



Recent decades have brought some major changes in Air Force doctrine.

# Basic

by John T. Correll

# Beliefs

**T**HE Air Force has a reputation for not being very interested in doctrine, which is strange.

Billy Mitchell's epic campaign was about all doctrine—what airpower could do, how it should be employed—and his disciples carried on the cause with fervor until the Air Force became a separate service in 1947.

After that, however, airmen devoted their energies to developing and operating their new force. The Air Force did not publish its own basic doctrine until 1953. In the years that followed, doctrine was often regarded as a thing apart from everyday operations.

Even so, there was a long-running fight between factions of the force about who would write the doctrine and what it would say. The evolution of it tells a great deal about Air Force thinking and priorities over the past 50 years.

In today's world of joint operations, airmen are regularly called upon to explain and combine their concepts with those of the other services. Air Force doctrine watchers believe this is leading to a greater interest in doctrine.

"As airmen, we have not properly understood or consistently applied our air and space doctrine," the Air Force Chief of Staff, Gen. John P. Jumper, said in his foreword to the current Air Force Basic Doctrine, published in November 2003. "As great operators we have preferred our ability to improvise over sound repeatable principles."

That is no longer good enough. "We must understand what it means to be



*A KC-135 Stratotanker, once a "strategic" asset, leads a formation of F-15E, F-16, and British GR4 Tornados fighters, which were once considered tactical.*



**In the 1950s, Strategic Air Command set the tone and dominated Air Force doctrine. Pictured is the alert crew of a SAC B-58 Hustler, scrambling to its waiting bomber at Carswell AFB, Tex.**

an airman and be able to articulate what air and space power can bring to the joint fight,” Jumper said.

The Air Force Doctrine Center publishes more than 30 doctrine documents, on topics ranging from space operations to combat search and rescue, but the capstone is Air Force Doctrine Document 1—basic doctrine—which sets forth the fundamental beliefs of the force about air and space power.

### All Eyes on SAC

At first, Air University at Maxwell AFB, Ala., wrote doctrine for the Air Force. In 1958, the Air Staff at the Pentagon took over the job, not believing that Air University could keep up with “the rapid staff-action requirements of Air Staff officers reacting to policy dilemmas,” according to Lt. Col. Johnny R. Jones, author of an extensive study on how Air Force doctrine has developed. For the next 30 years, doctrine was an Air Staff function.

Strategic Air Command was front and center in the first doctrine manual, published in 1953. It emphasized strategic nuclear operations to the exclusion of almost everything else. That reflected the priorities of the force at the time. “In Air Force slang,” Jones said, “the service had been ‘SACumsized.’”

The focus on SAC was so strong that the Korean War was ignored in the writing of doctrine. In 1955, Thomas K. Finletter, a former Sec-

retary of the Air Force, said, “The Korean War was a special case, and airpower can learn little there about its future role in United States foreign policy in the East.”

The 1959 version of basic doctrine—the first published after the Air Staff takeover—said that “the best preparation for limited war is proper preparation for general war.”

Political leaders put their stamp on doctrine, too. Eugene M. Zuckert, Secretary of the Air Force in the early 1960s, said that doctrine “should be designed to support policy and strategy” rather than being “based upon the absolute capabilities and limitations of aerospace forces.”

When the Vietnam War came along, Air Force doctrine also treated it as another off-line event.

“As with the Korean War before, the Vietnam War now offered a vast experience bed for analysis,” Jones said. “Air Force doctrine writers largely ignored the lessons of Vietnam, choosing instead to remain with the now familiar issues of nuclear deterrence.”

After Vietnam, airmen became unsure of their beliefs and “wandered in a doctrinal wilderness” for the next two decades, said Dennis M. Drew, now associate dean of the School of Advanced Air and Space Studies.

### The AirLand Interlude

Lt. Col. Phillip S. Meilinger, who would soon emerge as a leading analyst of air and space power, reached

similar conclusions in an *Airpower Journal* article in 1992.

“When the crisis of Vietnam struck, a divided Air Force had no intellectual foundations to fall back on, so it stumbled towards Army doctrines that eventually culminated in AirLand Battle and deep operations that viewed airpower in a supporting—not complementary—role. Air leaders allowed their limited experience to become their even more limited theory,” Meilinger said. “As a result, we now have airmen who believe that the primary mission of the Air Force is to support the land battle.”

The relationship had supposedly been settled long ago. It was a red letter day in Air Force history, July 21, 1943, when Army Field Manual 100-20 acknowledged that “land power and airpower are co-equal and interdependent forces; neither is an auxiliary of the other.”

With doctrinal concentration fixed on SAC, though, the role of airpower in conventional warfare had come into question.

The Air Force’s 1984 basic doctrine manual said, “The basic objective of land forces is to win the land battle,” and “the basic objective of aerospace forces is to win the aerospace battle.” It could be—and was—interpreted to mean the Air Force’s job was to maintain air superiority and support Army forces on the ground.

The Army’s new doctrine in the 1980s was AirLand Battle, in which the Army sought to win the land battle with the help of the Air Force. It included deep strikes against the enemy’s rear echelons.

The catch was that the Army always led, was always the supported force. There was no provision for the Air Force to lead or be the supported force. Many Air Force people believed that AirLand Battle was Air Force doctrine as well.

As the Gulf War and other conflicts of the 1990s were to demonstrate, the AirLand Battle idea had underestimated enormously what airpower, used as the leading force, could achieve against ground forces.

Even earlier, though, change had begun to bubble up in Air Force doctrine. The 1992 version of basic doctrine, finished before the Gulf War but not published until afterward, addressed various levels and

kinds of wars, took a broader view of Air Force roles and functions, and made a stronger case for what aerospace forces could achieve.

The experience of the 1990s, from the Gulf to Kosovo, validated the bolder view of air and space power and the idea that the air component might be a supported rather than supporting element of the joint force in ground attack.

“The main objectives of counterland operations are to dominate the surface environment and prevent the opponent from doing the same,” the 2003 doctrine said. “Although historically associated with support to friendly surface forces, counterland operations may encompass the identical missions, either without the presence of friendly surface forces or with only small numbers of surface forces providing target cueing.”

### Back to Maxwell

The 1980s also saw a successful challenge to the Air Staff’s 30-year control of doctrine. The opening wedge was the creation—despite Air Staff objections—of the Center for Aerospace Doctrine, Research, and Education (CADRE) at Air University. Its charter was to conduct studies and analysis, and “to assist in the development, analysis, and testing of concepts, doctrine, and strategy.”

In August 1985, the Air Staff finished the draft of a new basic doctrine manual, intended to supersede the version put out in 1984. This

time, however, there was stiff criticism from CADRE, which said the draft was “narrowly focus[ed] on fighting a large-scale theater war against a modern, industrialized enemy” and that “our doctrine should address not only the most demanding war but also the most likely wars.”

Revised drafts stalled out in the review process, and, in 1988, CADRE got approval to prepare a competing draft for consideration. The CADRE product gained support in reviews by Air Force agencies, and the Air Staff’s revision effort was canceled in 1989.

Credits in the 1992 basic doctrine were mixed. CADRE was listed as having prepared and edited the manual, but Air Staff Plans and Operations was shown as the office of primary responsibility and as the approval authority.

In 1997, the new Air Force Doctrine Center, reporting directly to the Chief of Staff and co-located with Air University at Maxwell, took charge. The revision to basic doctrine published in 1997 listed the Doctrine Center as the office of primary responsibility. The Air Staff did not show in the credits.

### The 12th Edition

The Air Force Doctrine Document 1—AFDD 1—that came out in November 2003 was the 12th version of basic doctrine in the series that began in 1953.

Doctrine documents are traditionally dry, sometimes painfully dull.

This one is not. It is well-written and is interesting to read. At 127 pages, it is also longer than any of its predecessors. (The shortest, in 1955, was only 10 pages.)

AFDD 1 avoids parochialism, both about services and systems. “Doctrine is about effects ... not platforms,” it says. “This focuses on the desired outcome of a particular action, not on the system or weapon itself that provides the effect.”

“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.”

“Ultimately, doctrine is not about whether one particular element 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.”

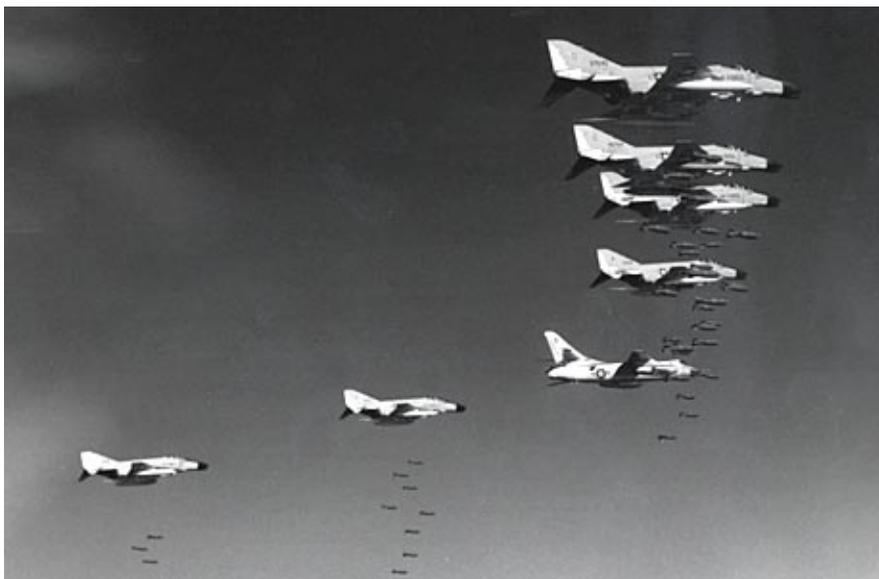
AFDD1 also says a lot of things that Billy Mitchell would no doubt like, were he still with us.

■ “Early airpower advocates argued that airpower could be decisive and could achieve strategic effects,” it says. “While this view of airpower was not proved during their lifetimes, the more recent history of air and space power application, especially since the 1991 Persian Gulf War, has proven that air and space power can be a dominant and frequently the decisive element of combat in modern warfare. Air and space power is a maneuver element in its own right, co-equal with land and maritime power; as such, it is no longer merely a supporting force to surface combat. As a maneuver element, it can be supported by surface forces in attaining its assigned objectives. Air and space power has changed the way wars are fought and the manner in which the United States pursues peacetime efforts to protect the nation’s vital interests.”

■ “The ‘American way of war’ has long been described as warfare based on either a strategy of annihilation or of attrition and focused on engaging the enemy in close combat to achieve a decisive battle. Air and space power, if properly focused, offers our national leadership alternatives to the annihilation and attrition options.”

■ “The prompt, continued, aggressive application of air and space power in the opening phase may ac-

USAF photo



*During the Vietnam War, doctrine often defined the Air Force’s role as being support of ground forces. Here, a flight of F-4C Phantoms under radar control of an EB-66 electronic warfare airplane bomb North Vietnamese targets.*

tually constitute the conflict's decisive phase. Thus, this first phase need not be a precursor to a buildup of ground forces and conventional counterattack."

■ "Air and space power's exceptional speed and range allow its forces to visit and revisit wide ranges of targets nearly at will. Air and space power 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 advance and proliferate, they offer the potential for 'permanent presence' over any part of the globe; unmanned aerial vehicles (UAVs) are offering similar possibilities from the atmosphere."

Strategic attack is still listed first among the operational functions of the force. However, the Cold War emphasis on global war is gone, and AFDD 1 applies equally to conflicts at all levels.

"As a concept, strategic attack builds on the idea that it is possible to directly affect an adversary's sources of strength and will to fight without first having to engage and defeat their ground forces," AFDD 1 says. "While strategic attack may not totally eliminate the need to directly engage the adversary's fielded military forces, it can shape those engagements so they will be fought at the time and place of our choosing under conditions more likely to lead to decisive outcomes



**By the time of the 1991 Gulf War, doctrine experts were beginning to argue that airpower could be supported by land power. The lines between strategic and tactical aircraft and missions began to blur.**

with the least risk for friendly forces."

It reminds us, however, that "strategic attack is not an argument for replacing ground combat with airpower; the ground battle will still often be necessary. Strategic attack simply offers [joint force commanders] another option, a flexible one, that can go to the heart of an enemy and attain a variety of effects directly at the strategic level."

Curiously, there is no mention in the new AFDD of "centers of gravity"—the assets of greatest strategic importance to the enemy—which was

a leading operational concept and a staple of doctrine through the 1990s. Nor is there direct discussion of targeting the enemy's infrastructure, other than that which "contributes directly" to the ground battle.

### **Evolving From Napoleon**

As has been traditional with basic doctrine, AFDD 1 cites and builds upon the classic principles of war. These are the same nine principles—unity of command, objective, offensive, mass, maneuver, economy of force, security, surprise, and simplicity—espoused 200 years ago by Napoleon, with one exception. In 1997, the Air Force moved unity of command to the top of the list, ahead of objective.

According to the Doctrine Center, this reflects a belief that unity of command is pivotal to Air Force concepts of organization and command and control.

"Unity of command is vital in employing air and space forces," AFDD 1 says. "Centralized command and control is essential. ... The ability of airpower to range on a theater and global scale imposes theater and global responsibilities that can be discharged only through the integrating function of centralized control under an airman. That is the essence of unity of command and air and space power."

AFDD 1 also comes down hard on the principle of the offensive. The old rule of thumb, devised by Army



**Strategic, or tactical? The B-52, formerly a strategic nuclear weapon, has now been used for close air support missions. This BUFF is loaded with 2,000-pound satellite guided bombs.**

theorists, said the defense in warfare had an advantage of at least 3-to-1, and that the advantage rose to 5-to-1 when defending prepared positions. Such ratios do not apply to air and space forces.

“History has generally shown that a well-planned and executed air attack is extremely difficult to stop,” AFDD 1 says. “The speed and range of attacking air and space forces give them a significant offensive advantage over surface forces and even *defending* air and space forces. In an air attack, the defender often requires more forces to defend a given geospatial area than the attacker requires to strike a set of specific targets.”

On the principle of mass, AFDD 1 says that “mass is an effect that air and space forces achieve through effectiveness of attack, not just overwhelming numbers. Today’s air and space forces have altered the concept of massed forces. The speed, range, and flexibility of air and space forces—complemented by the accuracy and lethality of precision weapons and advances in information technologies—allow them to achieve mass faster than surface forces.”

As for maneuver, “Air maneuver allows engagement anywhere, from any direction, at any time, forcing the adversary to be on guard everywhere.”

## Air and Space

In a significant change, AFDD 1 reverses a doctrinal position the Air Force had held for more than 40 years and drops the term “aerospace” in favor of “air and space.”

This aligns with the view of Chief of Staff Jumper, that “aerospace” terminology—which the Air Force expounded with vigor in the 1990s—“fails to give the proper respect to the culture and to the physical differences that abide between the physical environment of air and the physical environment of space.”

“Aerospace” had been in use since 1959, when basic doctrine switched from “airpower” to “aerospace power” and defined aerospace as the “total expanse beyond the Earth’s surface.”

This view had been confirmed in doctrine as recently as February 2000 in AFDD 2, “Organization and Employment of Aerospace Power,”



**A B-2 stealth bomber, first developed to penetrate Soviet air defenses and deliver nuclear bombs, is forward deployed to Andersen AFB, Guam. Today, the B-2s armed with conventional weapons are key to USAF’s force projection.**

which said that “Air Force doctrine recognizes the institutional shift within the US Air Force from ‘air’ to ‘aerospace.’ ”

However, AFDD 1 declares in the first chapter, “Air and space are *separate domains* requiring the exploitation of different sets of physical laws to operate in, but are *linked by the effects* they can produce together. By using the phrase ‘air and space’ instead of ‘aerospace’ we acknowledge the inherent differences in the two media and the associated technical and policy-related realities without deviating from our vision. To achieve a common purpose, ‘air’ and ‘space’ need to be integrated.” (Emphasis in the original.)

## Doctrine, Concepts, and Vision

The Doctrine Center is keenly aware of the dangers of rigidity and has built its process to be responsive to change. Two years after publication, every doctrine publication comes up for review and evaluation.

AFDD 1 says that “doctrine must be continually interpreted in light of the present situation. A too-literal reading of doctrine may fail to accommodate new operational realities.”

Doctrine should be seen as part of a continuum that begins with vision statements, which focus on concepts and desired operational capabilities,

15 years or more into the future. “As an example,” AFDD 1 says, “in the mid-1990s, the Air Force stated a vision to attain the ability to find, fix, target, track, and engage anything that moves on the Earth’s surface.”

Next on the continuum are operating concepts, which look out five to 15 years ahead. The Airborne Laser, designed to destroy enemy ballistic missiles shortly after launch, was such an operating concept.

At the end of the continuum is doctrine, which “is focused on near-term operational issues and talks to the proper employment of current capabilities and current organizations.”

AFDD 1 says that “any given doctrinal position reflects a snapshot in time. Doctrine can and should evolve based on experience. In circumstances when the Air Force cannot find a unanimous doctrinal consensus, it may settle on an ‘agreed-to, least-common-denominator’ position that all players are willing to sign up to.”

“Certain principles—like unity of command, objective, and offensive—have stood the test of time,” AFDD 1 says. “Other ideas—like unescorted daytime bombing, decentralized command, and the pre-eminence of nuclear weapons—have not. If we ignore the potential of space and information operations and the global and strategic natures of air and space power, we may commit the same sins as our forebears.” ■

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