, and reconnaissance (among other missions). As such, the COMAFFOR/JFACC is responsible to the JFC for planning, coordinating, and executing these missions, and other component commanders support the COMAFFOR/JFACC. When outlining supported/supporting relationships, the JFC usually does not specify the degree and timing for that support; the subordinate commanders normally work that out.

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 tactical control 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 COMAFFOR/JFACC should establish a close working relationship with the JFC to ensure the best representation of airpower’s potential. When possible, the COMAFFOR/JFACC should co-locate with, or at least be positioned close to, the JFC,
so they may benefit from frequent personal interaction. This fosters the personal trust between senior commanders essential to joint operations. It also helps keep a greater air component presence in the joint force headquarters, especially during planning, as well as keeping the joint force headquarters staff from trying to plan and run air component operations in the perceived absence of the JFC’s senior Airman. To facilitate this, in some situations the COMAFFOR/JFACC may even elect to co-locate with the JFC at the expense of residing in the AOC/JAOC.
The theater air control system (TACS) is the Air Force’s mechanism for commanding and controlling theater airpower. It consists of airborne and ground elements to conduct tailored command and control (C2) of airpower operations throughout the spectrum of conflict, including counterair and counterland operations, airspace control, and coordination of space mission support not resident within theater. The structure and positioning of the TACS elements adapt as needed to effectively control airpower. As an organic Air Force system, the TACS remains under the operational control of the commander, Air Force forces (COMAFFOR). In multinational commands, the name and function of certain TACS elements may differ, but multinational air components have similar capabilities.

As the senior C2 element of the TACS, the air operations center (AOC) includes personnel and equipment of the necessary disciplines to ensure the effective conduct of air component operations (e.g., communications, operations, intelligence, weather, etc.). When the COMAFFOR/joint force air component commander (JFACC) is designated as the airspace control authority, area air defense commander, and space coordinating authority, these functions are also performed through the AOC. The AOC should have secure and redundant communications with higher and lateral headquarters, as well as subordinate units. The TACS provides the COMAFFOR/JFACC with connectivity from the theater strategic level down through control and reporting centers (CRCs) and expeditionary air support operations groups (EASOGs) or expeditionary air support operations squadrons (EASOSs), and eventually to tactical air control parties (TACPs) and joint terminal attack controllers (JTACs).

When the TACS is combined with other components’ C2 elements, such as the Army air-ground system, the Navy tactical air control system, and the Marine Corps air command and control system, they become the theater air-ground system, and collectively support the JFACC.

See Annexes 3-03, Counterland Operations, and 3-30, Command and Control, for more detailed discussion on these TACS elements.
JOINT LIAISONS IN THE AOC

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Depending on the nature of the operation, the commander, Air Force forces (COMAFFOR)/joint force air component commander (JFACC) may have a number of liaison teams within the air operations center (AOC) to facilitate planning and execution among the other components in the joint force.

Component Liaisons. Component liaisons work for their respective component commanders and with the COMAFFOR/JFACC and staff. Each component normally provides liaison elements that work within the AOC and AFFOR staff. These liaison elements consist of experienced specialists who provide component planning and tasking expertise and coordination capabilities. They help integrate, coordinate, and deconflict their component’s participation in joint air component operations. The air component may require other liaison augmentation to support AOC functions such as Coast Guard, Defense Intelligence Agency, National Security Agency, Central Intelligence Agency, National Geospatial-Intelligence Agency, Air Force ISR Agency, National Reconnaissance Office, and Federal Aviation Administration in various operational and support areas.

Battlefield Coordination Detachment (BCD). The BCD supports integration of air component operations with Army operations. BCD personnel are integrated into AOC divisions to support planning; operations; air defense; intelligence, surveillance, and reconnaissance; airlift; logistics; airspace control; and communications. In particular, the BCD coordinates ground force priorities, requests, and items of interest. One of the BCD’s most important functions is to coordinate boundary line and fire support coordination line changes and timing. The BCD brings ground order of battle (both friendly and enemy) situational awareness and expertise into the AOC and normally briefs the ground situation/intelligence update. The BCD may also provide current ground situation inputs to AOC teams for incorporation into daily briefings and intelligence summaries.

Naval and Amphibious Liaison Element (NALE). The NALE personnel from the maritime components support the AOC in integrating naval air, naval fires, and amphibious operations into theater air operations and monitor and interpret the maritime battle situation for the AOC.

Marine Liaison Element (MARLE). MARLEs are representatives of the COMMARFOR and the associated aviation combat element commander. The MARLEs support the COMAFFOR/JFACC in integrating Marine air-ground task force (MAGTF) fires,
maneuver, and Marine air into the theater campaign and supporting joint air operations plan. This team should be well versed in the MAGTF commander’s guidance, intentions, schemes of maneuver, and direct support aviation plan.

**Special Operations Liaison Element (SOLE).** The joint force special operations component commander (JFSOCC) provides a SOLE to the COMAFFOR/JFACC (or appropriate Service component air C2 facility) to coordinate and integrate SOF air and surface operations within the area of responsibility. The SOLE coordinates, integrates, and deconflicts all SOF air and surface activities through the JFACC’s air tasking order and airspace control order. The SOLE chief, serving as the JFSOCC’s representative to the JFACC, places liaison officers (LNOs) throughout the AOC staff.

**Coalition/Allied Liaison Officers.** LNOs representing coalition/allied surface forces may improve AOC situational awareness regarding the disposition of friendly forces, especially when those forces do not have a mature TACS. They are also essential for unity of effort for coalition air defense operations and airspace deconfliction. When teamed with linguists, they can help overcome language barriers with remote allied/coalition forces. In force projection scenarios into an immature theater, AOC directors should anticipate the need for LNOs and actively seek them out via the JFC staff, in-country military group, staff country team, or direct contact with coalition forces, if necessary.
This section presents some considerations on composition and uses of joint staffs.

**Joint Staff Composition**

Effective joint operations require real integration of significant multi-Service capabilities. The composition of a truly joint staff should reflect the composition of the subordinate joint forces to ensure that those responsible for employing joint forces have a thorough knowledge of the capabilities and limitations of assigned or attached forces. The presence of liaisons on a single-Service staff does not transform that Service staff into a joint staff. The joint staff should be composed of appropriate members in key positions of responsibility from each Service or functional component having significant forces assigned to the command.

The same general guidelines for joint staffs apply to coalition operations. Key staff positions ought to be a representative mix of US and allied officers. As with a joint staff, the key concepts are shared responsibilities and trust. And as with a joint staff, liaisons alone don’t make a Service staff into a coalition staff.

**Commanders and Staff**

“Commanders command, staffs support.” Within a joint force, only those with the title of “commander”—i.e., the joint force commander (JFC), the Service component commanders, and the functional component commanders—may exercise any degree of operational control over forces. Only commanders have the legal and moral authority to place personnel in harm’s way. Under no circumstance should staff agencies, including those of the JFC’s staff, attempt to command forces. Special cells formed within a joint staff to oversee or advise the JFC on special interest activities should not exercise direct control over component forces. In accordance with JP 1, *Doctrine for the Armed Forces of the United States*, it is permissible for joint staff agencies to issue orders and directives in the name of the commander of the higher command to the commander of the immediate subordinate command. Staff agencies should neither attempt to nor be permitted to directly command or control elements of the subordinate forces. As a final note, while this guidance is aimed at joint staffs, it also applies to Service staffs.

**JFACC Staff**

When the commander, Air Force forces (COMAFFOR) is designated the joint force air component commander (JFACC), the JFACC may need to establish a small joint or
combined staff to deal with joint issues beyond the purview of the AFFOR staff. Additionally, some AFFOR staff personnel may be present in the joint air operations center (JAOC) to provide the JFACC with access to Air Force component information; normally, such AFFOR staff personnel should not be dual-hatted within the JAOC. Augmentation within each JAOC directorate from relevant Service components and coalition partners ensures adequate joint representation on the JFACC staff. At the discretion of the JFACC, officers from other Services and coalition partners may fill key deputy and principal staff JFACC positions. Finally, for very large and complex operations, as might be encountered with large coalition operations, a COMAFFOR dual-hatted as a JFACC may delegate some aspects of COMAFFOR functions to a subordinate deputy COMAFFOR to ensure that they receive the proper attention.
Caution should be applied when multi-hatting commanders. Too many “hats” may distract a commander from focusing on the right level of war at the right time, or may simply overwhelm the commander with detail. Of equal importance is the fact that a commander’s staff can usually operate effectively only at one level of war at a time. If a commander wears several hats, it is preferable that the associated responsibilities lie at the same level of war. While it is normally inappropriate for either a Service or a functional component commander to also serve as the joint force commander (JFC), it is entirely appropriate for a joint force air component commander (JFACC) to also serve as the airspace control authority, area air defense commander, and space coordinating authority, since all four functions lie at the operational level of war and all four functions are supported through the same command node (the JAOC). To alleviate the overload, a multi-hatted commander may delegate some functions (but not the ultimate responsibility) to appropriate deputies.

More challenging are those instances when a commander’s hats vertically span several levels of war, as in the case when the JFC (normally acting at the theater-strategic level) is also acting as a functional component commander (operational level), and also as the commander of one of the operating (tactical) units. In such cases, the commander may be inadvertantly drawn to the tactical level of detail at the expense of the operational-level fight. Also, dual- or multi-hatting a functional or Service component commander as the JFC raises a special caution in itself:

“…dual-hatting a commander also means dual-hatting the commander’s staff which can result in forcing the staff to operate at the operational and tactical levels simultaneously” (Joint Publication 1, Doctrine for the Armed Forces of the United States).

Thus, although this option is available to combatant commanders when designing subordinate joint task forces, caution is needed when vertically multi-hatting commanders, as it tends to create “part-time commanders.”
Most operations today are not US-only. Many operations involve military forces of allies, and many operations also involve intergovernmental organizations (IGOs), nongovernmental organizations (NGOs), and regional organizations. Managing the myriad interrelationships is often challenging yet necessary. In many instances, direct command over these various entities is not possible, and unity of effort rather than unity of command becomes the goal.

Multinational Operations

Multinational operations are operations conducted by forces of two or more nations, and are usually undertaken within the structure of a coalition or alliance.

- An alliance is “the relationship that results of a formal agreement [e.g., a treaty] between two or more nations for broad, long-term objectives that further the common interests of the members.”

- A coalition is “an arrangement between two or more nations for common action.” Coalitions are formed by different nations with different objectives, usually for a single occasion or for longer cooperation in a narrow sector of common interest.

In a multinational force, the joint commanders become combined commanders; thus, the joint force commander (JFC) becomes a combined force commander, the joint force air component commander (JFACC) becomes a combined force air component commander (CFACC), etc. Similarly, the air operations center (AOC) (properly a JAOC in joint context) becomes a CAOC with representation that, as with a JAOC, reflects the composition of the force. An important point is that commanders may not have the same defined degree of control over forces (e.g., operational control, tactical control, etc.) as in a US-only force; degrees of control may have to be negotiated. Finally, each nation may retain its own chain of command over its forces and separate rules of engagement, again 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 (and occasionally incompatible) capabilities, equipment, and procedures.

Per Joint Publication 3-16, Multinational Operations, commanders in multinational operations should consider the following:
Respect. In assigning missions, the commander must consider that national honor and prestige may be as important to a contributing nation as combat capability. All partners must be included in the planning process, and their opinions must be sought in mission assignment.

Rapport. US commanders and staffs should establish rapport with their counterparts from partner countries, as well as the multinational force commander. This requires personal, direct relationships that only they can develop.

Knowledge of partners. US commanders and their staffs should have an understanding of each member of the multinational force. Much time and effort is expended in learning about the enemy; a similar effort is required to understand the doctrine, capabilities, strategic goals, culture, religion, customs, history, and values of each partner.

Patience. Effective partnerships take time and attention to develop. Diligent pursuit of a trusting, mutually beneficial relationship with multinational partners requires untiring, even-handed patience. This is easier to accomplish within alliances but is equally necessary regarding prospective coalition partners.

See Joint Pub 3-16 for more complete discussion on multinational operations.

Interagency Coordination

Interagency coordination is “the coordination that occurs between elements of DOD and engaged US Government agencies for the purpose of achieving an objective.” Attaining national objectives requires the efficient and effective use of the diplomatic, informational, economic, and military instruments of national power supported by and coordinated with those of our allies and various IGOs, NGOs, and regional organizations.

“A large number of civilian agencies and organizations—many with indispensable practical competencies and significant legal responsibilities—interact with the Armed Forces of the United States and its multinational counterparts. Joint and multinational operations must be strategically integrated and operationally and tactically coordinated with the activities of participating USG agencies, IGOs, NGOs, host nation (HN) agencies, and the private sector to achieve common objectives. Within the context of DOD involvement, interagency coordination is the coordination that occurs between elements of DOD and engaged USG agencies for the purpose of achieving an objective. Interagency coordination forges the vital link between the US military and the other instruments of national power. Similarly, within the context of DOD involvement, interorganizational coordination is the interaction that occurs among elements of the DOD; engaged USG agencies; state, territorial, local, and tribal agencies; foreign military forces and government agencies; IGOs; NGOs; and the private sector. Successful interorganizational coordination enables the USG to build
international and domestic support, conserve resources, and conduct coherent operations that more effectively and efficiently achieve common objectives.” (Joint Publication [JP] 3-08, Interorganizational Coordination During Joint Operations

As with multinational operations, command and control is not as straightforward as within a US-only joint force, and unity of effort is the goal.

“Achieving unity of effort requires the application of a comprehensive approach that includes coordination, consensus building, cooperation, collaboration, compromise, consultation, and deconfliction among all the stakeholders toward an objective. An inclusive approach of working closely with stakeholders is often more appropriate than a military C2 focused approach. Taking an authoritative, military approach may be counterproductive to effective interorganizational relationships, impede unified action, and compromise mission accomplishment. Gaining unity of effort is never settled and permanent; it takes constant effort to sustain interorganizational relationships.” (Joint Pub 3-08).

See JP 3-08 for complete discussion, including planning, organization, and execution considerations.
CONCLUSION
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If there is one attitude more dangerous than to assume that a future war will be just like the last one, it is to imagine that it will be so utterly different that we can afford to ignore all the lessons of the last one.

—Air Marshall Sir John C. Slessor, Air Power and Armies

More and more often, our national leadership is calling upon airpower as the military instrument of first choice, and they are asking it to accomplish tasks previously held unworkable—to coerce and to compel. Airpower offers joint force commanders options, including the ability to go to the heart of an enemy and attain a variety of effects directly at the strategic level. To support our national leadership, Airmen, as military professionals, must think about how to accomplish a spectrum of missions. We must understand the potential of airpower, and be able to plan and employ it to its maximum effect, and to articulate it within the context of joint operations. This is especially true in contemporary irregular warfare operations, in which airpower plays an important role, but largely complementing surface operations.

Air Force doctrine development is never totally complete—it is a continuous work in progress. We must remain aware of the lessons of the past—alert and receptive to future technologies and paradigms that may alter the art of air, space, and cyberspace warfare. We should

I am tempted indeed to declare dogmatically that whatever doctrine the armed forces are working on now, that they have got it wrong. I am also tempted to declare that it does not matter that they have got it wrong. What matters is their capacity to get it right quickly when the moment arrives.

not assume that things have not or will not change; above all, doctrine should be continually interpreted in light of the present situation. A too-literal reading of doctrine may fail to accommodate new operational realities.

Doctrine application requires informed judgment. Certain principles—like unity of command, objective, and offensive—have stood the test of time. Other ideas—like unescorted daytime bombing, decentralized command, and the preeminence of nuclear weapons—have not. If we ignore the potential of integrated air, space, and cyberspace operations and the global and strategic potential of airpower, we may commit the same sins as our forebears by preparing for the “wrong war.” If we ignore the reality that adaptive, thinking adversaries will seek asymmetric strategies, anti-access capabilities, and favorable arenas within which to influence and engage us, we risk failure.

Tomorrow, a new set of conditions and requirements will likely emerge. In fact, some new conditions and environments are already emerging, and national security requirements are changing. The best hedge is an institutional commitment to learn from experience and to exploit relevant ideas and new technologies so we may be ready for the future, while retaining those fundamental principles that remain constant over time.

**AT THE HEART OF WARFARE LIES DOCTRINE...**
This appendix presents discussion on command relationships and command authorities. It supports discussion in the main text and complements discussion in joint doctrine.

Clear and effective command relationships are central to effective operations and organizations. In order to apply the principles of war and tenets of airpower to any organization, Airmen must fully understand the terms of command and support that underpin today’s organizations and operations. A working understanding of command terminology is essential to understanding the relationships among components and the responsibilities inherent in organizations.

The authority vested in a commander should be commensurate with the responsibility assigned. In other words, the commander with responsibility for a particular mission should have the necessary authority to carry out that mission. Levels of authority include the four types of command relationships—combatant command (command authority) (COCOM), operational control (OPCON), tactical control (TACON), and support. These are “warfighting” authorities that flow through joint channels, from the SecDef to the combatant commanders (CCDRs), to joint force commanders (JFCs), and to component commanders. The CCDR attaches various forces to the JFC and specifies the degree of control over each force element in terms of OPCON, TACON, or support. The JFC should in turn delegate appropriate authorities to the various component commanders. Thus, a commander, Air Force forces (COMAFFOR)/joint force air component commander (JFACC) actually exercises only those operational authorities delegated by the JFC.

Administrative control (ADCON) is a Service command authority, and flows through Service, not joint, channels. This authority is not an operational command authority, but provides the requisite authority for Services to execute their individual “organize, train, and equip” functions.

**Combatant Command**

Combatant command (command authority)(COCOM) is defined as “nontransferable command authority, which cannot be delegated, of a combatant commander to perform those functions of command over assigned forces involving organizing and employing commands and forces; assigning tasks; designating objectives; and giving authoritative direction over all aspects of military operations, joint
training, and logistics necessary to accomplish the missions assigned to the command” (JP 1). COCOM is exercised by commanders of combatant commands as directed by the President or the SecDef. COCOM should be exercised through the commanders of subordinate organizations such as subordinate joint force commanders and Service and/or functional component commanders. COCOM provides full authority to organize and employ commands and forces as the CCDR considers necessary to accomplish assigned missions. (Note that COCOM refers only to the command authority, not to an individual.)

**Operational Control**

Operational control (OPCON) is defined as “the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission” (JP 1). OPCON is able to be delegated from a lesser authority than combatant command (command authority) (COCOM). OPCON normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions. It does not include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. OPCON does not, for example, include the authority to change the Service’s internal organization of its forces. Component forces (e.g., the air expeditionary task force and its subordinate mix of expeditionary wings, groups, or squadrons) “should remain organized as designed and in the manner accustomed through training to maximize effectiveness.” (JP 1). OPCON should be exercised through the commanders of subordinate organizations, such as subordinate JFCs and Service and/or functional component commanders. Normally, JFCs exercise OPCON of assigned and attached Air Force forces through the COMAFFOR.

**Tactical Control**

Tactical control (TACON) is defined as “the authority over forces that is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned” (JP 1). TACON is able to be delegated from a lesser authority than OPCON and may be delegated to and exercised by commanders at any echelon at or below the level of combatant command (CCMD). Tactical control provides sufficient authority for controlling and directing the application of force or tactical use of combat support assets within the assigned mission or task. TACON does not provide organizational authority or authoritative direction for administrative and logistic support.

An example of TACON is when the COMAFFOR, acting as the JFACC, produces an air tasking order that provides detailed instructions for joint air assets made available for tasking. For example, a JFACC functioning as the area air defense commander (AADC) with TACON over Army PATRIOT surface-to-air missile forces would have the authority to specify which asset/battery would be responsible for providing which portion of the air defense coverage for the joint force (exact placement of the assets/battery
necessary to achieve the required coverage should normally be left to the Army component commander). The commander exercising TACON is responsible for ensuring communications with the controlled unit.

**Support**

Support is a command authority that aids, protects, complements, or sustains another force. It is usually used when neither OPCON nor TACON is appropriate. The SecDef specifies support relationships between CCDRs; the CCDR may establish support relationships between components assigned or attached to the command. Over several years of experience, the most common example of this between CCDRs is seen when a functional CCDR (e.g., Commander, USTRANSCOM) is established by the SecDeF as a supporting commander and a geographic CCDR (e.g., Commander, USCENTCOM) is established as the supported commander. Within a combatant command, the best example is the last several years of experience within USCENTCOM, in which the COMAFFOR/JFACC (Commander, USAFCENT) is the supporting commander with the JFCs in Operations IRAQI FREEDOM (redesignated Operation NEW DAWN) and ENDURING FREEDOM designated by Commander, USCENTCOM as supported commanders.

The supported commander should ensure that the supporting commanders understand the assistance required. The supporting commanders will then provide the assistance needed, subject to a supporting commander's existing capabilities and other assigned tasks. When a supporting commander cannot fulfill the needs of the supported commander, the establishing authority will be notified by either the supported commander or a supporting commander. The establishing authority is responsible for determining a solution.

An establishing directive normally is issued to specify the purpose of the support relationship, the effect desired, and the scope of the action to be taken. It also should include: the forces and resources allocated to the supporting effort; the time, place, level, and duration of the supporting effort; the relative priority of the supporting effort; the authority, if any, of the supporting commander to modify the supporting effort in the event of exceptional opportunity or an emergency; and the degree of authority granted to the supported commander over the supporting effort.

There are four defined categories of support that a CCDR may direct over assigned or attached forces to ensure the appropriate level of support is provided to accomplish mission objectives. These include general support, mutual support, direct support, and close support.

- **General support.** That support which is given to the supported force as a whole rather than to a particular subdivision thereof.

- **Mutual support.** That support which units render each other against an enemy because of their assigned tasks, their position relative to each other and to the enemy, and their inherent capabilities.
**Direct support.** A mission requiring a force to support another specific force and authorizing it to answer directly to the supported force’s request for assistance.

**Close support.** That action of the supporting force against targets or objectives that are sufficiently near the supported force as to require detailed integration or coordination of the supporting action with the fire, movement, or other actions of the supported force.

A supported relationship does not include authority to position supporting units but does include authority to direct missions or objectives for those units. In contrast to the previous TACON example, the JFACC/AADC (as supported commander for counterair) is interested in the support provided by other assets (e.g., Army surface-to-air missiles) rather than where they are positioned or which specific asset provides the support. Another example would be a JFACC’s request for a supporting commander, Army Forces or joint force land component commander to provide joint fire support to engage a time sensitive target (TST). It is up to the supporting commander to choose whether to use an Army Tactical Missile System, long range artillery, or some other weapon system as long as the TST is engaged with the effect and timing as directed by the supported commander. Under a supported relationship, the supporting unit is responsible for ensuring connectivity.

**Administrative Control**

Administrative control (ADCON) is defined as the “**direction or exercise of authority over subordinate or other organizations with respect to administration and support**” (JP 1). This includes organization of Service forces, control of resources and equipment, personnel management, unit logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations.

ADCON is not a warfighting authority like that found in combatant command, operational control, tactical control, or support relationships. Normally the COMAFFOR exercises ADCON over assigned Air Force personnel and at least those elements of ADCON that are necessary to ensure mission accomplishment over those Air Force personnel attached to the Air Force component command. G-series orders implement Service ADCON authority by detailing those aspects of support that are necessary for the mission, and the relationship the gaining organization possesses over assigned or attached units and personnel. For example, the authority to exercise ADCON could include such elements as building a tent city, ordering supplies and equipment, authorizing training sorties, conducting exercises, working assignment actions for personnel, developing budget requests, protecting personnel, and recommending awards and decorations. Uniform Code of Military Justice (UCMJ) authority is inherent in command authority, and is distinct from ADCON. However, G-series orders implementing ADCON may incorporate references to UCMJ authority. In specific contingency operations, the G-series order may retain one or more of these authorities in the parent unit. For attached forces, those elements of ADCON that are not specified
to be gained by the COMAFFOR to whom the forces are attached, are retained by the parent Service organization to whom the Air Force forces are permanently assigned.

**Coordinating Authority**

Coordinating authority is defined as “the commander or individual who has the authority to require consultation between the specific functions or activities involving forces of two or more Services, joint force components, or forces of the same Service or agencies, but does not have the authority to compel agreement” (JP 1). In the event that essential agreement cannot be obtained, the matter shall be referred to the appointing authority. Coordinating authority is a consultation relationship, not an authority through which command may be exercised.

Coordinating authority may be exercised by commanders or individuals at any echelon at or below the level of combatant command. Coordinating authority may be granted and modified through a memorandum of agreement to provide unity of effort for operations involving Reserve component and active component forces engaged in interagency activities. The common task to be coordinated should be specified in the establishing directive without disturbing the normal organizational relationships in other matters. Coordinating authority is more applicable to planning and similar activities than to operations. Coordinating authority is not in any way tied to force assignment. Assignment of coordinating authority is based on the missions and capabilities of the commands or organizations involved.

**Direct Liaison Authorized**

Direct liaison authorized (DIRLAUTH) is defined as “that authority granted by a commander (any level) to a subordinate to directly consult or coordinate an action with a command or agency within or outside of the granting command” (JP 1). DIRLAUTH is more applicable to planning than operations and always carries with it the requirement of keeping the commander granting DIRLAUTH informed. DIRLAUTH is a coordination relationship, not an authority through which command may be exercised.” DIRLAUTH is most appropriately used to streamline communications and operations between tactical elements without relinquishing command by the higher authority.
APPENDIX B: THE AIR RESERVE COMPONENTS

The Air Reserve Components (ARC) are the Air Force Reserve (AFR) and the Air National Guard of the United States (ANGUS). The ARC provides operational capabilities and strategic depth to meet US defense requirements across the range of military operations. ARC forces are normally employed to take advantage of military opportunities, cover shortfalls in regular component critical skills, and to support short duration national priorities. The importance of this factor—the part-time nature of the force—should be fully considered. When evaluating which ongoing operational missions are best suited for ARC participation, factors such as predictability, tour length, and duty location should all be considered.

The AFR consists of the Ready Reserve, the Standby Reserve, and the Retired Reserve (which includes retirees from both the ARC and regular component). The Ready Reserve consists of the Selected Reserve and the Individual Ready Reserve.

The ANGUS consists of members of the Air National Guard (ANG) who are on active duty under Title 10 USC. The ANG consist of the federally-recognized organized militia of the States and Territories, Puerto Rico, and the District of Columbia. Administrative control (ADCON) for Guardsmen not in federal status flows to their respective adjutant general and governor. When activated under Title 10 USC, ADCON is maintained through the ANG Readiness Center.

The AFR and the ANG both provide forces to the Selected Reserve, which the Air Force maintains at the same readiness level as the regular component. AFR and ANG are full partners ready to meet Air Force mission requirements at all times. This enables the ARC to provide operational capability on a continual basis.

Leveraging the ARC to provide operational capability involves a process of using both volunteer forces and/or forces mobilized as described below. The ARC provides sustainable, rotational support across numerous operational missions, such as airlift, air refueling, North American Air Defense Command air sovereignty mission, and combat support. Voluntary duty is encouraged to meet mission requirements and volunteers provide the bulk of the ARC's sustainable rotational capability to operations. ARC forces may need to be mobilized during a surge operation and for activities requiring critical skills.

Historically, ARC forces were allocated to regular component major commands (MAJCOMs) which then managed, mobilized, and presented forces to fulfill operational
requirements. With the increased operational commitment of the ARC, more of the roles and responsibilities currently performed by the regular component MAJCOMs related to generating ARC forces are shifting to the ARC.

**ARC Organization**

The majority of the ARC is organized into two types of units: unit-equipped or associate. Unit-equipped units have their own organic equipment; associate units share the weapon systems of an equipped host unit and train to perform the same mission. These unit associations allow for consistent training, leveraging of resources, and familiarization between the regular component and ARC. The associate models are:

- **Classic Associate:** A host regular unit retains principal responsibility for a weapon system that it shares with one or more associate ARC units. Each component exercises ADCON of it respective members.

- **Active Associate:** A host ARC unit has principal responsibility for a weapon system which it shares with one or more associate regular units. Reserve and regular units retain separate organizational structures and chains of command.

- **ARC Associate:** An ANG and an AFR unit train and operate integrally, with one retaining principal responsibility for the weapon system as host unit. Each unit retains separate organizational structures and chains of command.

**Air Force Reserve**

The AFR also provides individual reservists through the individual mobilization augmentee (IMA) program and the participating individual ready reserve (PIRR) program. IMAs are trained reservists who augment regular units to support mobilization requirements, contingency operations, or other specialized requirements. Their experience helps the regular component accomplish its mission by augmenting (or rounding out) the regular unit, backfilling positions that have been vacated by deploying regular component members, or performing missions at the normal duty station. IMAs perform the full range of Air Force missions. The ARC retains ADCON of IMAs and PIRR personnel.

**Air National Guard**

National Guard Airmen can be called to long-term active duty under five different statutes, as authorized in Title 10 USC. They range from full mobilization, which requires a declaration of war or national emergency by the Congress, to reserve component volunteers, which requires consent of the individual reserve component member and consent from the governor to activate individuals in the National Guard. The various mobilization statutes determine how many reservists can be called up, to whom the call up applies, and the duration of the call up.
Accessing ARC Forces

ARC forces can be activated both voluntarily and involuntarily to support national requirements. Once activated, there are different degrees of operational and administrative control applicable to ARC members. The ARC structure normally retains full ADCON; the gaining commander, Air Force forces (COMAFFOR) normally exercises specified elements of ADCON, which should be articulated in appropriate orders. OPCON transfers in accordance with SecDef orders.

**Voluntary.** Volunteers are placed on Federal active duty by the SECAF as authorized by Title 10 USC.

**Involuntary:** There are three authorities that outline the limits and requirements for involuntarily activating members of the ARC:

- **Presidential Reserve Callup.** This provides the President a means to activate, without a declaration of national emergency, not more than 200,000 members of the Selected Reserve and the Individual Ready Reserve (of whom not more than 30,000 may be members of the Individual Ready Reserve), for not more than 365 days to meet the requirements of any operational mission. Members called under this provision may not be used for disaster relief or to suppress insurrection. This authority has particular utility when used in circumstances in which the escalatory national or international signals of partial or full mobilization would be undesirable. Forces available under this authority can provide a tailored, limited-scope, deterrent, or operational response, or may be used as a precursor to any subsequent mobilization.

- **Partial Mobilization.** Expansion of the active Armed Forces resulting from action by Congress (up to full mobilization) or by the President (not more than 1,000,000 for not more than 24 consecutive months) to mobilize Ready Reserve Component units, individual reservists, and the resources needed for their support to meet the requirements of a war or other national emergency involving an external threat to the national security.

- **Full Mobilization.** Expansion of the active Armed Forces resulting from action by Congress and the President to mobilize all Reserve Component units and individuals in the existing approved force structure, as well as all retired military personnel, and the resources needed for their support to meet the requirements of a war or other national emergency involving an external threat to the national security. Reserve personnel can be placed on active duty for the duration of the emergency plus six months. Under full mobilization, ADCON transfers to the gaining COMAFFOR and OPCON transfers in accordance with SecDef orders.

Refer to Joint Publication 4-05, *Joint Mobilization Planning*, for more complete discussion on mobilization of the ARC.