

Air Force Basic Doctrine, Organization, and Command



Air Force Doctrine Document 1 14 October 2011

This document complements related discussion found in Joint Publication 1,
Doctrine for the Armed Forces of the United States.

SUMMARY OF CHANGES

This revision not only updates and expands material from the previous version of Air Force Doctrine Document (AFDD) 1, but also incorporates much material from AFDD 2, *Operations and Organization*, due to a restructure of the doctrine document publication framework. As a result, this publication has been significantly restructured and renamed *Air Force Basic Doctrine, Organization, and Command*. The Preface is new to all AFDDs. The material presented in Chapter 1, *Doctrine*, has been revamped. Chapter 2, *Airpower*, is completely new and introduces new discussion on airpower and the Airman's perspective. Chapter 3, *War*, substantially updates previous discussion, and introduces irregular warfare and the role of culture in war. Chapter 4, *Principles and Tenets*, is largely unchanged except for the inclusion of four additional principles of operations previously found in AFDD 2. This chapter also contains a truncated discussion on the range of military operations previously found in AFDD 2. Chapter 5, *Air Force Functions*, has been completely rewritten; the previous seventeen Operational Functions have been replaced by twelve new core functions. Most of the material in Chapter 6, *Commanding and Organizing Air Force Forces*, was pulled forward from AFDD 2; discussion has been appropriately updated. New material includes expanded discussion of air expeditionary task force organization, and integration of cyberspace and nuclear capabilities. Homeland organizational discussion has been expanded. Chapter 7, *The Air Force Component within the Joint Force*, was largely pulled forward from AFDD 2 and updated appropriately; new material consists of discussion on presenting forces at different levels within a theater. Appendix A now presents discussion on command authorities previously presented in the main text of AFDD 1. Appendices B and C were previously separate chapters in AFDD 2; the material was moved into appendices to aid the flow of discussion in the main text and the bulk of material was reduced. Appendix D contains updated discussion on the Air Reserve Components. Finally, historical references have been updated throughout for currency of discussion.

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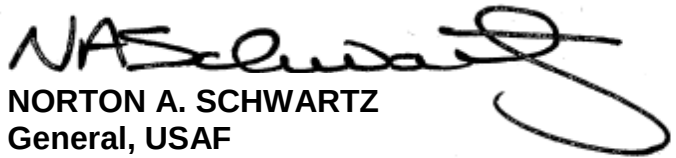
FOREWORD

This document is the Air Force's premier statement of warfighting principles and beliefs. It is the senior doctrine publication from which all other Air Force doctrine flows.

Historically, airpower has been associated with its more familiar and visible aspects, such as air-to-air combat, strategic bombing, and long-range heavy airlift. However, airpower has many less visible but equally important missions across the range of military operations: providing close air support and tactical mobility to our ground forces; positioning and resupplying remote forces; obtaining and providing detailed and timely intelligence, surveillance and reconnaissance; providing humanitarian relief; projecting world-wide command and control; and training of coalition partners in the use of airpower, just to name a few. Also, while many parts of the Air Force are visibly engaged in overseas expeditionary operations, other aspects of the Air Force are quietly at work day-to-day, overwatching the homeland. These include nuclear forces on alert; ground- and space-based national warning systems; cyberspace forces monitoring the security of military networks; and fighters on call to defend sovereign airspace.

Much has transpired in the world since the previous edition of AFDD 1 was published in 2003. Irregular warfare and homeland defense have taken on more importance; the Air Force has recognized cyberspace as an operational domain and has renewed its commitment to nuclear operations; and we are now investing heavily in unmanned aircraft systems. Seven years ago, we could not have accurately foreseen these changes; looking forward, the future is equally unpredictable. While we cannot accurately predict where and how we'll next be engaged, doctrine provides a leg up, outlining the basics of organization and command, providing guidance on how to think about and plan for different types of operations and missions. These foundational basics allow us to respond more quickly, freeing commanders and planners to think about larger issues such as strategy, operational art, and objectives.

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.



NORTON A. SCHWARTZ
General, USAF
Chief of Staff

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PREFACE

At the very heart of warfare lies doctrine. It represents the central beliefs for waging war in order to achieve victory. Doctrine is of the mind, a network of faith and knowledge reinforced by experience which lays the pattern for the utilization of men, equipment, and tactics. It is the building material for strategy. It is fundamental to sound judgment.

— General Curtis E. LeMay



Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine, Organization, and Command*, is the senior capstone document of Air Force doctrine. AFDD 1 discusses the fundamental beliefs that underpin the application of Air Force capabilities across the range of military operations. Its seven chapters range from the fundamentals of airpower to discussion on commanding and organizing Air Force forces. AFDD 1 provides guidance on the proper employment of airpower, sets the foundation for educating Airmen on airpower, guides the development of all other AFDDs, and provides insight where personal experience may be lacking.

Much has transpired in the overall operational environment since the previous edition of AFDD 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.¹ Some of its key points are summarized as follows:

- ★ 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 US may find itself caught off guard by changes in the political, economic, technological, strategic, and operational environments. The US will likely find itself surprised by the creativity and capability of its adversaries.

¹ *Joint Operating Environment 2010*, US Joint Forces Command/J59.

- ★ 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 US 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 US should expect future opponents to launch both terrorist and unconventional attacks on the US 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 US 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 US 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 AFDD 1 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. AFDD 1 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.

CHAPTER ONE

DOCTRINE

There is no end to the number of people who will line up to make flippant remarks that the doctrine is too long, too short, has too many pictures, is too academic, is not academic enough.... The acid test is do we read it, do we understand it, and do we use it, and DOES IT WORK? ... "all else is rubbish" to borrow from Baron von Richthofen. Our doctrine does not mirror the Navy's, nor the Marine's, nor the Army's... it is aerospace doctrine... our best practices... and we should not be bashful about how we write it or what it says.

— From briefing notes by then-Brigadier General Ronald Keys to a doctrine symposium, 1997



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.

✧ “...*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.

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

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.

POLICY, STRATEGY, AND DOCTRINE

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 wisdom. Military doctrine is authoritative, but unlike policy, is not directive.

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.



Although air officers have not been prolific writers, they have expressed their beliefs freely.... In fact, one may almost say that the Air Force has developed an oral rather than a written tradition.

— Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force, 1907 - 1960*

USES OF DOCTRINE

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.

SOURCES OF DOCTRINE

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 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



[Doctrine] reflects an official recognition of what has usually worked best from observation of numerous trials. These may be reports of actual combat operations, or they may be limited to tests, exercises, and maneuvers. Only when necessary will doctrine consist of extrapolations beyond actual experience of some sort, for example, in the use of nuclear weapons where the nature of the weapon normally precludes the gathering of experience in any but the most limited sense.

— Maj Gen I.B. Holley,
*Technology and
Military Doctrine*

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.

LEVELS OF DOCTRINE

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. (Note that the Air Force doctrine publication architecture breaks Air Force Doctrine Documents (AFDDs) into levels of capstone, keystone, and sub-publications, but this does not explicitly address the content.)

- ★ **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. AFDD 1 is the Air Force’s basic doctrine publication.
- ★ **Operational doctrine** contained in AFDD X-0 series publications (e.g., AFDD 2-0, AFDD 3-0, etc.) describes 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 anti-armor 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.

TYPES OF DOCTRINE

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.

DOCTRINE, OPERATING CONCEPTS, AND VISION

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.

A hiatus exists between inventors who know what they could invent, if they only knew what was wanted, and the soldiers who know, or ought to know, what they want, and would ask for it if they only knew how much science could do for them.

— Winston Churchill,
The Great War

- ★ **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.

CHAPTER TWO

AIRPOWER

The other services have air arms—magnificent air arms—but their air arms must fit within their services, each with a fundamentally different focus. So those air arms, when in competition with the primary focus of their services, will often end up on the short end, where the priorities for resources may lead to shortfalls or decisions that are suboptimum. It is therefore important to understand that the core competencies of [airpower] are optional for the other services. They can elect to play or not play in that arena. But if the nation is to remain capable and competent in air and space [sic], someone must pay attention across the whole spectrum; that is why there is a US Air Force.



— General Ronald R. Fogleman, USAF, retired

This chapter 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 Airman’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

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.

Airpower

This AFDD presents airpower as a unitary construct; this is a change from previous basic doctrine which talked to “air and space power.” Since publication of the previous edition of AFDD 1, the Air Force has acknowledged the importance of the cyberspace domain. However, **Air Force doctrine should address what unifies Airmen.** Thus, in the Air Force's capstone doctrine document, it is appropriate to use concepts and language that bind Airmen together instead of presenting the Air Force as a collection of tribes broken out in technological stovepipes according to the domains of air, space, and cyberspace. Other subordinate doctrine documents delve into the differences and interdependencies of the core functions and missions conducted within and across the air, space, and cyberspace domains, and within the context of more specific types of operations. Where appropriate, this AFDD will also mention air, space, and cyberspace forces or capabilities.

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 JFC 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.² 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" (JP 1-02). 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 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.

THE FOUNDATIONS OF AIRPOWER

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

² 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.

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 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

Upon the outbreak of war the offensive power of the Air Service should be ready for instant use, and the offensive in the air should be assumed immediately. During this period of hostilities offensive aerial operations will exert an important influence upon the future conduct of the campaign. It should be used offensively, primarily to secure the control of the air, and, secondarily, to disrupt and delay enemy communications and ground establishments.

— Training Regulation No. 440-15, "Fundamental Principles for the Employment of the Air Service," 1926

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 US. 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 US 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 of Air Force assets and decentralized execution, 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 ISR, command and control (C2), 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, JFCs 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 US to anywhere on the globe in hours (for air operations) and even nanoseconds (for space and cyberspace operations).

“[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.”

— Dr. Dale L. Hayden, “Air-Mindedness,” *Air & Space Power Journal*, Winter 2008

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.

THE AIRMAN'S PERSPECTIVE

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, discussed further in chapter 4.

CHAPTER THREE

WAR

Every art has its rules and maxims. One must study them: theory facilitates practice. The lifetime of one man is not long enough to enable him to acquire perfect knowledge and experience. Theory helps to supplement it; it provides a youth with premature experience and makes him skillful also through the mistakes of others. In the profession of war the rules of the art are never violated without drawing punishment from the enemy, who is delighted to find us at fault.

— Frederick the Great



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.

THE NATURE OF WAR

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 one's 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

The US' overwhelming dominance in recent conventional wars has made it highly unlikely that most adversaries would choose to fight the US 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”³ (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. 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” (JP 1-02).

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 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.

³ Joint doctrine does not formally define traditional war. However, JP 1 contains this characterization.

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 AFDD 3-24, *Irregular Warfare*, for detailed discussion on irregular warfare.

CULTURE AND WAR

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.



When one is attempting to change minds, rather than blow them away, local beliefs and attitudes assume high strategic importance.

— Colin S. Gray, *The Airpower Advantage in Future Warfare*

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 US 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 US 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 (COGs). At this level the US 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 (CCDRs) determine and direct the overall outcomes of major operations (or "wars") taking place within their particular areas of responsibility (AORs), 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, space, and 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.**

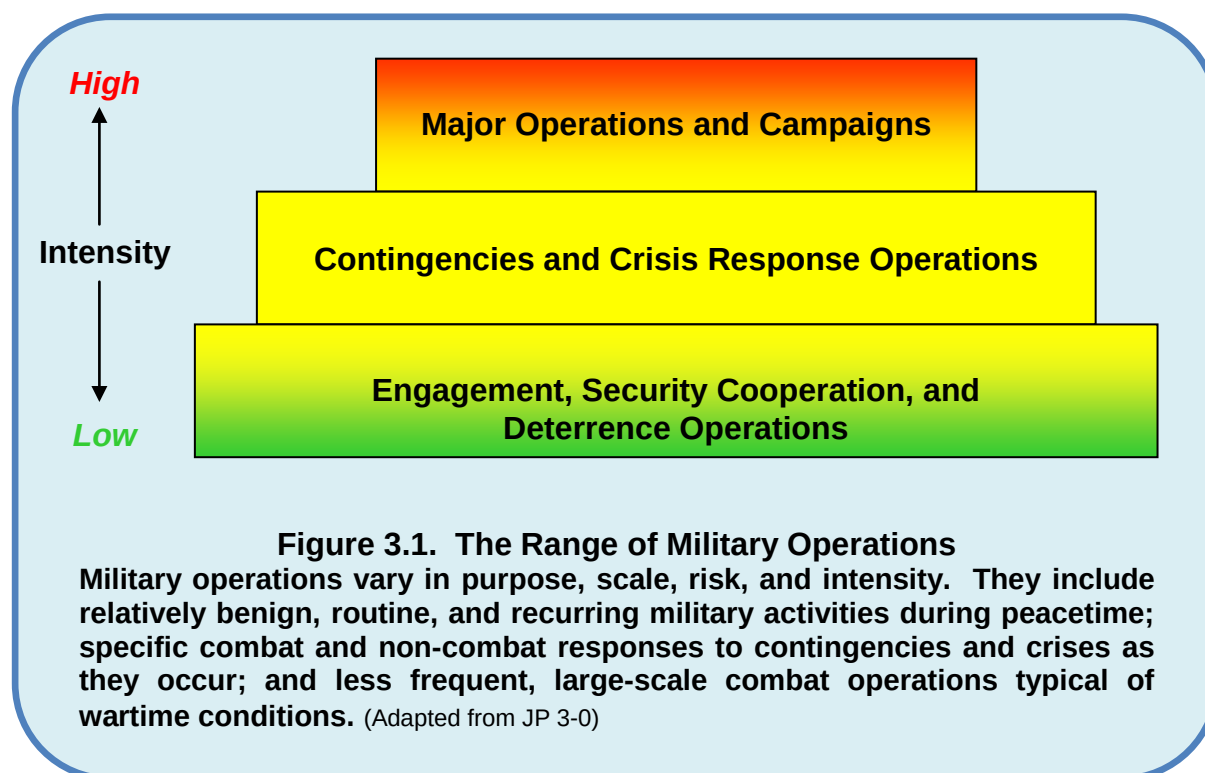
THE RANGE OF MILITARY OPERATIONS

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 3.1. 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 ISR), 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 AFDD 3-0, *Operations and Planning*, and JP 1.

CHAPTER FOUR

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

The role of the Air Force is to defend the US 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.

PRINCIPLES OF JOINT OPERATIONS

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 ⁴ developed through recent experience in irregular warfare. See figure 4.1.

PRINCIPLES OF WAR

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” (JP 1). 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.

⁴ Joint doctrine recognizes three additional principles. The Air Force recognizes Unity of Effort as a fourth additional principle to better highlight its importance.

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 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

Principles of War

- Unity of Command
- Objective
- Offensive
- Mass
- Maneuver
- Economy of Force
- Security
- Surprise
- Simplicity

Additional Principles of Operations

- Unity of Effort
- Restraint
- Perseverance
- Legitimacy

Figure 4.1. Principles of Joint Operations

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.

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.

— Training Regulation 440-15,
“Employment of the
Air Forces of the Army,” 1935

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 JFCs 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, 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 ROE). 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.

ADDITIONAL PRINCIPLES OF OPERATIONS

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 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 US 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 US 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.

TENETS OF AIRPOWER

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 4.2.**

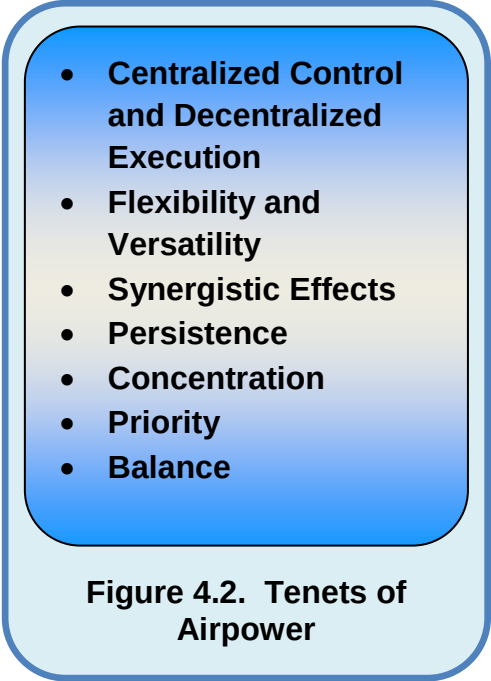
- 
- **Centralized Control and Decentralized Execution**
 - **Flexibility and Versatility**
 - **Synergistic Effects**
 - **Persistence**
 - **Concentration**
 - **Priority**
 - **Balance**

Figure 4.2. 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 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 maximizes the flexibility and

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.

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 warfare 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.

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.

Air forces can be switched from one objective to another. They are not committed to any one course of action as an army is, by its bulk, complexity, and relatively low mobility. While their action should be concentrated, it can be quickly concentrated afresh against other objectives, not only in a different place, but of a different kind.

— B.H. Liddell Hart

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 ISR 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.

CHAPTER FIVE

AIR FORCE FUNCTIONS

A modern, autonomous, and thoroughly trained Air Force in being at all times will not alone be sufficient, but without it there can be no national security.

— General H. H. “Hap” Arnold



In order to describe what airpower in general, and the Air Force in particular, bring to the Nation, Airmen should first understand the distinctions among roles, missions, and functions. Although these terms are frequently used interchangeably, each has a specific meaning.

In brief, the primary *function* of the Services is to organize, train, equip and administer military Service forces to perform a *role*—to be provided to and employed by a CCDR in the accomplishment of a *mission* to achieve a specific effect. Based upon the effect desired and the mission assigned, Airmen accomplish a series of discrete tasks that cumulatively deliver the desired effects.

ROLES

Roles are the broad and enduring purposes for which the Services were established by law. The role of the Air Force is to organize, train, and equip aviation forces “primarily for prompt and sustained offensive and defensive air operations” (*National Security Act*, 1947). This basic charter has essentially remained unchanged to the present.

MISSIONS

Missions are the tasks assigned by the President or Secretary of Defense (SecDef) to the CCDRs. CCDRs take these assigned tasks and develop mission statements, operational objectives, and concepts of operations; they then in turn assign specific tasks to subordinate commanders. By tailoring these tasks to meet the commander’s guidance and desired objectives, Air Force component commanders in turn develop component mission statements, objectives, and concepts of operations at their level.

FUNCTIONS

The functions of the Military Departments are those specific responsibilities that enable the Services to fulfill their legally established roles. The Air Force functions are based on the statutory responsibilities outlined in Title 10 United States Code (USC), which are known as “organize, train, and equip” activities. Specifically, these include “recruiting; organizing; supplying; equipping; training; servicing; mobilizing; demobilizing; administering (including the morale and welfare of personnel); maintaining; the construction, outfitting, and repair of military equipment; and the construction, maintenance, and repair of buildings, structures, and utilities; the acquisition, management and disposal; and the management of real property or natural resources” (Department of Defense Directive 5100.1, *Functions of the Department of Defense and its Major Components*).

CORE FUNCTIONS

Recently the Air Force refined its understanding of the core duties and responsibilities it performs as a Service, streamlining what previously were six distinctive capabilities and seventeen operational functions into twelve core functions to be used across the doctrine, organization, training, materiel, leadership and education, personnel, and facilities spectrum. These core functions express the ways in which the Air Force is particularly and appropriately suited to contribute to national security, but they do not necessarily express every aspect of what the Air Force contributes to the nation. It should be emphasized that the core functions, by themselves, are not doctrinal constructs. See figure 5.1.

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- **Nuclear Deterrence Operations**
 - **Air Superiority**
 - **Space Superiority**
 - **Cyberspace Superiority**
 - **Command and Control**
 - **Global Integrated ISR**
 - **Global Precision Attack**
 - **Special Operations**
 - **Rapid Global Mobility**
 - **Personnel Recovery**
 - **Agile Combat Support**
 - **Building Partnerships**

Figure 5.1. Core Functions

Nuclear Deterrence Operations

The purpose of Nuclear Deterrence Operations (NDO) is to operate, maintain, and secure nuclear forces to achieve an assured capability to deter an adversary from taking action against vital US interests. In the event deterrence fails, the US should be able to appropriately respond with nuclear options. The sub-elements of this function are:

- ★ **Assure/Dissuade/Deter.** This is a mission set derived from the Air Force’s readiness to carry out the nuclear strike operations mission as well as from specific actions taken to assure allies as a part of extended deterrence. Dissuading others from acquiring or proliferating WMD, and the means to deliver them, contributes to

promoting security and is also an integral part of this mission. Moreover, different deterrence strategies are required to deter various adversaries, whether they are a nation state, or non-state/transnational actor. The Air Force maintains and presents credible deterrent capabilities through successful visible demonstrations and exercises which assure allies, dissuade proliferation, deter potential adversaries from actions that threaten US national security or the populations and deployed military forces of the US, its allies and friends.

★ **Nuclear Strike.** Nuclear strike is the ability of nuclear forces to rapidly and accurately strike targets which the enemy holds dear in a devastating manner. If a crisis occurs, rapid generation and, if necessary, deployment of nuclear strike capabilities will demonstrate US resolve and may prompt an adversary to alter the course of action deemed threatening to our national interest. Should deterrence fail, the President may authorize a precise, tailored response to terminate the conflict at the lowest possible level and lead to a rapid cessation of hostilities. Post-conflict, regeneration of a credible nuclear deterrent capability will deter further aggression. The Air Force may present a credible force posture in either the continental US, within a theater of operations, or both to effectively deter the range of potential adversaries envisioned in the 21st Century. This requires the ability to engage targets globally using a variety of methods; therefore, the Air Force should possess the ability to induct, train, assign, educate and exercise individuals and units to rapidly and effectively execute missions that support US NDO objectives. Finally, the Air Force regularly exercises and evaluates all aspects of nuclear operations to ensure high levels of performance.

★ **Nuclear Surety.** Nuclear surety ensures the safety, security and effectiveness of nuclear operations. Because of their political and military importance, destructive power, and the potential consequences of an accident or unauthorized act, nuclear weapons and nuclear weapon systems require special consideration and protection against risks and threats inherent in their peacetime and wartime environments. The Air Force, in conjunction with other entities within the Departments of Defense or Energy, achieves a high standard of protection through a stringent nuclear surety program. This program applies to materiel, personnel, and procedures that contribute to the safety, security, and control of nuclear weapons, thus assuring no nuclear accidents, incidents, loss, or unauthorized or accidental use. The Air Force continues to pursue safe, secure and effective nuclear weapons consistent with operational requirements. Adversaries, allies, and the American people must be highly confident of the Air Force's ability to secure nuclear weapons from accidents, theft, loss, and accidental or unauthorized use. This day-to-day commitment to precise and reliable nuclear operations is the cornerstone of the credibility of the NDO mission. Positive nuclear command, control, communications; effective nuclear weapons security; and robust combat support are essential to the overall NDO function.

Air Superiority

Air Superiority is “that degree of dominance in the air battle of one force over another which permits the conduct of operations by the former and its related land, sea, air, and special operations forces at a given time and place without prohibitive interference by the opposing force” (JP 1-02). The sub-elements of this function are:

- ★ **Offensive Counterair.** Offensive Counterair (OCA) is defined as “offensive operations to destroy, disrupt, or neutralize enemy aircraft, missiles, launch platforms, and their supporting structures and systems both before and after launch, but as close to their source as possible” (JP 1-02). OCA is the preferred method of countering air and missile threats, since it attempts to defeat the enemy closer to its source and typically enjoys the initiative. OCA comprises attack operations, sweep, escort, and suppression/destruction of enemy air defense.
- ★ **Defensive Counterair.** Defensive Counterair (DCA) is defined as “all the defensive measures designed to detect, identify, intercept, and destroy or negate enemy forces attempting to penetrate or attack through friendly airspace” (JP 1-02). A major goal of DCA operations, in concert with OCA operations, is to provide an area from which forces can operate, secure from air and missile threats. The DCA mission comprises both active and passive defense measures. Active defense is “the employment of limited offensive action and counterattacks to deny a contested area or position to the enemy” (JP 1-02). It includes both ballistic missile defense and air breathing threat defense, and encompasses point defense, area defense, and high value airborne asset defense. Passive defense is “measures taken to reduce the probability of and to minimize the effects of damage caused by hostile action without the intention of taking the initiative” (JP 1-02). It includes detection and warning; chemical, biological, radiological, and nuclear defense; camouflage, concealment, and deception; hardening; reconstitution; dispersion; redundancy; and mobility, counter-measures, and stealth.
- ★ **Airspace Control.** Airspace control is “a process used to increase operational effectiveness by promoting the safe, efficient, and flexible use of airspace” (JP 1-02). It promotes the safe, efficient, and flexible use of airspace, mitigates the risk of fratricide, enhances both offensive and defensive operations, and permits greater agility of air operations as a whole. It both deconflicts and facilitates integration of joint air operations.

Space Superiority

Space superiority is “the degree of dominance in space of one force over another that permits the conduct of operations by the former and its related land, sea, air, space, and special operations forces at a given time and place without prohibitive interference by the opposing force” (JP 1-02). Space superiority may be localized in time and space, or it may be broad and enduring. Space superiority provides freedom of action in space for friendly forces and, when directed, denies the same freedom to the adversary. The sub-elements of this function are:

- ★ **Space Force Enhancement.** Space Force Enhancement is defined as the “combat support operations and force-multiplying capabilities delivered from space systems to improve the effectiveness of military forces as well as support other intelligence, civil, and commercial users. This mission area includes: intelligence, surveillance, and reconnaissance; integrated tactical warning and attack assessment; command, control, and communications; positioning, navigation, and timing; and environmental monitoring” (JP 1-02).
- ★ **Space Force Application.** Space Force Application is defined as “combat operations in, through, and from space to influence the course and outcome of conflict. This mission area includes ballistic missile defense and force projection” (JP 1-02).
- ★ **Space Control.** Space Control is defined as “operations to ensure freedom of action in space for the US and its allies and, when directed, deny an adversary freedom of action in space. This mission area includes: operations conducted to protect friendly space capabilities from attack, interference, or unintentional hazards (defensive space control); operations to deny an adversary’s use of space capabilities (offensive space control); and the requisite current and predictive knowledge of the space environment and the operational environment upon which space operations depend (space situational awareness)” (JP 1-02).
- ★ **Space Support.** Space Support is defined as “operations to deploy and sustain military and intelligence systems in space. This mission area includes: launching and deploying space vehicles; maintaining and sustaining spacecraft on-orbit, rendezvous and proximity operations; disposing of (including de-orbiting and recovering) space capabilities; and reconstitution of space forces, if required” (JP 1-02).

Cyberspace Superiority

Cyberspace Superiority is “the operational advantage in, through, and from cyberspace to conduct operations at a given time and in a given domain without prohibitive interference” (AFDD 3-12, *Cyberspace Operations*). The sub-elements of this function are:

- ★ **Cyberspace Force Application.** Cyberspace Force Application is combat operations in, through, and from cyberspace to achieve military objectives and influence the course and outcome of conflict by taking decisive actions against approved targets. It will incorporate computer network attack (CNA), computer network exploitation (CNE), and may involve aspects of influence operations. It is highly dependent on ISR, fused all-source intelligence, sophisticated attribution activities, situational awareness, and responsive C2.
- ★ **Cyberspace Defense.** This is the passive, active, and dynamic employment of capabilities to respond to imminent or on-going actions against Air Force or Air Force-protected networks, the Air Force's portion of the Global Information Grid, or expeditionary communications assigned to the Air Force. Cyberspace defense

incorporates CNE, computer network defense (CND), and CNA techniques and may be a contributor to influence operations. It is highly dependent upon ISR, fused all-source intelligence, automated indications and warning, sophisticated attribution/characterization, situational awareness, assessment, and responsive C2.

- ★ **Cyberspace Support.** Cyberspace Support is foundational, continuous, or responsive operations ensuring information integrity and availability in, through, and from Air Force-controlled infrastructure and its interconnected analog and digital portion of the battle space. Inherent in this mission is the ability to establish, extend, secure, protect, and defend in order to sustain assigned networks and missions. This includes protection measures against supply chain components plus critical C2 networks/communications links and nuclear C2 networks. The cyberspace support mission incorporates CNE and CND techniques. It incorporates all elements of Air Force Network Operations, information transport, enterprise management, and information assurance, and is dependent on ISR and all-source intelligence.

Command and Control

Command and control is “the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission” (JP 1-02). This core function includes all of the C2-related capabilities and activities associated with air, space, cyberspace, nuclear, and agile combat support operations to achieve strategic, operational, and tactical objectives.

- ★ **Strategic Level Command and Control.** At this level the US determines national or multinational security objectives and guidance, and develops and uses national resources to accomplish these objectives. These national objectives in turn provide the direction for developing overall military objectives, which are used to develop the objectives and strategy for each theater.
- ★ **Operational Level Command and Control.** At this level of war, campaigns and major operations are planned, conducted, sustained, and assessed to accomplish strategic goals within theaters or areas of operations. These activities imply a broader dimension of time or space than do tactics; they provide the means by which tactical successes are exploited to achieve strategic and operational objectives.
- ★ **Tactical Level Command and Control.** This is the level of war where individual battles and engagements are fought. The tactical level of war deals with how forces are employed, and the specifics of how engagements are conducted and targets attacked. The goal of tactical level C2 is to achieve commander's intent and desired effects by gaining and keeping offensive initiative.

Global Integrated Intelligence, Surveillance, and Reconnaissance

Global Integrated ISR is the synchronization and integration of the planning and operation of sensors, assets, and processing, exploitation, dissemination systems across the globe to conduct current and future operations. The sub-elements of this function are:

- ★ **Planning and Directing.** This is “the determination of intelligence requirements, development of appropriate intelligence architecture, preparation of a collection plan, and issuance of orders and requests to information collection agencies” (JP 2-01, *Joint and National Intelligence Support to Military Operations*). These activities enable the synchronization and integration of collection, processing, exploitation, analysis, and dissemination activities/resources to meet information requirements of national and military decision makers.
- ★ **Collection.** Collection is “the acquisition of information and the provision of this information to processing elements” (JP 2-01). It provides the ability to obtain required information to satisfy intelligence needs (via use of sources and methods in all domains). Collection activities span the ROMO.
- ★ **Processing and Exploitation.** Processing and exploitation is “the conversion of collected information into forms suitable to the production of intelligence” (JP 2-01). It provides the ability, across the ROMO, to transform, extract, and make available collected information suitable for further analysis or action.
- ★ **Analysis and Production.** Analysis and production is “the conversion of processed information into intelligence through the integration, evaluation, analysis, and interpretation of all source data and the preparation of intelligence products in support of known or anticipated user requirements” (JP 2-01). It provides the ability to integrate, evaluate, and interpret information from available sources to create a finished intelligence product for presentation or dissemination to enable increased situational awareness.
- ★ **Dissemination and Integration.** This is “the delivery of intelligence to users in a suitable form and the application of the intelligence to appropriate missions, tasks, and functions” (JP 2-01). It provides the ability to present information and intelligence products across the ROMO enabling understanding of the operational environment to military and national decision makers.

Global Precision Attack

Global Precision Attack is the ability to hold at risk or strike rapidly and persistently, with a wide range of munitions, any target and to create swift, decisive, and precise effects across multiple domains. The sub-elements of this function are:

- ★ **Strategic Attack.** Strategic Attack is defined as “offensive action specifically selected to achieve national strategic objectives. These attacks seek to weaken the adversary's ability or will to engage in conflict, and may achieve strategic objectives

without necessarily having to achieve operational objectives as a precondition” (AFDD 3-70, *Strategic Attack*).

- ★ **Air Interdiction.** Air Interdiction is defined as “air operations conducted to divert, disrupt, delay, or destroy the enemy's military potential before it can be brought to bear effectively against friendly forces, or to otherwise achieve JFC objectives. Air Interdiction is conducted at such distance from friendly forces that detailed integration of each air mission with the fire and movement of friendly forces is not required” (AFDD 3-03, *Counterland Operations*).
- ★ **Close Air Support.** Close Air Support is defined as “air action by fixed- and rotary-winged aircraft against hostile targets that are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces” (JP 1-02). This can be as a pre-planned event or on demand from an alert posture (ground or airborne). It can be conducted across the ROMO.

Special Operations

Special Operations are “operations conducted in hostile, denied, or politically sensitive environments to achieve military, diplomatic, informational, and/or economic objectives employing military capabilities for which there is no broad conventional force requirement. These operations may require covert, clandestine, or low-visibility capabilities. Special operations are applicable across the ROMO. They can be conducted independently or in conjunction with operations of conventional forces or other government agencies and may include operations through, with, or by indigenous or surrogate forces. Special operations differ from conventional operations in degree of physical and political risk, operational techniques, mode of employment, independence from friendly support, and dependence on detailed operational intelligence and indigenous assets” (JP 1-02). The sub-elements of this function are:

- ★ **Agile Combat Support.** This is the capability to effectively create, prepare, deploy, employ, sustain, and protect Air Force Special Operations Command (AFSOC) Airmen, assets, and capabilities throughout the ROMO at a chosen initiative, speed, and tempo.
- ★ **Aviation Foreign Internal Defense.** These operations directly execute US security and foreign policy as lead airpower elements that shape the battlefield and conduct stability operations to enable global reach and strike. This is accomplished by applying the mission set (assess, train, advise, and assist foreign aviation forces) across a continuum of operating venues described as indirect assistance, direct assistance (not including combat) and combat operations.
- ★ **Battlefield Air Operations.** This is a unique set of combat proven capabilities (combat control, pararescue, combat weather, and tactical air control party) provided by regular and reserve component special operations forces (SOF) Battlefield

Airmen who integrate, synchronize, and control manned and unmanned capabilities to achieve tactical, operational, and strategic objectives.

- ★ **Command and Control.** This is the exercise of the commander's authority and direction over assigned and attached forces by trained, organized, and equipped C2 elements. Operational C2 elements consist of personnel and equipment with specialized capability to plan, direct, coordinate, and control forces in the conduct of joint/combined special operations.
- ★ **Information Operations.** This mission is the integrated employment of the capabilities of influence operations, electronic warfare operations, and network warfare operations, in concert with specified integrated control enablers, to influence, disrupt, corrupt, or usurp adversarial human and automated decision making while protecting one's own.
- ★ **Intelligence, Surveillance, and Reconnaissance.** This is the synchronization and integration of platforms and sensors with the planning and direction, collection, processing and exploitation, analysis, and production and dissemination processes. These activities provide actionable intelligence, weather, environmental awareness, and prediction across all SOF command echelons.
- ★ **Military Information Support Operations.** These are planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals. The purpose of military information support operations is to induce or reinforce foreign attitudes and behavior favorable to the originator's objectives.
- ★ **Precision Strike.** This mission provides CCDRs with an integrated capability to find, fix, track, target, engage, and assess targets using a single weapons system or a combination of systems. This includes close air support, air interdiction, and armed reconnaissance missions.
- ★ **Specialized Air Mobility.** This is the conduct of rapid, global infiltration, exfiltration, and resupply of personnel, equipment, and materiel using specialized systems and tactics. These missions may be clandestine, low visibility, or overt and through hostile, denied, or politically sensitive airspace.
- ★ **Specialized Refueling.** This is the conduct of rapid, global refueling using specialized systems and tactics. This includes aerial refueling of vertical lift aircraft and ground refueling during forward arming and refueling point operations. These missions may be clandestine, low visibility, or overt and in hostile, denied, or politically sensitive environments.

Rapid Global Mobility

Rapid Global Mobility is the timely deployment, employment, sustainment, augmentation, and redeployment of military forces and capabilities across the ROMO.

It provides joint military forces the capability to move from place to place while retaining the ability to fulfill their primary mission. Rapid Global Mobility is essential to virtually every military operation, allowing forces to reach foreign or domestic destinations quickly, thus seizing the initiative through speed and surprise. The sub-elements of this function are:

- ✧ **Airlift.** Airlift is “operations to transport and deliver forces and materiel through the air in support of strategic, operational, or tactical objectives” (AFDD 3-17, *Air Mobility Operations*). The rapid and flexible options afforded by airlift allow military forces and national leaders the ability to respond and operate in a variety of situations and time frames. The global reach capability of airlift provides the ability to apply US power worldwide by delivering forces to crisis locations. It serves as a US presence that demonstrates resolve and compassion in humanitarian crisis.
- ✧ **Air Refueling.** Air Refueling is “the refueling of an aircraft in flight by another aircraft” (JP 1-02). Air refueling extends presence, increases range, and serves as a force multiplier. It allows air assets to more rapidly reach any trouble spot around the world with less dependence on forward staging bases or overflight/landing clearances. Air refueling significantly expands the options available to a commander by increasing the range, payload, persistence, and flexibility of receiver aircraft.
- ✧ **Aeromedical Evacuation.** Aeromedical Evacuation is “the movement of patients under medical supervision to and between medical treatment facilities by air transportation” (JP 1-02). JP 4-02, *Health Service Support*, further defines it as “the fixed wing movement of regulated casualties to and between medical treatment facilities, using organic and/or contracted mobility airframes, with aircrew trained explicitly for this mission.” Aeromedical evacuation forces can operate as far forward as fixed-wing aircraft are able to conduct airland operations.

Personnel Recovery

Personnel Recovery (PR) is defined as “the sum of military, diplomatic, and civil efforts to prepare for and execute the recovery and reintegration of isolated personnel” (JP 1-02). It is the ability of the US government and its international partners to affect the recovery of isolated personnel across the ROMO and return those personnel to duty. PR also enhances the development of an effective, global capacity to protect and recover isolated personnel wherever they are placed at risk; deny an adversary’s ability to exploit a nation through propaganda; and develop joint, interagency, and international capabilities that contribute to crisis response and regional stability. The sub-elements of this function are:

- ✧ **Combat Search and Rescue.** This is “the tactics, techniques, and procedures performed by forces to effect the recovery of isolated personnel during combat” (JP 1-02). Combat search and rescue is the primary Air Force recovery method utilized to conduct PR taskings.

- ★ **Civil Search and Rescue.** This is “the use of aircraft, surface craft, submarines, and specialized rescue teams and equipment to search for and rescue distressed persons on land or at sea in a permissive environment” (JP 1-02).
- ★ **Disaster Response.** Disaster Response can be described as the capability to support and assist US government agencies and embassies during national and international disasters with rapidly deployable and flexible air/ground rescue forces.
- ★ **Humanitarian Assistance Operations.** These are “programs conducted to relieve or reduce the results of natural or manmade disasters or other endemic conditions such as human pain, disease, hunger, or privation that might present a serious threat to life or that can result in great damage to or loss of property. Humanitarian assistance provided by US forces is limited in scope and duration. The assistance provided is designed to supplement or complement the efforts of the host nation civil authorities or agencies that may have the primary responsibility for providing humanitarian assistance” (JP 1-02).
- ★ **Medical Evacuation/Casualty Evacuation.** Medical evacuation refers to dedicated medical evacuation platforms staffed and equipped to provide en route medical care using predesignated tactical and logistic aircraft, boats, ships, and other watercraft temporarily equipped and staffed with medical attendants for en route care. Casualty evacuation involves the unregulated movement of casualties aboard ships, land vehicles, or aircraft (JP 4-02, *Health Service Support*).

Agile Combat Support

Agile Combat Support (ACS) is the ability to field, protect, and sustain Air Force forces across the ROMO to achieve joint effects. The sub-elements of this function are:

- ★ **Ready the Total Force.** Mission elements include: organizing, training, and equipping forces; establishing quality of life and maintaining core security; and fielding and planning for the use of operational and support forces to meet global mission requirements.
- ★ **Prepare the Battlespace.** Mission elements include: assessing, planning, and posturing for rapid employment; prepositioning resources and conditioning specific theaters and/or contingency locations in a manner to meet closure timing; and establishing sustainment levels for potential operations.
- ★ **Position the Total Force.** Mission elements include: preparing to deploy, deploying, receiving, and bedding down tailored and prioritized forces; establishing initial operations and support cadres in a joint operations area; distributing pre-positioned resources; establishing initial reachback connectivity; securing operating locations; and preparing for mission operations.
- ★ **Protect the Total Force.** Protecting the Total Force key focus areas include personnel, critical assets, and information. These areas are the persistent detection

and understanding of threats in the operational environment and the timely dissemination of accurate decisions, warnings and taskings to protect against attacks and/or threats.

- ★ **Employ Combat Support Forces.** Mission elements include: engaging support forces in support of mission operations; initializing, launching, recovering, and regenerating operational elements; executing support through supporting-supported relationships; and commencing reachback operations to strategic levels of support.
- ★ **Sustain the Total Force.** Mission elements include: producing assured capacities and levels of support; accomplishing the long term mastery of an operational environment (peacetime and wartime) requiring persistent and effective materiel and personnel support through both local and reachback processes.
- ★ **Recover the Total Force.** Mission elements include: preparing forces to remain in place, redeploy, relocate, and be reconstituted to prescribed levels of readiness; restoring operating locations and/or environments to planned conditions; protecting the dynamic levels of force structure; and ensuring Air Force mission elements can be effectively applied at the direction of national leadership.

Building Partnerships

Building Partnerships is described as Airmen interacting with international airmen and other relevant actors to develop, guide, and sustain relationships for mutual benefit and security. Building Partnerships is about interacting with others and is therefore an inherently inter-personal and cross-cultural undertaking. Through both words and deeds, the majority of interaction is devoted to building trust-based relationships for mutual benefit. It includes both foreign partners as well as domestic partners and emphasizes collaboration with foreign governments, militaries and populations as well as US government departments, agencies, industry, and NGOs. To better facilitate partnering efforts, Airmen should be competent in the relevant language, region, and culture. The sub-elements of this function are:

- ★ **Communicate.** Communicate refers to developing and presenting information to domestic audiences to improve understanding. It is also the ability to develop and present information to foreign adversary audiences to affect their perceptions, will, behavior and capabilities in order to further US national security and/or shared global security interests.
- ★ **Shape.** Shape refers to conducting activities to affect the perceptions, will, behavior, and capabilities of partners, military forces, and relevant populations to further US national security or shared global security interests.

CHAPTER SIX

COMMANDING AND ORGANIZING AIR FORCE FORCES

It turned out to be another scrambled outfit...with so many lines of responsibility, control, and coordination that it resembled a can of worms. I made a note to tell Walker to take charge, tear up the chart, and have no one issue orders around there except himself. After he got things operating simply, quickly, and efficiently he could draw up a new chart if he wanted to.

— Lieutenant General George Kenney,
Australia, 1942



This chapter presents the basics of commanding and organizing Air Force forces; chapter 7 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 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.

THE COMMANDER, AIR FORCE FORCES

Although all Air Force units, regardless of level, have an Air Force commander, **the title of COMAFFOR is reserved exclusively to the single Air Force commander of an Air Force Service component assigned or attached to a JFC at the unified combatant command, subunified combatant command, or joint task force (JTF) level.** At the unified combatant command level, the CCDR's Air Force Service component is specified in the 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 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 operational control (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.

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 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 chapter 7.)

- ★ Prepare component plans to support the JFC's estimate.
- ★ Develop and recommend courses of action (COAs) to the JFC.
- ★ Develop a strategy and operations 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 ROEs 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 ROEs 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 CCCR.

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 CCCR-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, SOF, 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 (AFIs). 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.

THE AIR EXPEDITIONARY FORCE

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 COMAFFOR) 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 AETF, 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.

Refer to AFI 10-401, *Air Force Operations Planning and Execution*, for further details.

THE AIR EXPEDITIONARY TASK FORCE

The 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, tailorable 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 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 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 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 OPCON, TACON, or support. Within Service lines, the AETF commander exercises 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 in to 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 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.

✧ “*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 AEF 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.

Regional Organization and Control

All military missions are ultimately under the authority of a JFC at the appropriate level. If the entire theater is engaged, the CCCR may be the JFC. If the situation is less than theater-wide, the CCCR may establish a subordinate JTF commanded by a subordinate JFC. In either case, the CCCR should first look to assigned, in-theater forces. If augmentation is required, the JFC should request additional forces through the SecDef. Upon SecDef approval, additional forces transfer into the theater and are attached to the gaining CCCR. The degree of control gained over those forces (i.e., OPCON or TACON) should be specified in the deployment orders. The gaining CCCR 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 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

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.**

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-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 later in this chapter). These situations require careful and continuing dialogue between competing senior commanders and their common superior commander.

AETF ORGANIZATION

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 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 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 7 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 elements if it is planned to augment a deployed AEW or AEG, and would thus obtain necessary support from the larger units.

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 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:**

- ★ 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 mechanism 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



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.

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 AEF 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 ANG 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 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 JTF level, usually with specification of OPCON, forming Service component commands. In these cases, the AETF commander is a COMAFFOR, 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 JOAs 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 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-apportion airpower across the USCENTCOM AOR 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 CDR retains final decision on the laydown of subordinate organization and distribution of command authorities.

COMMAND AND CONTROL MECHANISMS

The COMAFFOR requires C2 assets to assist in exercising OPCON, TACON, and ADCON. The COMAFFOR normally uses some form of an 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 ISR tasks appropriate to assigned missions.
- ★ 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 inter-theater 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



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.**

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 appendix B 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*, and Air Force Tactics, Techniques, and Procedures (AFTTP) 3-3 AOC, *Operational Employment—Air and Space Operations Center*.

AFFOR Staff

An 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. 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 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.**⁵

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 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.

⁵ The note on workload distribution and the recommendation on augmentation are lessons observed during Exercise AUSTERE CHALLENGE 2010.

The structure and division of labor within an AFFOR staff that is dual-tasked as both a Service component to a unified 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 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 appendix C for a summary of baseline AFFOR staff organization.

DISTRIBUTED/SPLIT OPERATIONS

Understanding distributed operations, split operations and reachback is important to a full understanding of 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 AFDD 6-0, *Command and Control*, for further discussion of split and distributed operations.

COMMAND RELATIONSHIP MODELS FOR AIR FORCE FORCES

When employing military forces, a 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 authority (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 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 operations plan. Other orders created during the planning process, such as warning, alert, planning, 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 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 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 AORs).
- ★ Functional forces with global missions.
- ★ Transient forces.

These four models illustrate the most probable combinations in assigning responsibility for operational control 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 ADCON should also go forward to the regional 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, operational control 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 commander (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 earlier in this chapter). 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 JP 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 OPCON, to a geographic CCDR should be balanced against competing needs across multiple 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. If any of the above questions are answered “no,” then the functional forces should remain under the OPCON of the functional CCDR’s 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 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” (JP 1-02).
- ★ **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 1-02). 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... 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

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 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 CCCR.

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 JFC, with 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 AOR, coordinates on behalf of the COMAFFOR/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 AFDD 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 SCA to facilitate unity of effort with DOD-wide space operations and non-DOD space capabilities. Although JFCs may retain authority at the 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 AFDD 3-14, *Space Operations*, for more information.

Integrating Special Operations

The geographic CCDR normally exercises COCOM of assigned Air Force special operations forces (AFSOF) and OPCON of all attached AFSOF through the commander of the theater special operations command. For conventional missions, the JFACC may receive OPCON or TACON of AFSOF assets when directed by the JFC. However, in most cases, AFSOF 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). AFSOF, like all Air Force units, organize using the AETF construct. Due to their unique relationship with US Special Operations Command, AFSOF deployed unit designations differ slightly from the conventional Air Force model. Although the names differ (e.g., expeditionary special operations wing [ESOW] vice AEW), AFSOF 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 AFDD 3-05, *Special Operations*.

SOF can enhance operations across the ROMO 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 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 CDRUSSTRATCOM 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 COAs 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 (MAAP), 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 AFDD 3-12.

NUCLEAR SUPPORT TO REGIONAL COMMANDS

The political and psychological effects of nuclear weapons confer upon them a unique nature. Therefore, the singular role of USSTRATCOM 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 AFDD 3-72, *Nuclear Operations*, for more information.

INTEGRATING THE AIR RESERVE COMPONENTS

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 ANG. 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 and administrative control. Furthermore, differences in tour length availability pose continuity challenges for a COMAFFOR, and planners should carefully consider such issues for any category of activation (whether by volunteerism or mobilization).

See appendix D for more discussion on ARC organization and accessing ARC forces.

HOMELAND ORGANIZATIONAL CONSIDERATIONS

Military operations inside the US 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 AETF under the OPCON of a COMAFFOR, just as in any other theater. 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. The Commander, AFNORTH is also the COMAFFOR/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 C2 or organization of air, space, and cyberspace forces. The COMAFFOR should still be under direct OPCON of a designated JFC, should still normally exercise OPCON and ADCON over the Air Force Service component forces, and should still coordinate activities with other components and outside agencies to achieve JFC objectives. As noted previously, single-Service task forces may also be established in homeland operations. 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 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 AFDD 3-27, *Homeland Operations*.

THE SENIOR/HOST AIR FORCE INSTALLATION COMMANDER

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 ADCON responsibilities and common logistics support for all Air Force forces within his/her region, regardless of organization or 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 AETF conducting sustained operations from that base.
- ★ AFSOC assets operating in-theater but not attached to the host AETF.
- ★ Air mobility forces bedded down in-theater, supporting an air bridge under the OPCON of USTRANSCOM (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 SOF 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 PACAF. 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 JFC 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 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.

CHAPTER SEVEN

THE AIR FORCE COMPONENT WITHIN THE JOINT FORCE

The greatest lesson of this war has been the extent to which air, land, and sea operations can and must be coordinated by joint planning and unified command. The attainment of better coordination and balance than now exists between services is an essential of national security.

— General Henry H. “Hap” Arnold



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.

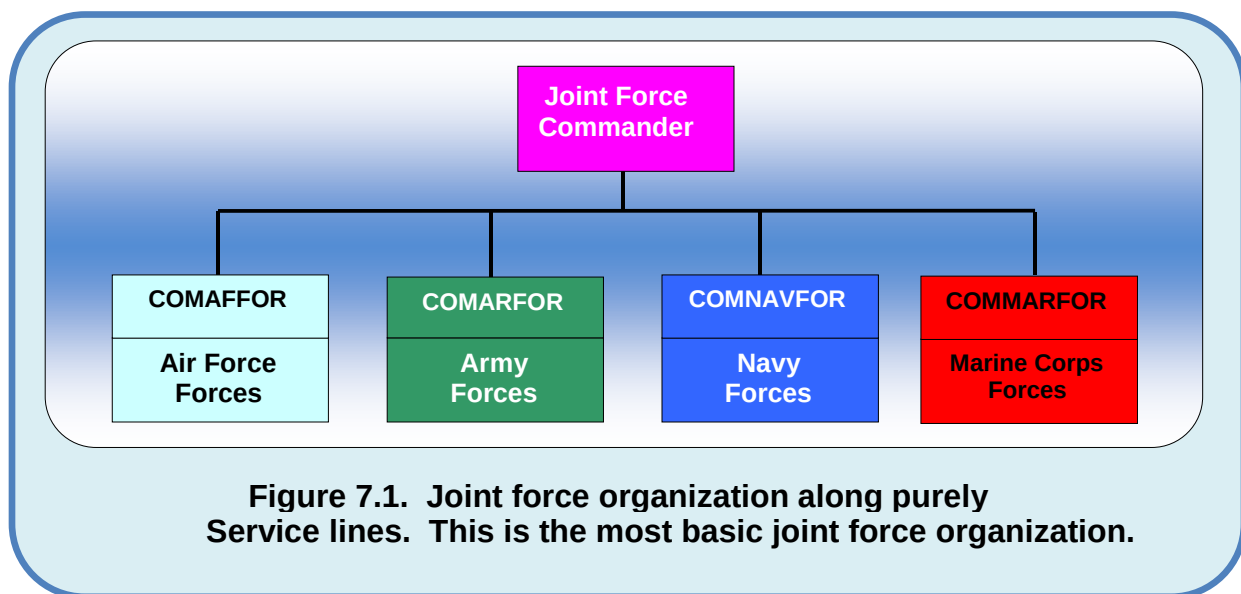
JOINT FORCE ORGANIZATIONAL BASICS

When a crisis requires a military response, the geographic CCDR will usually form a tailored JTF. If Air Force forces are attached to the JTF, they stand up as an AETF within the JTF. The AETF commander, as the 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 7.1. Each separate Service component commander normally exercises OPCON over assigned and attached forces, as delegated from the 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:

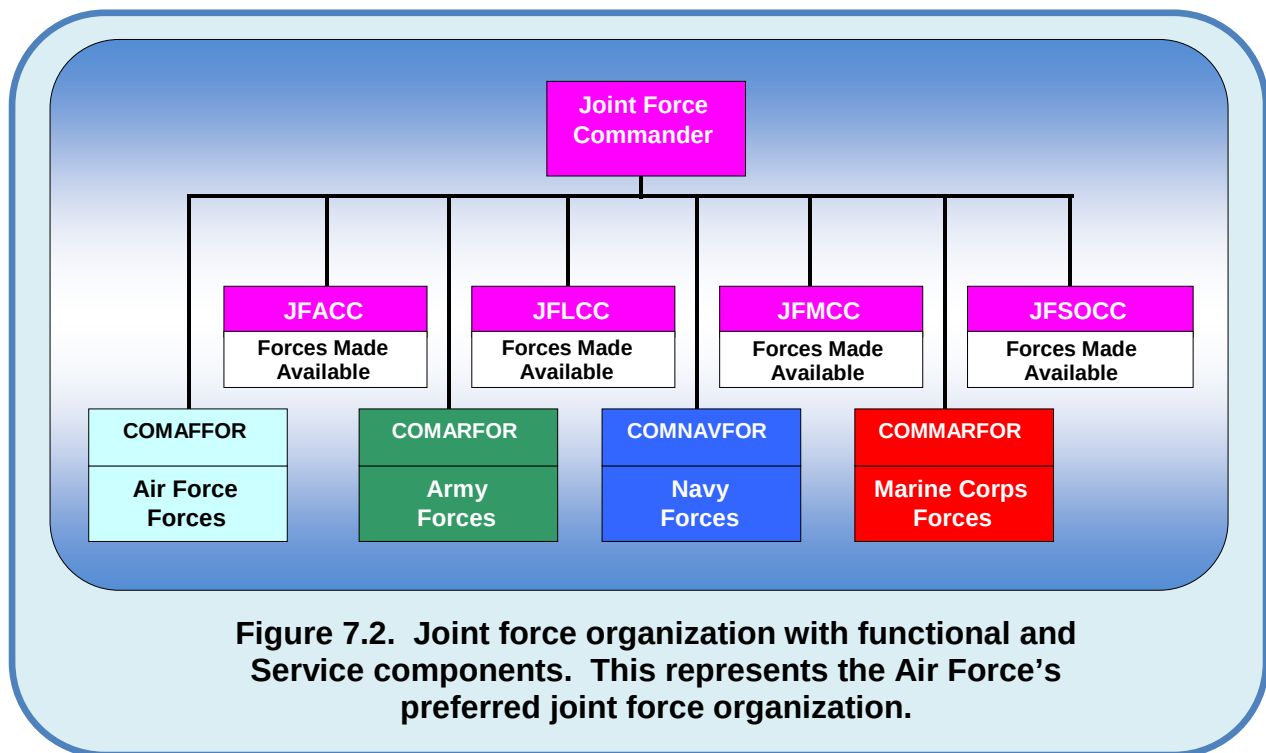
“Operational control is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. **Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders.**” (JP 1-02) (Emphasis added)



Organizing and employing forces through Service components, however, does not allow for the true integration of key functional activities—especially airpower. Further, Army, Navy, and Marine forces are usually assigned individual AOs, which are subsets of the JFC's 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 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 7.2.



THE JOINT FORCE AIR COMPONENT COMMANDER

Historically, when Air Force forces have been attached to a JTF, the COMAFFOR has normally been dual-hatted as the JFACC, not merely due to preponderance of forces but also due to the ability to command and control airpower through an AOC, which forms the core of the JFACC's 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 JP 3-30.

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 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 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 TACON of forces made available to them by the JFC. Thus, a COMAFFOR normally exercises 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.



[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*

- ★ ★ Information operations.
- ★ ★ Personnel recovery operations, including CSAR, for assigned and attached forces.
- ★ Coordinate SOF operations with the JFSOCC or the JSOTF commander.
- ★ Perform assessment of joint air component operations at the operational (component) and tactical levels.
- ★ Serve as ACA, AADC, and SCA and develop plans and products associated with these responsibilities.
- ★ Serve as the joint electronic warfare coordinator, if so appointed.
- ★ Serve as the supported commander for counterair operations, strategic attack, the JFC's overall air interdiction effort, and theater airborne ISR. 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 AOs.
- ★ Serve as the supporting commander for operations such as CAS, air interdiction within the land and naval component AOs, and maritime support.

If the JFACC is ever 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 for more complete discussion of the JFACC's role and the planning processes that support joint air component employment.

CONTROL OF OTHER SERVICES' AVIATION CAPABILITIES

By definition, the 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 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.

- ★ Army aviation assets. These are normally are retained for employment as organic forces within its combined arms paradigm. However, some Army helicopters could be employed in CAS, 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 ACO to deconflict airspace and friendly air defense planning. Placing Army aviation assets on the ATO/ACO reduces the risk of fratricide and provides better overall integration with other joint air component operations.
- ★ 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/AADC.
- ★ 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.)
- ★ 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 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 AETF. 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 AOC a SOLE to coordinate, deconflict, and integrate SOF operations, strategy, and plans with conventional air, and the JFSOCC in turn receives a JACCE from the JFACC, if required.

Regardless of whether the JFACC exercises TACON of other Services' forces, the JFACC, in the normally expected multi-hatted roles of ACA, AADC, and SCA, normally requires inclusion of such forces on the ATO and ACO. This provides

situational awareness of all friendly aviation in the AOR/JOA, prevents fratricide, and deconflicts airspace.

AIR FORCE COMPONENT PRESENTATION CONSIDERATIONS

There are many possible options for presenting forces in support of a 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: ⁶

- ★ **Theater-level component.** This establishes an AETF at the CCDR level, attached with specification of OPCON and commanded by a theater COMAFFOR/JFACC.
- ★ **Sub-theater-level component.** This establishes an AETF at the subunified command or 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 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 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.

⁶ There may be additional considerations during homeland operations that impact command arrangements and command relationships. See AFDD 3-27, *Homeland Operations*.

Theater-Level Component

This unified command-level model establishes an AETF and COMAFFOR at the CCCR 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 CCCR 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 CCCR’s Air Force component command.

The CCCR’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 CCCR 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 CCCR’s theater-wide priorities.

To support planning and operations with subordinate JTFs and other components, the theater-level JFACC may then deploy JACCES to ensure the JTFs receive appropriate support. The JACCES provides on-hand air component expertise and the direct link back to the theater COMAFFOR and the AOC. (See related discussion later in this chapter of the roles and responsibilities of the JACCES.)

The key advantage of this model is that it allows the COMAFFOR/JFACC to optimize CCCR

“Deputy Commander – Air” in the Afghanistan JOA

Due to the complexity of operations in the USCENTCOM AOR, the AFCENT commander created two subordinate AETFs (9th AETF-Iraq and 9th AETF Afghanistan) to better focus airpower support in those two JOAs. In Afghanistan, a NATO organization, the International Security Assistance Force (ISAF) also required a clearly identified command relationship with Air Force forces.

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

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

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). 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., ISR, remotely piloted aircraft, and air refueling) across the AOR, yet there is also sufficient demand for dedicated airpower at subordinate levels to drive attachment of Air Force forces to a subordinate JTF.

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.

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 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 operations 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.

JOINT AIR COMPONENT COORDINATION ELEMENT

The JFACC may establish one or more JACCes with other component commanders' headquarters to better integrate the air component's operations with their operations, and with the supported 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, joint 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 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 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 COMAFFOR/JFACC as the supported commander for strategic attack, air interdiction, and theater airborne ISR (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 TACON of specific elements of another component's resources (this, in fact, is the usual command authority exercised by functional component commanders over forces made available to them). This provides that commander with a better degree of control. Finally, written establishing directives are extremely useful in clearly outlining the supporting/supported relationship between commanders and providing guidance for staffs.

The 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.



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

THEATER AIR COMPONENT COMMAND MECHANISM

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 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 OPCON of the 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 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/JFACC is designated as the AADC, ACA, and SCA, 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 AFDDs 3-03, *Counterland Operations*, and 6-0, *Command and Control*, for more detailed discussion on these TACS elements.

JOINT LIAISONS IN THE AOC

Depending on the nature of the operation, the JFACC may have a number of liaison teams within the 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, ISR, 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 MAGTF fires, maneuver, and Marine air into the theater campaign and supporting JAOP. 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 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 AOR. 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.

JOINT STAFFS

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 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, 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 COMAFFOR is designated the 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 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

MULTI-HATTING COMMANDERS/SPAN OF COMMAND

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 JFC, it is entirely appropriate for a JFACC to also serve as the AADC, ACA, and SCA, since all four functions lie at the operational level 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 inadvertently 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 that can result in forcing the staff to operate at the operational and tactical levels simultaneously” (JP 1).

Thus, although this option is available to CCDRs when designing subordinate JTFs, caution is needed when vertically multi-hatting commanders, as it tends to create “part-time commanders.”

MULTINATIONAL AND INTERAGENCY INTEGRATION

Most operations today are not US-only. Many operations involve military forces of allies, and many operations also involve intergovernmental, nongovernmental, 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 a 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 (JP 1-02).
- ★ **A coalition is an ad hoc arrangement between two or more nations for common action** (JP 1-02). 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 JFC becomes a CFC, the JFACC becomes a CFACC, etc. Similarly, the 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., OPCON, TACON, 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 JP 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 JP 3-16 for more discussion.

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” (JP 1-02). 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 intergovernmental, nongovernmental, and regional organizations.

“The integration of US political and military objectives and the subsequent translation of these objectives into action have always been essential to success at all levels of operation. Military operations must be coordinated with the activities of other agencies of the US Government, intergovernmental organizations (IGOs), NGOs, regional organizations, the operations of foreign forces, and activities of various host nation agencies. Sometimes the JFC draws on the capabilities of other organizations; sometimes the JFC provides capabilities to other organizations; and sometimes the JFC merely deconflicts his activities with those of others. Interagency coordination forges the vital link between the military and the diplomatic, informational, and economic instruments of power of the US Government. Successful interagency, IGO, and NGO coordination enables the US Government to build international support, conserve resources, and conduct coherent operations that efficiently achieve shared international goals.” (JP 3-08, *Interagency, Intergovernmental Organization, and Nongovernmental Organization Coordination During Joint Operations*, vol I)

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. “Coordinating and integrating efforts between the joint force and other government agencies, IGOs, and NGOs should not be equated to the command and control of a military operation. Military operations depend upon a command structure that is often very different from that of civilian organizations. These differences may present significant challenges to coordination efforts. The various US Government agencies’ different, and sometimes conflicting, goals, policies, procedures, and decision-making techniques make unity of effort a challenge. Still more difficult, some IGOs and NGOs may have policies that are explicitly antithetical to those of the US Government, and particularly the US military” (JP 3-08, vol I).

See JP 3-08, volumes I and II, for further discussion, including planning, organization, and execution considerations.

CONCLUSION

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 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.

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.

— Michael Howard, “*Military Science in the Age of Peace*,”
Royal United Services Institute
Journal (March 1974)

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, antiaccess 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...

APPENDIX A

COMMAND RELATIONSHIPS AND AUTHORITIES

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 CCDRs, to 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 COMAFFOR/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

Per JP 1, COCOM is “**non-transferable command authority** established by law (Title 10 [“Armed Forces”], United States Code, section 164). COCOM is **exercised by commanders of combatant commands** as directed by the President or the SecDef. COCOM cannot be delegated and is the authority of a CCDR 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. COCOM should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through 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. Operational control is inherent in COCOM.” (Note that COCOM refers only to the command authority, not to an individual.)

Operational Control

Per JP 1, OPCON is “**command authority exercised by commanders at any echelon at or below the level of combatant command.**” OPCON may be delegated within the chain of command. When forces are transferred between combatant commands, the command relationship the gaining commander exercises over these forces should be specified by the SecDef. 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. OPCON should not, however, include the authority to change the Service’s internal organization of its forces. Component forces (e.g., the AETF 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 is inherent in COCOM. OPCON 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 necessary to accomplish the mission. OPCON includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. OPCON should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate JFCs and Service and/or functional component commanders. 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” (JP 1). Normally, JFCs exercise OPCON of assigned and attached Air Force forces through the COMAFFOR.

Tactical Control

TACON is the “**command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned.**” TACON is inherent in OPCON. TACON may be delegated to, and exercised at, any level at or below the level of combatant command. 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” (JP 1).

Unless otherwise specified, TACON involves no responsibilities for organization, logistics, training, or discipline. A visible example of TACON is the COMAFFOR, when acting as the JFACC, produces an ATO that provides detailed

instructions for joint air assets made available for tasking. TACON also includes the authority to command and position forces to achieve mission objectives. For example, a JFACC functioning as the 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 in accordance with a directive requiring such action**” (JP 1). 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., CDRUSTRANSCOM) is established by the SecDeF as a supporting commander and a geographic CCDR (e.g., CDRUSCENTCOM) 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 CDRUSCENTCOM as supported commanders.

The supported commander has primary responsibility for all aspects of a task assigned by the Joint Strategic Capabilities Plan or other joint operations planning authority. In the context of joint operations planning, this term refers to the commander who prepares operation plans or operation orders in response to requirements of the Chairman, Joint Chiefs of Staff. The supporting commander provides augmentation forces or other support to a “supported commander” or develops a supporting plan. This includes the designated combatant commands and defense agencies as appropriate.

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 (JP 1).

- ★ **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.

JFCs establish support relationships within their own organizations to emphasize or clarify priorities, provide a subordinate with an additional capability, and/or combine the effects of similar assets. This is normally done by directing one force (the "supporting force") to provide support to another force (the "supported force"). The supported commander has the authority to exercise general direction of the supporting effort. General direction includes the designation and prioritization of targets or objectives, timing and duration of the supporting action, and other instructions necessary for coordination and efficiency. 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 COMARFOR or JFLCC 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

ADCON is the "**direction or exercise of authority over subordinate or other organizations with respect to administration and support**, including 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" (JP 1).

ADCON is not a warfighting authority like that found in COCOM, OPCON, TACON, 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. 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 the **authority delegated to “a commander or individual assigned responsibility for coordinating specific functions or activities** involving forces of two or more Military Departments, two or more joint force components, or two or more forces of the same Service. The commander or individual has the authority to require consultation between the agencies involved, but does not have the authority to compel agreement. 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” (JP 1).

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 command and 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 **“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.** 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” (JP 1). DIRLAUTH is most appropriately used to streamline communications and operations between tactical elements without relinquishing command by the higher authority.

APPENDIX B

THE AIR OPERATIONS CENTER

This appendix supports discussion of the AOC in chapter Six.

The following discussion outlines the basic geographic AOC model as described in AFTTP 3-3 AOC, *Operational Employment—Air and Space Operations Center* and AFI 13-1AOC, volume 3, *Operational Procedures—Air and Space Operations Center*. These documents provide further detail concerning the structure, functions, processes, and personnel within the AOC.

The AOC provides operational-level C2 of air component forces as the focal point for planning, executing, and assessing air component operations. The AOC can be tailored and scaled to a specific or changing mission and to the associated task force the COMAFFOR presents to the JFC. Thus, for smaller scale operations, the Air Force may not necessarily provide all of the elements described in the following sections if the situation does not warrant them.

The primary functions of the AOC are to:

- ★ Develop air component operations strategy and planning documents that integrate air, space, and cyberspace operations to meet COMAFFOR/JFACC objectives and guidance.
- ★ Task, execute, and assess day-to-day air component operations; provide rapid reaction, positive control, and coordinate and deconflict weapons employment as well as integrate the total air component effort.
- ★ Receive, assemble, analyze, filter, and disseminate all-source intelligence and weather information to support air component operations planning, execution, and assessment.
- ★ Integrate space capabilities and coordinate space activities for the COMAFFOR/JFACC when the COMAFFOR/JFACC is designated as SCA.
- ★ Issue airspace control procedures and coordinate airspace control activities for the ACA when the JFACC is designated the ACA.
- ★ Provide overall direction of air defense, including theater missile defense (TMD), for the AADC when the COMAFFOR/JFACC is designated the AADC.
- ★ Plan, task, and execute the theater air- and space-borne ISR mission.
- ★ Conduct component-level assessment to determine mission and overall air component operations effectiveness as required by the JFC to support the theater assessment effort.

- ✦ Plan and task air mobility operations according to the theater priorities.

The baseline AOC organization includes an AOC commander, five divisions (strategy, combat plans, combat operations, ISR, and air mobility), and multiple support/specialty teams. Each integrates numerous disciplines in a cross-functional team approach to planning and execution. Liaisons from other Service and functional components may also be present to represent the full range of joint air, space, and cyberspace capabilities made available to the COMAFFOR/JFACC. The following provides a summary of the major elements of an AOC.

The AOC Commander is charged with effectively managing air component operations and establishing the AOC battle rhythm. The AOC commander develops and directs processes to plan, coordinate, allocate, task, execute, and assess air component operations in the AOR/JOA based on JFC and COMAFFOR/JFACC guidance. The AOC commander commands the AOC weapons system (but not AETF forces) and should be prepared to direct a C/JAOC when the COMAFFOR is designated as the C/JFACC.

The Strategy Division concentrates on long-range planning of air component operations to achieve theater objectives by developing, refining, disseminating, and assessing progress toward achieving the COMAFFOR/JFACC component strategy. The strategy division is normally task organized into four functionally oriented core teams: the strategy plans team, the strategy guidance team, the operational assessment team, and the information operations team. Key products include the JAOP, the AOD, and other COMAFFOR/JFACC guidance.

The Combat Plans Division applies operational art to develop detailed execution plans for air component operations. The combat plans division is normally task organized into four functionally oriented core teams: the targeting effects team; the MAAP team; the ATO production team; and the C2 planning team. The division's key products are an area air defense plan, airspace control plan, and a daily ATO, ACO, special instructions, and joint integrated prioritized target list.

The Combat Operations Division monitors and executes current operations. The combat operations division is also the focal point for monitoring the execution of joint and combined operations, such as TST, TMD, joint suppression of enemy air defense supported by theater forces, and joint air attack team. The combat operations division is normally task-organized into four functionally oriented core teams: offensive operations, defensive operations, senior intelligence duty officer team, and interface control team. The division's main products are daily ATO/ACO changes, the airspace control plan, and air defense plan.

The ISR Division, in conjunction with the other AOC divisions, plans and executes airborne ISR operations and provides combat ISR support to air component planning, execution, and assessment activities. The ISR division has four core teams: the analysis, correlation and fusion team; the targets/tactical assessment team; the ISR operations team; and the processing, exploitation, and dissemination management

team. Major products include: the reconnaissance, surveillance, and target acquisition annex to the ATO (or the ISR collection plan); updated intelligence preparation of the operational environment; air component target nomination list; and intelligence summaries.

The **Air Mobility Division** plans, coordinates, tasks, and executes the theater air mobility mission. Unlike the other AOC divisions that work solely for the AOC commander, the AMD coordinates with the DIRMOBFOR but remains responsive to the tempo and timing of the AOC commander's operation. The DIRMOBFOR is responsible for integrating the total air mobility effort for the COMAFFOR/JFACC and, in this capacity, coordinates with the AMD on behalf of the COMAFFOR/JFACC to execute the air mobility mission. The AMD coordinates with the theater deployment distribution operations center and the 618 AOC. The AMD is comprised of four core teams: the airlift control team; the air refueling control team; the air mobility control team; and the aeromedical evacuation control team. Major products include airlift apportionment plans and air refueling inputs to the MAAP, ATO, ACO, and special instructions.

APPENDIX C

THE AFFOR STAFF

This appendix supports the basic discussion of the AFFOR staff in chapter 6. More specific guidance can be found in PAD 06-09, *Implementation of the Chief of Staff of the Air Force Direction to Establish an Air Force Component Organization*, 7 November 2006.

Most AETFs provide for an AFFOR staff function to support the COMAFFOR. **The AFFOR staff is the vehicle through which the COMAFFOR fulfills his/her operational and administrative responsibilities for assigned and attached forces, and is responsible for the long-range planning that occurs outside the air tasking cycle (e.g., deliberate planning).** The AFFOR staff consists of functionally-oriented directorates, a command section, a personal staff, and any required liaisons. The AFFOR staff may issue traditional mission type orders on behalf of the COMAFFOR to direct subordinate units to execute actions outside of the scope of the ATO. Two examples of such orders include setting a baseline force protection condition or directing the move of a unit to another operating base.

The following discussion of AFFOR staff duties is not intended to be all-inclusive. The differing mission requirements of any given operation may dictate different task emphasis and staff arrangements. Very large or complex operations, for example, may require all staff directorates. In some cases, senior component liaison elements may not be needed; in other cases, some of the required support may be obtained through reachback. For very small or limited operations, a full AFFOR staff may not be required. As a rule of thumb, the size and span of the AFFOR staff should normally be held to the smallest number of divisions necessary to handle the demands of the operation; in some cases, the COMAFFOR may combine some leadership positions (e.g., A-3/5; A-4/7). Other operations may employ an AFFOR staff split into forward and rear elements, using reachback to maintain unity of effort. In each case, based upon regional requirements, the COMAFFOR determines the size, shape, and location of the AFFOR staff and AOC to best support the operation.

Command Section

The command section is normally composed of the commander (i.e., the COMAFFOR), vice commander, chief of staff, command chief master sergeant, executive assistant, and appropriate administrative support personnel. Within the command section, the chief of staff coordinates and directs the daily activities of the AFFOR staff; approves actions, orders, and plans, as authorized by the COMAFFOR; and ensures COMAFFOR decisions and concepts are implemented by directing and assigning staff responsibilities.

Personal Staff

The COMAFFOR has several staff activities that normally function outside the AFFOR staff directorates. These activities fulfill specific responsibilities usually related to providing close, personal advice or services to the commander, or assist the commander and the component staff with technical, administrative, or tactical matters. These activities may include the commander's legal advisor; public affairs advisor; inspector general; protocol advisor; historian; chaplain; counterintelligence and special investigations; financial management; force protection; air mobility operations (DIRMOBFOR); space operations (DIRSPACEFOR); medical; and safety. Based on the needs of the operation and the requirements of the AFFOR staff, some of these activities may be located within the AFFOR staff directorates.

Senior Component Liaisons

The senior LNO from each component represents his or her respective commander to the COMAFFOR/JFACC. Subordinate LNOs from each component may perform duties throughout the staff as required, providing weapon system expertise. LNOs should be knowledgeable of the capabilities and limitations of their units and Service.

Manpower, Personnel, and Services (A-1)

The director of manpower, personnel, and services is the principal staff assistant to the COMAFFOR for total force accountability, personnel policy and procedures, the establishment and documentation of manpower requirements, organizational structures, mortuary affairs, food and force beddown operations, the coordination of exchange services, and the provision of quality of life programs to enable and sustain forces assigned and attached to the COMAFFOR.

Intelligence, Surveillance, and Reconnaissance (A-2)

The director of intelligence, surveillance, and reconnaissance is the principal staff assistant to the COMAFFOR for policy and guidance for all Air Force ISR operational architectures, personnel, systems and training. The A-2 provides intelligence support to forces within the assigned area of operations. The A-2 does not normally direct ISR collection assets when an ISR Division is resident in the AOC; this is normally the province of the ISR division director.

Operations (A-3)

The director of operations serves as the principal staff assistant to the COMAFFOR in the direction and control of all assigned and attached Air Force forces. When OPCON of Air Force units is formally transferred to the COMAFFOR, the A-3 ensures they are capable of performing tasked missions. This includes monitoring unit deployments and beddown locations, combat readiness, mission rehearsals, force protection, and training activities.

Logistics (A-4)

The director of logistics is the principal staff assistant to the COMAFFOR for logistics and sustainment support of assigned and attached Air Force forces. This includes oversight, integration, and operational level planning for and management of logistics capabilities for deploying units and the AOC, and similar support to other US government agencies, NGOs, and private voluntary organizations as appropriate. Most of the challenges confronting this division will likely be Air Force component-unique.

Plans and Requirements (A-5)

The director of plans and requirements serves as the principal staff assistant to the COMAFFOR for all consolidated planning functions. In coordination with the A-4, the A-5 conducts comprehensive force-level movement and execution planning throughout the campaign. This involves preparation and subsequent refinement of the force flow, beddown, and redeployment in the time-phased force and deployment data. The A-5 may perform long-range theater engagement (deliberate planning) that falls outside of the AOC's current operational focus. Close coordination should occur between A-5 and the strategy division to ensure planning efforts are complementary. In addition, the A-5 leads in the development of the organizational structure and command relationships for the Air Force component within the framework of the joint operation. The A-5 normally publishes the Air Force component operations order to support the JFC's campaign. The A-5 develops the Air Force component's Theater Security Cooperation plan and theater engagement activities.

Communications (A-6)

The director of communications is the principal staff assistant to the COMAFFOR for communications-electronics and information capabilities. This includes establishing the theater communications and automated systems architecture to support operational and command requirements.

Installations and Mission Support (A-7)

The director of installations and mission support is the COMAFFOR's primary advisor for installations, mission support, force protection, civil engineering, explosive ordnance disposal, fire fighting, emergency management, chemical, biological, radiological, and nuclear passive defense and response, contracting, and all cross-functional expeditionary combat support. Additionally, the A-7 works in coordination with the A-4 and A-1 on formulation of beddown plans and coordination and supervision of force beddown.

Strategic Plans and Programs (A-8)

The director of strategic plans and programs provides the COMAFFOR comprehensive advice on all aspects of strategic planning and programming. The A-8 also conducts program assessment and provides coordinated resource inputs to the supporting MAJCOM's Program Objective Memorandum processes.

Studies, Analyses, Assessments, and Lessons Learned (A-9)

The director of studies, analyses, assessments, and lessons learned collects, documents, reports, and disseminates critical information necessary to analyze, assess, and document Air Force aspects of campaigns and contingencies, and to document lessons identified. (Note: A-9 functions do not include campaign operational assessment, a task performed within the AOC). This information provides the primary source documents for both contemporary and future Air Force planning and analysis. Moreover, they serve as an official permanent record of component mission accomplishment.

APPENDIX D

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 ROMO. 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. 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, NORAD air sovereignty alert, 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 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 its 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 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. (JP 1-02)
 - ★ ★ **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. (JP 1-02)
 - ★ ★ **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. (JP 1-02) Under full mobilization, ADCON transfers to the gaining COMAFFOR and OPCON transfers in accordance with SecDef orders.

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Chief of Staff of the Air Force (CSAF) Professional Reading Program

The CSAF's professional reading list, with links to book reviews, is available on the Air Force web site at: <http://www.af.mil/information/csafreading/index.asp>. The list is subject to revision. Readers are encouraged to check the Air Force web site (<http://www.af.mil>) for the most current information.

GLOSSARY

Abbreviations and Acronyms

AADC	area air defense commander
ACA	airspace control authority
ACO	airspace control order
ACS	Agile Combat Support
ADCON	administrative control
AEF	air expeditionary force
AEG	air expeditionary group
AES	air expeditionary squadron
AETF	air expeditionary task force
AEW	air expeditionary wing
AFCYBER	Air Forces Cyber
AFDD	Air Force Doctrine Document
AFFOR	Air Force forces
AFI	Air Force Instruction
AFR	Air Force Reserve
AFNORTH	Air Forces Northern
AFPAC	Air Forces Pacific
AFTTP	Air Force Tactics, Techniques, and Procedures
AFSOC	Air Force Special Operations Command
AFSOF	Air Force special operations forces
AFSPC	Air Force Space Command
ANG	Air National Guard
ANGUS	Air National Guard of the United States
AMC	Air Mobility Command
AMD	air mobility division
AO	area of operations
AOC	air operations center
AOD	air operations directive
AOR	area of responsibility
ARC	Air Reserve Components
ATO	air tasking order
BCD	battlefield coordination detachment
C2	command and control
CAOC	combined air operations center
CAS	close air support
CCDR	combatant commander
CDRUSCENTCOM	Commander, United States Central Command
CDRUSSTRATCOM	Commander, United States Strategic Command
CDRUSTRANSCOM	Commander, United States Transportation Command
CFACC	combined force air component commander

CFLCC	combined force land component commander
CFMCC	combined force maritime component commander
CFSOCC	combined force special operations component commander
CNA	computer network attack
C-NAF	component numbered Air Force
CND	computer network defense
CNE	computer network exploitation
COA	course of action
COCOM	combatant command (command authority)
COG	center of gravity
COMAFFOR	commander, Air Force forces
COMARFOR	commander, Army forces
COMMARFOR	commander, Marine forces
COMNAVFOR	commander, Navy forces
CONUS	continental United States
CRC	control and reporting center
CSAF	Chief of Staff, United States Air Force
CSAR	combat search and rescue
CTO	cyber tasking order
DCA	defensive counterair
DIRLAUTH	direct liaison authorized
DIRMOBFOR	director of mobility forces
DIRSPACEFOR	director of space forces
DOD	Department of Defense
EASOG	expeditionary air support operations group
EASOS	expeditionary air support operations squadron
EOD	explosive ordnance disposal
ESOW	expeditionary special operations wing
IGO	intergovernmental organization
IMA	individual mobilization augmentee
ISAF	International Security Assistance Force
ISR	intelligence, surveillance, and reconnaissance
JACCE	joint air component coordination element
JAOC	joint air operations center
JAOP	joint air operations plan
JFACC	joint force air component commander
JFC	joint force commander
JFHQ	joint force headquarters
JFLCC	joint force land component commander
JFMCC	joint force maritime component commander
JFSOCC	joint force special operations component commander

JOA	joint operations area
JP	Joint Publication
JSOTF	joint special operations task force
JTAC	joint terminal attack controller
JTF	joint task force
LNO	liaison officer
MAAP	master air attack plan
MAGTF	Marine air-ground task force
MAJCOM	major command
MARLE	Marine liaison element
NAF	numbered Air Force
NALE	naval and amphibious liaison element
NATO	North Atlantic Treaty Organization
NDO	nuclear deterrence operations
NEAF	numbered expeditionary Air Force
NGO	nongovernmental organization
NORAD	North American Aerospace Defense Command
OC	operations center
OCA	offensive counterair
OCONUS	outside the continental United States
OPCON	operational control
PACAF	Pacific Air Forces
PAD	Program Action Directive
PIRR	participating individual ready reserve
PR	personnel recovery
ROE	rules of engagement
ROMO	range of military operations
SCA	space coordinating authority
SECAF	Secretary of the Air Force
SecDef	Secretary of Defense
SOF	special operations forces
SOLE	special operations liaison element
TACC	tanker/airlift control center
TACON	tactical control
TACP	tactical air control party
TACS	theater air control system
TFC	task force commander
TMD	theater missile defense

TST	time sensitive target
TTP	tactics, techniques, and procedures
UCMJ	Uniform Code of Military Justice
USAFCENT	United States Air Forces Central
USAFE	US Air Forces in Europe
USC	United States Code
USCENTCOM	United States Central Command
USCYBERCOM	United States Cyber Command
USFOR-A	United States Forces-Afghanistan
USNORTHCOM	United States Northern Command
USPACOM	United States Pacific Command
USSTRATCOM	United States Strategic Command
USTRANSCOM	United States Transportation Command
WMD	weapon(s) of mass destruction

Definitions

administrative control. Direction or exercise of authority over subordinate or other organizations in respect to administration and support, including 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. Also called **ADCON**. (JP 1-02)

air expeditionary force. An organizational structure to provide Air Force forces and support on a rotational, and thus relatively more predictable basis. They are composed of force packages of capabilities that provide rapid and responsive airpower. Also called **AEF**. (AFDD 1)

air expeditionary task force. The organizational manifestation of Air Force forces afield. The AETF provides a joint force commander with a task-organized, integrated package with the appropriate balance of force, sustainment, control, and force protection. Also called **AETF**. (AFDD 1)

air domain. The air domain is described as the atmosphere, beginning at the Earth's surface, extending to the altitude where its effects upon operations become negligible. (JP 3-30)

Airman. The term Airman has historically been associated with uniformed members of the US Air Force (officer or enlisted; regular, reserve, or guard) regardless of rank, component, or specialty. Today, Department of the Air Force civilians are incorporated within the broader meaning of the term when there is a need to communicate to a larger audience within the Service, either for force development

purposes or for clarity and inclusiveness by senior leaders when addressing a larger body of personnel. All Airmen, military and civilian, support and defend the Constitution of the United States and live by the Air Force core values. (AFDD 1-1)

airpower. 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. (AFDD 1)

area of responsibility. The geographical area associated with a combatant command within which a geographic combatant commander has authority to plan and conduct operations. Also called **AOR**. (JP 1-02)

assign. 1. To place units or personnel in an organization where such placement is relatively permanent, and/or where such organization controls and administers the units or personnel for the primary function, or greater portion of the functions, of the unit or personnel. 2. To detail individuals to specific duties or functions where such duties or functions are primary and/or relatively permanent. (JP 1-02)

attach. 1. The placement of units or personnel in an organization where such placement is relatively temporary. 2. The detailing of individuals to specific functions where such functions are secondary or relatively temporary, e.g., attached for quarters and rations; attached for flying duty. (JP 1-02)

centralized control. In joint air operations, placing within one commander the responsibility and authority for planning, directing, and coordinating a military operation or group/category of operations. (JP 1-02) [*The planning, direction, prioritization, synchronization, integration, and deconfliction of air, space, and cyberspace capabilities to achieve the objectives of the joint force commander.*] (AFDD 1) {Italicized words in brackets apply only to the Air Force and are offered for clarity.}

combatant command. A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant commands typically have geographic or functional responsibilities. (JP 1-02)

combatant command (command authority). Nontransferable command authority established by title 10 ("Armed Forces"), United States Code, section 164, exercised only by commanders of unified or specified combatant commands unless otherwise directed by the President or the Secretary of Defense. Combatant command (command authority) cannot be delegated and is the authority 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. Combatant command (command authority) should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Combatant command (command authority) provides full authority to organize and employ commands and forces as the combatant commander considers necessary to accomplish assigned missions. Operational control is inherent in combatant command (command authority). Also called **COCOM**. (JP 1-02)

combatant commander. A commander of one of the unified or specified combatant commands established by the President. Also called **CDCR**. (JP 3-0)

command. 1. The authority that a commander in the armed forces lawfully exercises over subordinates by virtue of rank or assignment. Command includes the authority and responsibility for effectively using available resources and for planning the employment of, organizing, directing, coordinating, and controlling military forces for the accomplishment of assigned missions. It also includes responsibility for health, welfare, morale, and discipline of assigned personnel. 2. An order given by a commander; that is, the will of the commander expressed for the purpose of bringing about a particular action. 3. A unit or units, an organization, or an area under the command of one individual. Also called **CMD**. (JP 1-02)

command and control. The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. Also called **C2**. (JP 1-02)

command relationships. The interrelated responsibilities between commanders, as well as the operational authority exercised by commanders in the chain of command; defined further as combatant command (command authority), operational control, tactical control, or support. (JP 1-02)

component. One of the subordinate organizations that constitute a joint force. Normally a joint force is organized with a combination of Service and functional components. (JP 1-02)

coordinating authority. A commander or individual assigned responsibility for coordinating specific functions or activities involving forces of two or more Military Departments, two or more joint force components, or two or more forces of the same Service. The commander or individual has the authority to require consultation between the agencies involved, but does not have the authority to compel agreement. 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 is more applicable to planning and similar activities than to operations. (JP 1-02)

coordination. The necessary action to ensure adequate exchange of information to integrate, synchronize, and deconflict operations between separate organizations. Coordination is not necessarily a process of gaining approval but is most often used for mutual exchange of information. Normally used between functions of a supporting staff. Direct liaison authorized (DIRLAUTH) is used to coordinate with an organization outside of the immediate staff or organization. (AFDD 1)

cyberspace. 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. (JP 1-02)

decentralized execution. Delegation of execution authority to subordinate commanders. (JP 1-02) [*Decentralized execution of airpower is the delegation of execution authority to responsible and capable lower-level commanders to achieve effective span of control and to foster disciplined initiative, situational responsiveness, and tactical flexibility.*] (AFDD 1) {Italicized words in brackets apply only to the Air Force and are offered for clarity.}

direct liaison authorized. 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. Direct liaison authorized is more applicable to planning than operations and always carries with it the requirement of keeping the commander granting direct liaison authorized informed. Direct liaison authorized is a coordination relationship, not an authority through which command may be exercised. Also called **DIRLAUTH**. (JP 1-02)

doctrine. 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 (JP 1- 02)

effect. The physical or behavioral state of a system that results from an action, a set of actions, or another effect. 2. The result, outcome, or consequence of an action. 3. A change to a condition, behavior, or degree of freedom. (JP 1-02)

functional component command. A command normally, but not necessarily, composed of forces of two or more Military Departments which may be established across the range of military operations to perform particular operational missions that may be of short duration or may extend over a period of time. (JP1-02)

functions. The appropriate or assigned duties, responsibilities, missions, or tasks of an individual, office, or organization. As defined in the National Security Act of 1947, as amended, the term “function” includes functions, powers, and duties (5 United States Code 171n (a)). (JP 1-02)

joint doctrine. Fundamental principles that guide the employment of US military forces in coordinated action toward a common objective. Joint doctrine contained in joint publications also includes terms, tactics, techniques, and procedures. It is authoritative but requires judgment in application. (JP 1-02)

joint force. A general term applied to a force composed of significant elements, assigned or attached, of two or more Military Departments operating under a single joint force commander. (JP 1-02)

joint force air component commander. The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of assigned, attached, and/or made available for tasking air forces; planning and coordinating air operations; or accomplishing such operational missions as may be assigned. The joint force air component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. Also called **JFACC**. (JP 1-02)

joint force commander. A general term applied to a combatant commander, subunified commander, or joint task force commander authorized to exercise combatant command (command authority) or operational control over a joint force. Also called **JFC**. (JP 1-02)

joint publication. A publication containing joint doctrine that is prepared under the direction and authority of the Chairman of the Joint Chiefs of Staff and applies to all Armed Forces of the United States. Also called **JP**. (JP 1-02)

joint task force. A joint force that is constituted and so designated by the Secretary of Defense, a combatant commander, a subunified commander, or an existing joint force commander. Also called **JTF**. (JP 1-02)

operational control. Command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in combatant command (command authority) and may be delegated within the command. 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 necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Operational control 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. Also called **OPCON**. (JP 1-02)

operational level of war. The level of war at which campaigns and major operations are planned, conducted, and sustained to achieve strategic objectives within theaters or other operational areas. Activities at this level link tactics and strategy by establishing operational objectives needed to achieve the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. See also strategic level of war; tactical level of war. (JP 1-02)

Service component command. A command consisting of the Service component commander and all those Service forces, such as individuals, units, detachments, organizations, and installations under that command, including the support forces that have been assigned to a combatant command or further assigned to a subordinate unified command or joint task force. (JP 1-02)

strategic level of war. The level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance, and develops and uses national resources to achieve these objectives. Activities at this level establish national and multinational military objectives; sequence initiatives; define limits and assess risks for the use of military and other instruments of national power; develop global plans or theater war plans to achieve those objectives; and provide military forces and other capabilities in accordance with strategic plans. (JP 1-02)

strategy. A prudent idea or set of ideas for employing the instruments of national power in a synchronized and integrated fashion to achieve theater, national, and/or multinational objectives. (JP 1-02)

support. 1. The action of a force that aids, protects, complements, or sustains another force in accordance with a directive requiring such action. 2. A unit that helps another unit in battle. 3. An element of a command that assists, protects, or supplies other forces in combat. (JP 1-02)

supported commander. 1. The commander having primary responsibility for all aspects of a task assigned by the Joint Strategic Capabilities Plan or other joint operation planning authority. In the context of joint operation planning, this term refers to the commander who prepares operation plans or operation orders in response to requirements of the Chairman of the Joint Chiefs of Staff. 2. In the context of a support command relationship, the commander who receives assistance from another commander's force or capabilities, and who is responsible for ensuring that the supporting commander understands the assistance required. (JP 1-02)

supporting commander. 1. A commander who provides augmentation forces or other support to a supported commander or who develops a supporting plan. This

includes the designated combatant commands and Department of Defense agencies as appropriate. 2. In the context of a support command relationship, the commander who aids, protects, complements, or sustains another commander's force, and who is responsible for providing the assistance required by the supported commander. (JP 1-02)

synchronization. 1. The arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time. 2. In the intelligence context, application of intelligence sources and methods in concert with the operation plan to ensure intelligence requirements are answered in time to influence the decisions they support. (JP 1-02)

tactical control. Command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned. Tactical control is inherent in operational control. Tactical control may be delegated to, and exercised at any level at or below the level of combatant command. 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. Also called **TACON**. (JP 1-02)

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-1s dropping anti-armor cluster munitions). Tactical doctrine is codified as tactics, techniques, and procedures (TTP) in Air Force TTP (AFTTP). Because tactical doctrine is closely associated with employment of technology, change may occur more rapidly than to the other levels of doctrine. (AFDD 1)

tactical level of war. The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives. (JP 1-02)

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. (AFDD 1)