Closing the Ga

Joint doctrine perpetuates a "land-centric" focus because it is largely based on Army concepts. That may be about to change.

By Rebecca Grant

HE Air Force is stepping up to the challenge of revitalizing its doctrine for a world in which joint operations will depend on greater understanding of the contributions from air and space forces.

For years, USAF treated doctrine as a formality. Today, however, the Air Force is being pushed forward by awareness that its individual service doctrine could become a major ingredient in the development of joint-force military power.

In the wake of Operation Desert Storm, debates over joint doctrine revealed that the airman's view of warfare could spark doctrinal conflicts with other service components—even more so if aerospace doctrine is not clearly articulated.

Early last year, the Air Force Chief of Staff, Gen. Ronald R. Fogleman, and the Army Chief of Staff, Gen. Dennis J. Reimer, openly acknowledged their differences over such basic issues as control of air and missile defenses and deep operations conducted beyond the fire-support coordination line but within the land commander's area of operation. It became clear that neglect of doctrine can translate to less than optimal use of airpower and cloud the debate over future forces.

The Army, Navy, and Marine Corps maintain dedicated doctrine organizations under flag rank command. The purpose is to integrate doctrine with education and training and link it to the requirements process. In contrast, the Air Force traditionally has kept basic doctrine separate from the day-to-day business of airpower. The Air Force last published basic doctrine in 1992 and operationallevel doctrine in 1969.

However, with the Chairman of the Joint Chiefs of Staff, Army Gen. John M. Shalikashvili, putting new emphasis on joint doctrine and

vision, each service's approach to doctrine has become an important contributor to the overall shape of defense concepts.

Army: "Close Engagement" **Decisive**

Army doctrine encapsulates principles for maneuver warfare and acts as a springboard for advanced experiments with concepts for the future of land warfare. At the Army's Training and Doctrine Command (TRADOC) at Fort Monroe, Va., a four-star general oversees all Army training and doctrine. Twostar deputies supervise doctrine, training, combat development, and requirements.

Setting up a strong doctrine and training command was a step toward revitalizing the Army after the Vietnam War. In the 1980s, AirLand Battle doctrine emphasized the concept of maneuver warfare and the nonlinear battlefield as a way to capitalize on Army strengths and prepare to defeat the numerically superior forces of the Warsaw Pact. To the Army, the ground-war segment of Desert Storm proved the value of reinvigorated doctrine and training.

TRADOC supervises and integrates doctrine, but most of the Army's more than 600 tactical and operational doctrine publications are written in the field. "FM 100-5, Operations," the Army's best-known doctrine manual, is drafted at the Combined Arms Center at Fort Leavenworth, Kan., headed by a three-star general. Logistics doctrine comes from the two-star commander of Combined Arms Support Command at Fort Lee, Va. Specialized Army branch schools also contribute to the doctrine development process.

Doctrine goes hand in hand with what the Army calls combat development. TRADOC's combat development branch runs war games, field exercises—such as the Louisiana Maneuvers—and simulations that test future concepts. By experimenting with combinations of soldiers, equipment, and tactics in real-world situations, the Army looks out about 10 years ahead of the basic doctrine cycle. Concepts for the Army's Force XXI stem from combat development and will feed into future revisions of basic doctrine. TRADOC also sponsored work on long-range planning for the Army of 2025.

The philosophy behind Army doctrine reveals why the Army crafts its doctrine with such care. Doctrine, to the Army, is more than just concepts. Army officers feel a special burden to win and terminate the nation's wars—a role that, in their view, is not shared by other services, who are considered valuable but supporting arms in the joint force. This is why Army doctrine, in FM 100-5, states that the Army is "the nation's historically proven decisive military force."

Army operational doctrine concentrates on the corps and maneuver warfare at the operational level, where commanders translate strategic goals into military objectives.

Maneuver is more than just mobility. It is a means to gain positional advantage over the enemy with armor, infantry, and attack helicopters. Firepower supports and enhances the maneuver-warfare plan of operations. Army forces conduct maneuver warfare by synchronizing

close and deep operations while protecting the force. Simultaneous operations delay, disrupt, and destroy the enemy's follow-on echelons and strategic areas behind the lines. Close engagement reaps these advantages and "is where soldiers close with and destroy the enemy," achieving victory. Even if this takes just 100 hours, as did the ground offensive in Desert Storm, Army doctrine defines close engagement as the point where decisive and lasting results are achieved.

Success in land warfare calls for principles that soldiers understand. Army officers promoted to the rank of major begin to draw on doctrine to master the basics of maneuver warfare and the art of commanding larger units and more complex missions. At Command and General Staff College, for example, officers learn to create operations orders for brigade, division, corps, and theaterlevel forces. For the field-grade Army officer, mastering operational doctrine, like leadership and battle management, is part of doing the job right.

Navy/USMC: Battlespace Dominance and Peacetime Presence

For most of its more than 200-year existence, the Navy has kept doctrine at arm's length for fear that a binding set of principles might restrict the initiative and independence of the captain at sea—the very founda-

tion of naval combat arms. Strategy and tactics substituted as the focus of debate.

The Reagan Administration, for example, formally embraced the Maritime Strategy in early 1981, and much controversy ensued. Whatever it was, however, it wasn't doctrine. One defense analyst, John Mearsheimer, said it was "best described as a loose combination of four offensive concepts—direct military impact, horizontal escalation, offensive sea control, and counterforce coercion."

Desert Storm's joint-force air attack procedures on land targets jolted the Navy out of its independent operations.

In 1993, Adm. Frank B. Kelso II, the Chief of Naval Operations, reversed the Navy's course by establishing Naval Doctrine Command at Norfolk, Va. Chartered in part to provide the doctrinal foundation for "From the Sea," issued in 1992, Naval Doctrine Command followed up with publication of "NDP-1, Naval Warfare" in 1994. Naval Doctrine Command, headed by a rear admiral, still reports directly to the CNO.

Naval doctrine still shines with tradition. Adm. Horatio Nelson and Adm. Arleigh A. Burke appear frequently in sidebar illustrations of such concepts as commander's intent and other imperatives of operations at sea. Despite the reverence for history and aversion to formal doctrine, the Navy harnessed its new doctrine process to explain littoral warfare and how naval forces project combat power. The command compressed some 300 naval warfare publications into the new joint numbering system.

NDP-1 covers the Navy's role in national security and discusses dominant operational concepts. Prominent among them are two concepts: battlespace dominance and presence.

Naval doctrine defines battlespace dominance as establishment of a zone of superiority from which naval forces project power. Battlespace reaches as far as the combat radius of naval weapons and covers the surface, undersea, air, land, space, and time. In littoral warfare doctrine, battlespace stretches to permit projection of power over land. Naval forces act alone when required or serve as the node of control for a joint force.

Forward presence is another aspect of naval power grounded in



The Army has the oldest, most-developed doctrine infrastructure in DoD. Training and Doctrine Command, which helped revitalize the Army after the Vietnam War, reflects the Army's view that it is "the nation's . . . decisive military force."



Marine Corps doctrine is part of Navy doctrine, with its emphasis on presence and battlespace dominance. USMC F/A-18s like this one will support naval and Marine forces in littoral warfare and any other level of warfare from the sea.

new doctrine publications. When a crisis occurs, naval forces may be first on the scene and remain behind after other landbased forces depart. With such concepts as presence and battlespace dominance, Navy doctrine, like Army doctrine, offers a rationale for force roles and missions and a comprehensive perspective on the operational level of war from the sea.

Marine Corps doctrine is part of naval doctrine, but the Marine Corps also generates its own concepts of maneuver operations ashore. An elaborate, concept-based requirements system limits doctrine to organizing, training, and equipping Marine forces. Marine Corps doctrine publications begin with "FMFM-1, Warfighting," last published in 1991. FMFM-1 presents basic and enduring principles of warfare. A second layer of publications on strategy, campaigning, and tactics begins the discussion of the operational level of warfare and continues into a series of subordinate publications. Most of all, however, the Marine deliverable is Marines.

USAF: Airman's Perspective

During most of the 1990s, Air Force doctrine stood apart in its sparse organization and lack of attention to the operational level of warfare. Since 1947, the Air Force leadership within the Pentagon and Air University have waged a sporadic tug-of-war over responsibility

for developing Air Force doctrine. The Air Force Doctrine Center at Langley AFB, Va., commanded by a colonel, reported to the two-star deputy for Plans on the Air Staff at the Pentagon. A second Air Staff office assisted with headquarters and joint coordination, while the Center for Aerospace Doctrine, Research, and Education was a separate function under Air University at Maxwell AFB, Ala.

Organizational turmoil reflected the Air Force's tendency to approach doctrine as an academic exercise, but the raw material of air doctrine is a blueprint for concepts of warfare inherently different from surface maneuver traditions. Basic principles of air doctrine describe and present a view of warfare from the vertical dimension.

For biplane pilots and jet-age crew members alike, elevation above the surface gave a unique perspective and allowed aircraft to make use of increased range and speed to gain advantage over the enemy. The airman's perspective and ability to see and operate across the battlespace made unified command of air assets crucial to full success, while making decentralized execution of air operations highly efficient. While many of these advantages were available as early as World War I, the improved lethality and effectiveness of air attacks hold out the potential to change the focus of warfare from twentieth-century surface maneuver

to twenty-first-century air and space dominance.

The Air Force developed a wealth of basic principles, but keeping doctrine publications up-to-date often proved arduous. Operational-level doctrine suffered. "Air Force Manual 2-1. Tactical Air Operations," written in 1969, has not been revised since it was adopted. This overarching operational-level publication discusses counterair, close air support, and air interdiction missions but has not been updated to reflect the maturing capabilities of the 1970s and 1980s or the success of these mission areas in Desert Storm. Save for a few publications co-written with the Army in the 1980s, the Air Force has failed to participate in formal discussion of doctrine at the operational level of war.

Until 1992, the development of operational-level doctrine suffered from fragmentation of the Air Force into the cultures and missions of Strategic Air Command, Tactical Air Command, and Military Airlift Command. SAC and TAC honed independent procedures and ways of thinking about airpower. At SAC, the mission to deter or fight a global nuclear war required a full suite of thinking on the tactical, operational, and strategic levels of war. However, SAC's association with the nuclear mission lessened its impact on overall air doctrine.

TAC concentrated on achieving air superiority over the battlefield and employing airpower in support of ground forces—a consuming challenge, especially because NATO's doctrine of Follow-On Forces Attack depended on air and ground forces working together to defeat the superior numbers of the Warsaw Pact without first resorting to nuclear weapons. Killing MiGs and flying close air support were the name of the game. Army and Air Force cooperation on AirLand Battle may have reduced the incentive to think about other roles for airpower in the ioint battle.

Prior to Desert Storm, one of the few full-length discussions of air war at the operational level was Col. John Warden's *The Air Campaign*, published in 1988 by the National Defense University at Fort McNair, D. C. Milestones like the 1990 "Global Reach, Global Power" or 1995's "Global Presence" germinated out-

side the formal doctrine process.

The Air Force's apathy about operational doctrine may have stemmed from the fact that tactical doctrine guides squadron and wing employment of airpower. Seldom are Air Force officers required to master principles of operational-level doctrine to carry out their day-to-day force-employment responsibilities. The numbered air force commander may be the first to take on responsibility for operational plans and understand how they fit with a Joint Force Commander's objectives. In contrast, Army and Marine majors are starting to master doctrine for combined arms warfare. This "fact of life" of airpower organization and employment creates a gap where there is little natural demand for operational doctrine.

Joint Vision

Gaps in formal airpower doctrine at the operational level can affect the role of airpower in joint doctrine. Joint doctrine is by law the near-exclusive province of the Chairman of the Joint Chiefs of Staff. Fully empowered by the Goldwater-Nichols Defense Reorganization Act of 1986, which emphasized joint operations, General Shalikashvili has spurred the process of joint-doctrine development in the 1990s.

Joint doctrine flows from service doctrine but takes on added responsibilities. Joint doctrine's charter is to help the theater commander in chief meld the different capabilities and perspectives provided by the services into the most efficient and effective joint force possible. Joint doctrine knits together service components and concepts by prescribing guidelines for areas of operation, command relationships, and support and coordination of the joint force.

The goal is to create tight "seams." When seams pull apart, lives may be at risk. In the aftermath of the UH-60 Black Hawk shootdown in 1994, General Shalikashvili declared joint doctrine to be "authoritative." He said, "This doctrine will be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise." Changing the status of joint doctrine from "recommended" to "authoritative" crowned its emerging importance and impact on military power.

Joint Pub 3-0, Doctrine for Joint Operations, coordinates the surface maneuver of ground forces with the supporting abilities of naval and air forces. Drafted by the Army in 1993, before the Navy or Air Force reengaged with joint doctrine, the current manual reflects the Army's emphasis on maneuver warfare. Specific instructions detail the task of establishing command and organization of joint forces.

For example, Joint Pub 3-0 says that Joint Force Commanders will establish the size, shape, and position of land and naval areas of operation, based on "the land or naval

force commander's requirement to maneuver rapidly and to fight at extended ranges." Within their areas of operation, the land or naval component commander will be supported by other force elements and will be responsible for the "synchronization of fires, maneuver, and interdiction." The Joint Force Air Component Commander has no geographic area of operation but manages theaterwide air operations beyond land and naval areas of operation. Joint Pub 3-0 cautions commanders to "carefully balance doctrinal imperatives that may be in tension, including the needs of the maneuver force and the undesirability of fragmenting theater air assets."

However, gray areas remain at the intersection of air and surface operations. Joint Pub 3-0's authoritative prescriptions for organization and command affect operation of each component differently. As General Fogleman and General Reimer noted in their discussion of differences, "What might be optimum for one component can come at the expense of the other," either "decreasing its rombat power or increasing its risk."

To balance each service's core capabilities, US joint doctrine must be able to draw on fully developed operational doctrine in each service. Air Force members working in the joint-doctrine process often experience disadvantages that stem from their service's lean doctrine structure.

A recent example was the drafting of a Joint Pub 3-09 on joint fires. Proposals for a joint-forces fires coordinator fit well with maneuver warfare doctrine. However, from an airman's perspective, it threatened to complicate the situation and weaken the air component commander's authority, depending on how much of the air component was grouped under the heading of indirect fires. Without a parallel publication on the operational level of war, Air Force doctrine representatives faced numerous uphill battles on this and other issues affecting the role of airpower in joint warfare.

There are those who say that the presence of several Army officers in key senior billets on the Joint Staff during the early 1990s resulted in a surface warfare tinge to joint doctrine produced after Desert Storm. While both Gen. Colin L. Powell and



Joint doctrine gives the theater commander in chief the latitude to employ his different capabilities in the most efficient and effective way possible, whether they are Navy EA-6Bs (perhaps with USAF crews) or Air Force KC-135s.



In the past, some key air concepts were given short shrift, but the Air Force is working to strengthen its doctrine organization to make sure all commanders will be aware of what USAF can bring to the fight.

General Shalikashvili brought their Army experience to joint doctrine, it is also true that Army doctrine easily embraced joint doctrine. The Navy and Air Force were comparatively late players, not in position to dominate joint-doctrine dialogue.

Joint doctrine today carries forward a land-centric focus because it is still largely based on dominant surface maneuver. Key air concepts and some naval concepts—receive short shrift. Differences between land and air components generally are resolved in favor of the land commander. Most of all, it is striking how closely joint doctrine runs parallel to the Army doctrine of maneuver, fires, and force protection. As a result, major conflicts in the jointdoctrine process most often erupt over differences between air and ground views of operational strategy, command, and organization. For all the periodic USAF-Navy fireworks over bombers and carriers, it is the clash of the surface soldier's view of the battlefield and the airman's perspective that creates the deepest misunderstandings.

One such misunderstanding that spread from joint doctrine to last year's "Joint Vision 2010" was the description of air superiority as a part of full-dimension protection—what might be called freedom from attack. But air superiority's goal as defined in air doctrine is to eliminate by one means or another the enemy force that can interfere with air operations.

Air superiority provides positional advantage, with "supporting" fire-power aboard the aircraft—a close match to the definition of dominant maneuver, but not how it is described in joint doctrine.

The Way Ahead

Joint Vision 2010 established the importance of joint doctrine as an influence on future military capability. Drawing on tested concepts of dominant maneuver, precision engagement, full-dimension protection, and focused logistics, Joint Vision 2010 springboards from doctrine to forward-looking concepts of operation that light the way for all components in the joint force. According to General Shalikashvili, Joint Vision 2010 will focus "the strengths of each individual service or component to exploit the full array of available capabilities" and "guide the evolution of joint doctrine, education, and training to [ensure that] we will be able to achieve more seamless joint operations in the future."

There are dangers, too. The increasing authority of joint doctrine may amplify the joint voice in future planning and investment. The danger is that, as joint doctrine and visions gain strength, the services may find it hard to carry out their missions if

they are not allowed to develop new doctrine and capabilities outside of the joint framework—a framework that hinges primarily on surface maneuver.

For the Air Force, Joint Vision 2010 appears to present an opportunity to expand on operational concepts for how inherent maneuver, battlespace control, air superiority, and fast, long-legged forces will strengthen future joint operations. The challenge is to clarify the links between airpower doctrine and the Joint Force Commander's priorities. General Shalikashvili chartered the Joint Warfighting Center at Fort Monroe, Va., to expand concepts and begin implementation of Joint Vision 2010. The Air Force and all the services have a chance to engage in debate to sharpen their capabilities and means of interaction.

First steps for the Air Force include plans to reorganize doctrine functions under a single two-star commander and to update doctrine publications. A single commander—with authority over every major doctrine function in the field—will strengthen the Air Force's doctrine organization by providing direct oversight of all major doctrine functions. Doctrine will be firmly linked to professional military education and training. An independent structure can also keep USAF up to speed with fast-moving changes in the world of joint doctrine.

General Fogleman discussed upcoming doctrine changes with senior leaders at the October 1996 Corona conference. Later this year, the Air Force will publish its "equivalent" of FM 100-5—a new operational doctrine publication that will document the basic principles, abilities, and operational concepts for air- and spacepower in joint warfare. At its best, doctrine is like an observation tower from which to survey past lessons, current practices, and future concepts for military operations.

As General Fogleman explained, "The ultimate goal of our doctrine should be the development of an airman's perspective on joint warfare and national security issues—not just among our generals but among all airmen, in all specialties."

Rebecca Grant is president of IRIS, a research organization in Arlington, Va. She has worked for Rand Corp., in the Office of Secretary of the Air Force, and for the Chief of Staff of the Air Force. This is her first article for Air Force Magazine.