

JFQ



Transformation During War

Defining
Integrated
Operations

Getting
Transformation
Right

Understanding
Adversary
Culture

Chinese and American
Network Warfare

38
Issue

3rd Quarter
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The laws of successful war in one generation would ensure defeat in another.
—General of the Army Ulysses S. Grant

Never tell people how to do things. Tell them what to do and they will surprise you with their ingenuity.
—General George Patton, Jr., USA, 1947



Organizations created to fight the last war better are not going to win the next.
—General James Gavin, USA, 1947

There's a risk. I submit that the risk of not sharing [information] today is a lot greater than the risk of sharing.
—General Richard Myers, USAF
Chairman of the Joint Chiefs of Staff, 2005







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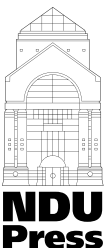
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JFQ

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The cover shows Air Force pararescuemen extraction training at Baghdad International Airport, (U.S. Air Force/James W. Bowman). Front inside cover features [top to bottom] air support operations Airmen, attached to 1st Infantry Division, calling in close air support at Sammarah, Iraq (U.S. Army); Marines positioning for close air support assault in Al Anbar Province, Iraq (1st Marine Division Combat Camera/Jonathan C. Knauth); Army OH-58D provides close air support in Al Shahabi, Iraq (U.S. Air Force/Shane A. Cuomo); and Navy ordnancemen loading laser-guided GBU-12 bombs aboard USS Harry S. Truman (U.S. Navy/Kristopher Wilson). The table of contents shows [left] Marine observing live fire operations (Fleet Combat Camera Group, Pacific/Ted Banks); [right] postflight operations on EC-135 AWACS, exercise Red Flag 2005 (440th Communications Squadron/Patrick M. Kuminecz). The back inside cover is USNS Artic guided through Suez Canal by Egyptian tugboat (U.S. Navy/Kristopher Wilson). Back cover shows [top] loading C-5 for Operational Readiness Inspection (125th Fighter Wing/Shelley Gill); [left to right] Marines set to board LCU at Kuwait Naval Base (Fleet Combat Camera Group, Pacific/Richard J. Brunson); Indonesian child aboard USNS Mercy (Fleet Combat Camera Group, Pacific/Jeffrey Russell); and Soldiers mount M1A1 Abrams tanks in South Korea (1st Combat Camera Squadron/Susanne M. Day).

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Corrections

In issue 36, the caption for the cover photo states that National Guardsmen and Marines are shown, but Marines attached to a Virginia National Guard unit in Iraq are depicted.

The caption for the photograph on page 30 in issue 36 mistakenly identifies Marines as Army Reservists.

In issue 36, book reviewer Janeen M. Klinger was misidentified. She is a professor of national security in the Command and Staff College at the Marine Corps University.

In issue 37, the caption for the photograph on page 35 misidentifies F-16CGs as F-16CJs.

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A Word from the



Gen Richard B. Myers, USAF, talking with commanders at Bagram Air Base, Afghanistan

Chairman

We must hold our minds alert and receptive to the application of unglimped methods and weapons. The next war will be won in the future, not in the past. We must go on, or we will go under.

—General Douglas MacArthur, USA, 1931

Many in the military community are familiar with change, but the rate of today's change—as we fight a new kind of war against a new kind of enemy—presents unique challenges. Understanding this landscape is essential; transforming in response is imperative.

Our response is a continuing, deliberate campaign to transform the military across the services. This issue of *Joint Force Quarterly* highlights the need to maintain our transformation efforts

while we are at war. We must continue moving forward with the right capabilities to meet today's challenges while also ensuring that the Armed Forces are positioned to meet the threats of the 21st century.

Though much has been written and discussed concerning the technological aspects of transformation, material solutions alone cannot transform our forces. Successful transformation must include a cultural component—creating an environment conducive to change within our organizations. Without creating a parallel culture of change in the Armed Forces, our transformation will fall far short of its fullest potential. Changing organizations always begins with leadership.

(continued on page 4)

Gen Richard B. Myers, USAF
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(continued from page 1)

Developing a culture of change in a complex and uncertain security environment is hard. We naturally rely on past practices and pull from a vast reservoir of successful experiences to guide us through periods of uncertainty. However, we shortchange our efforts if we simply use new technology in old ways. For example, the enhanced situational awareness provided by Common Operating Picture technology would be lost if we relied on the Cold War risk-averse approach to sharing information—the “need to know” mindset versus today’s “need to share.”

Creating a culture of change in the Armed Forces requires leaders at all levels who are willing to take action, to take informed risk, and to infuse their organizations with new energy. As military leaders take visible, concrete steps to make their organizations more flexible and adaptable, they create a new environment—one that supports and rewards innovation, adaptation, and new processes.

Following the Cold War, each service recognized the momentous change in the geopolitical environment and began historic change in their respective organizations—change that not only embraced the technology of the time but that also reflected a break from the past and ushered in new ways of thinking.

In the 1990s, the Navy shifted the focus of future operations away from the open sea to the coastlines. The emphasis on littoral warfare, according to ... *From the Sea: Preparing the Naval Service for the 21st Century*, “is a new doctrine that marries Navy and Marine forces priorities. . . . The Navy and Marine Corps will now respond to crises and can provide the initial ‘enabling’ capability for joint operations.” The Army instituted the Louisiana Maneuvers, which helped lay the groundwork for the total redesign of the Army for the 21st century under Force XXI. The new force structure would feature a CONUS-based force projection Army, which was more modular, more lethal, and more deployable. In the Air Force, the Air and Space Expeditionary Force (AEF) was a new approach to providing forces to the combatant commander. The ten AEFs—composed of paired Air Force combat forces and expeditionary combat support resources—were organized, trained, and equipped to deploy and employ air and space power quickly.

These changes illustrate the bold leadership required to break from the past. Such leaders and their actions reflected a new environment, new



U.S. Air Force (Val Gempis)

Crewmen conducting runway check on F-117 at Kunsan Air Base, Korea, where Airmen from Holloman Air Force Base are deployed in support of air expeditionary forces in Pacific Region, August 13, 2004

ways of thinking, and new support for a culture of change in each of the services. However, these actions took place during a less volatile and less threatening security environment. Time was more abundant. Execution was rooted in tradition and was at times ponderous and plagued by bureaucratic inertia. Today, the threat is unprecedented, and we must not only respond to the rapidly changing security environment, but we must do so at an accelerated rate.

The events of September 11, 2001, coupled with a global resurgence of terrorism and wars in Afghanistan and Iraq, have ushered in another period of significant change to the security landscape. Like their predecessors, today's Joint Chiefs of Staff recognize that the post-9/11 security environment requires adjustments. They also understand the important role a culture of change plays in the transformation of the Armed Forces and are taking steps to effect change at an accelerated rate.

■ The Army Chief of Staff is leading change with a plan to develop the Army into a modular force. This total redesign from Cold War-style

divisions to more lethal brigade combat teams (BCTs) is turning the operational Army into a larger, more powerful, flexible, and rapidly deployable force. BCTs represent a break from the past—they are stand-alone, self sufficient, tactical units organized the way they will fight.

■ The Chief of Naval Operations is leading change in the Navy by instituting the Fleet Response Plan (FRP), which enhances the Navy's ability to surge and augment deployed forces as threats develop. This initiative provides the Nation's leaders with unprecedented responsiveness in support of the Global Naval Forward Presence Policy. The FRP represents a dramatic departure from the Navy's longstanding approach to readiness.

■ The Air Force Chief of Staff is integrating the unique strengths of the Active and Reserve components with the Future Total Force (FTF). Under this plan, FTF integration models will enable certain Guard, Reserve, and Active units of the Air Force to live, work, and train more closely together. The Future Total Force represents

Soldiers taking positions during Quick Reaction Force exercise at Lackland Air Force Base, preparing to provide flexible response to any region in domestic incident, December 8, 2004



U.S. Air Force (Derrick C. Goodie)

a new approach to use of manpower, of basing infrastructure, and of current weapons systems. The enhanced integration taking place under FTF combines all Air Force capabilities as they meet the challenges of today's complex threat environment.

These examples are only a few of the initiatives the service chiefs have taken to transform the Armed Forces beyond technological advances to inspiring a culture of change. They reflect support for a culture of innovation—from service staffs in Washington to individual servicemembers in the field. Developing a culture of change adds value to the technological aspects of transformation by serving as an enabler, allowing us to maximize the potential of new technologies by using them in new ways, with a new mindset, as we face a rapidly changing security environment.

The Department of Defense is also taking steps to institute a culture of change beyond the services. Revisions to the Unified Command Plan included creation of U.S. Northern Command, with the mission to defend the homeland and territories. The plan also combined the U.S. Space Command mission and forces with those of U.S. Strategic Command. In addition, the Department of Defense has initiated the National Security Personnel System and programs such as Network Centric Warfare

and Operationally Responsive Space—actions that think past traditional approaches and help create a culture of adaptation and innovation. Though there has been measurable progress, there is still much room for improvement in key areas such as interagency coordination, joint acquisition, and information sharing.

Beyond the issues facing America's military loom the challenges of integrating all the instruments of national power as well as international partners. A similar culture change may be necessary to pull these new elements together.

To maximize the potential of our transformation efforts, we must not only embrace the promise of technology, but we must do so with the courage and confidence to break from the constraints of the past to create a culture of change—one that supports new thinking, new approaches, and new ideas. The steps taken by the Department of Defense and each of the services represent a starting point. Ultimately, success depends on the willingness of every member of the Armed Forces to embrace the new mindset that is required to meet the challenges of our time. **JFQ**

GENERAL RICHARD B. MYERS, USAF
Chairman
of the Joint Chiefs of Staff

From the Editor



At Walter Reed Army Medical Center in Washington, DC, I recently met a remarkable Army Soldier. A young troop sitting near me noticed my Air Force uniform and wings. He asked, “Sir, what kind of pilot are you?” At the Officer’s Club, I might have said, “the best” (or something equally brilliant and punch worthy). But he was genuinely interested, and we talked a bit about military aviation. I wanted to hear about his experiences, so I steered the conversation to why he was visiting the hospital.

The Soldier had returned from battle over a year ago, after he was injured in combat and spent about a year in rehabilitation. Unfortunately, his wounded leg caused him tremendous pain. At 20 years old he faced potential medical retirement with little prospect of regaining much use of his damaged limb.

Stryker Brigade Combat Team loading into Stryker vehicle in Mosul, Iraq, Operation Iraqi Freedom



56th Signal Company (Joy C. Randall)

So what does this have to do with the principal topic of this issue of *Joint Force Quarterly*, transformation during war? Undaunted, this Soldier has chosen a courageous route, one only recently viable. After consultation with his doctors and thoughtful consideration of his options, he requested to have his leg removed—so he could get back to work! Refusing to be deterred by his wound, he not only wanted to return to his job in the Army, but he also hoped to become an Army aviator. Amazingly, based on the transformation of America’s military, I think he could have a shot.

This Soldier’s decision is a perfect metaphor for transformation, and it exemplifies the commitment, culture of selflessness, and sophistication of those serving in the Armed Forces.

He is also emblematic of the transformation that the Chairman describes in his message and our contributing authors explore in this issue: New thinking, new technology, and new partners create new ways of providing for the common defense. This Soldier wasn’t simply a casualty; he is an experienced combat veteran, and his leaders recognize both his sacrifice and his continuing value to the Nation, the mission, and the Army.

By providence or destiny, we find ourselves in a time when free men and women, even those who have suffered grievous injuries and other sacrifices and privations, can look beyond impairments and continue to devote their efforts to sustain and cultivate liberty. Leaders and followers alike understand that the secret to successful transformation lies not in the newest rifle, satellite, or ship. Those are helpful tools, but they are still simply tools. As the 2005 *National Defense Strategy*, Chairman, and Secretary of Defense have stated, America and like-minded nations are integrating and blending the instruments of national power in new and potentially useful ways. Transformation is thus a growing process—one of realization, assessment, and reassessment, and ultimately, its unlimited potential resides in the hearts and brains of the men and women who defend the Nation and its allies.

COLONEL MERRICK E. KRAUSE, USAF
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From the Editor



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COLONEL MERRICK E. KRAUSE, USAF
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Airmen of Task Force 1041 conducting dismounted patrol near Balad Air Base, Iraq, Operation *Iraqi Freedom*, the first such missions by Air Force security forces since the Vietnam War



Transformation During War

America and its allies face a threat as great as any in the Nation's history. The danger posed by extremists, particularly terrorists armed with weapons of mass effects, spans borders and threatens the stability and economic prosperity of free states across the globe. This fourth year after the 9/11 attacks against citizens, civilians, and allies finds America still in recovery and engaged in a war on terror and a global economy slowly stabilizing.

Although individual memories may be short, the return to normalcy is not complete. We are recalibrating to find a new definition of *normal*. The world has changed: we live with color-coded alerts, anthrax scares, and not-so-friendly skies. Lest we become accustomed to this state of affairs, we must remember that the war is not over and liberty remains threatened. With enough commitment, resolve, and cooperation, those who embrace fear over freedom can again be overcome. But we

will not win by guns and guts alone. Indeed, all freedom-loving nations, using their combined instruments of national power, will be required to establish and maintain a lasting peace. Unfortunately, those are a lot of moving parts to synchronize, so the challenge is vast.

On December 17, 2004, the President of the United States signed the Intelligence Reform and Terrorism Support Act. This was a major change to America's traditional security system, and it demonstrated a recogni-



1st Combat Camera (Mike Blufas)

tion and willingness to act and move beyond legacy arrangements of government into new and more effective relationships. Before signing the bill, President Bush said:

Nearly six decades ago, our nation and our allies faced a new threat—the new world of the Cold War and the dangers of a new enemy. To defend the free world from an armed empire bent on conquest, visionary leaders created new institutions such as the NATO Alliance. The NATO Alliance was

begun by treaty in this very room. President Truman also implemented a sweeping reorganization of the Federal Government. He established the Department of Defense, the Central Intelligence Agency, and the National Security Council.

America, in this new century, again faces new threats. Instead of massed armies, we face stateless networks; we face killers who hide in our own cities. We must confront deadly technologies. To inflict great harm on our country, America's enemies need to be only right once. Our intelligence and law enforcement professionals in our government must be right every single time. Our government is adapting to confront and defeat these threats. We're staying on the offensive against the enemy. We'll take the fight to the terrorists abroad so we do not have to face them here at home.

The new *National Defense Strategy for the United States* describes in more detail the Department of Defense approach to modern security threats and the war on terror. The March 2005 document presents five strategic objectives: securing the United States from direct attack, securing strategic access, retaining global freedom of action, strengthening alliances and partnerships, and establishing favorable security conditions.

Are these merely organizational changes, or is this strategy transformational? Many contend that transformation of America's military is resident in a set of capabilities, an extension of former debates about the decades-old Soviet theory of military technological revolutions and American revolution in military affairs programs popular in the 1990s. But, as the Chairman of the Joint Chiefs has said, transformation is not just about technology and platforms—"transformation takes place between the ears." The cultural and intellectual factors of transformation are more important than new ships, planes, and high-tech weapons.

In past issues of *JFQ*, General Richard Myers described the transformation

of America's military, and the militaries of our allies, in three parts: technological, intellectual, and cultural. Battling extremists the last several years has helped create new operational strategies shaped by innovation. This is why Joint Forces Command and forward thinkers in the services have recently moved beyond dogma and challenged old doctrinal approaches that may be less useful in today's strategic environment.

The military is adapting and succeeding, capturing lessons learned and changing the Cold War status quo. As the next Quadrennial Defense Review approaches, military and civilian defense professionals will debate transformation in a context of acquisitions, new systems, and evolving visions. Clearly, America's military is moving from a legacy, post-Cold War containment force to something new. But new technology, although necessary, is not sufficient to ensure international stability and prosperity. Recent successes in Afghanistan, Iraq, and other fronts in the war on terror have proven that the military instrument of power cannot succeed in the long term if used independently. In fact, transformation during this war on terror has demonstrated that new partners—agencies, allies, industry, nongovernmental organizations, and the private sector—must together provide a front that blends all the tools of national power to defeat modern, transnational threats. Joint operations are the baseline; integrated operations with these new partners are the future.

This *JFQ* forum poses a variety of researched opinions on transformation of the military—and transformation of security strategy. Some essays promote conventional visions and some are more controversial. With these essays, *JFQ* hopes to encourage debate and engage further dialogue—among services, agencies, nations, industry, nongovernmental organizations, and private sector partners. **JFQ**

M.E. Krause



1st Combat Camera Squadron (Cherie A. Thurby)

If language is not correct, then what is said is not meant; if what is said is not what is meant, then what must be done remains undone; if this remains undone, morals and art will deteriorate; if justice goes astray, the people will stand about in helpless confusion. Hence there must be no arbitrariness in what is said. This matters above everything.

—Confucius

Defining Integrated Operations

By RICHARD D. DOWNIE

Confucius emphasizes that the lack of clear language causes confusion and possibly disastrous consequences. As military, interagency, and multinational operations become more

complex and integrated, we need to say what we mean. In this vein, the Chairman of the Joint Chiefs, General Richard Myers, USAF, has taken an important step to clarify some terms, although this article argues that more

steps are necessary. General Myers has noted that we operate on nonmilitary and cross-border fronts, involving law enforcement, diplomacy, and finance, and we need to “transform our military competencies from joint operations to *integrated operations* [emphasis added].”¹ He also mentions the requirement for standardization across the joint force to maximize effectiveness. One of the first—and easiest—things we can standardize is the terminology we use to define important, though perhaps amorphous, operational concepts. In the past, we have loosely defined what are considered *interagency operations*. But what are *integrated operations*—and for that matter, what are interagency operations? Distinctions matter as we more frequently conduct operations that include counterparts

Colonel Richard D. Downie, USA (Ret.), is Director of the Center for Hemispheric Defense Studies. He served as the first commandant of the Western Hemisphere Institute for Security Cooperation and is the author of *Learning from Conflict: The U.S. Military in Vietnam, El Salvador, and the Drug War*.

from U.S. Government and nongovernment agencies, private industry, and, perhaps more importantly, partners from allied countries and international organizations.

Toward the Chairman's goal of standardization, this commentary offers a taxonomy of terms to describe various types of interagency and integrated operations. The intent is to generate discussion on how to standardize the way we define and address such

one of the first things we can standardize is the terminology we use to define operational concepts

operations. The faculty of the Center for Hemispheric Defense Studies at the National Defense University developed the terms. We based our approach on differentiation and categorization of the entities participating rather than on the functional objective of an operation (such as peacekeeping, disaster relief, or counterterrorism).

Taxonomy of Terms

Joint operations, combined operations. The explanations of the taxonomy start with basic terms on which most agree, then proceed to more contentious ones. Most members of the defense and security community routinely recognize and use the terms *joint* and *combined*. The Department of Defense (DOD), in its *Dictionary of Military and Associated Terms*, defines *joint operations* as military actions conducted by joint forces or by service forces working together. The definition implies actions by the military forces of a single country. For instance, Operation *Just Cause* in Panama in 1989 was a joint operation that involved the elements of the Army, Navy, Air Force, and Marines in a coordinated effort. The DOD dictionary refers to *combined operations* as those conducted

by military forces of two or more allied nations acting together for the accomplishment of a single mission. Operation *Desert Storm* in 1991, designed to oust Iraqi forces from Kuwait, was considered a combined operation, as it involved a coalition of forces from the United States, Europe, the Middle East, and other regions.

Interagency operations. The lack of precision starts with the use of the term *interagency operations*, which I contend serves as an umbrella over various types of operations that should be defined separately. The term *interagency operations* evokes operations involving a variety of agencies; without further explanation, one might assume he understands the type of participants or agencies involved. Indeed, two individuals could conduct a discussion with very different impressions. What the specific operation includes or does not include is unclear. The receiver must ask additional questions. The divergence between what each speaker is saying may not be pronounced if they are from the same service or even represent two services working on the same staff. However, when a military official talks with his counterpart from the Departments of

State or Justice, there is great potential for misperception. That potential increases dramatically when one speaks with an international counterpart.

Federal interagency operations. A military colleague recently responded to my assertion that *interagency operations* is a vague term by declaring that joint staff officers have a common understanding of the expression and routinely use it. Without missing a beat, he defined interagency operations as those involving two or more U.S. Federal agencies—a worthy response. Clearly, an interagency operation can involve only Federal agencies. Take the example of a counterdrug operation to interdict a suspected narcotrafficker boat moving through Caribbean waters toward the U.S. coastline. An Air Force airborne warning and control system or Navy P-3 aircraft may identify a suspicious boat and pass the information to the Joint Interagency Task Force South (JIATF-S) Operations Center. U.S. Customs, the Department of Justice, and other Federal agencies manning the operations center may direct a Coast Guard or Navy vessel to intercept the boat. If drugs are found, Coast Guard or Federal law enforcement officers seize them and apprehend the traffickers.



1st Combat Camera Squadron (Aron Allmon II)

Commander of Combined Support Force 526, working with international militaries and nongovernmental organizations, briefing Special Coordinator for the Secretary General for Tsunami Relief, United Nations, January 20, 2005

Salvadoran soldiers marking their participation in the Multi-National Division Center-South at Al Hillah, Iraq, Operation *Iraqi Freedom*.



55th Signal Company (Jose M. Hernandez)

Such interagency operations are conducted frequently at JIATF-S, a true interagency task force located in Key West, Florida, and commanded by a Coast Guard admiral—as well as many

there are 16 joint terrorism task forces across the United States that link efforts and intelligence

other places every day. Within my colleague's definition, interagency operations can either include the military or not. For clarification, the taxonomy in the table refers to such operations,

involving only U.S. Government agencies, as *Federal interagency operations*.

Domestic interagency operations. However, others call operations that include state and local authorities as well as Federal entities interagency operations. For example, there are 16 joint terrorism task forces across the United States that link the efforts and intelligence available to the military and to Federal, state, and local law enforcement departments.² The intent is to permit these task forces to prevent, or respond more effectively to, terrorist

threats and activities. So how does one distinguish between those operations that involve only Federal agencies and those involving state and local authorities as well? Our taxonomy describes operations including entities at the Federal, state, and local levels as *domestic interagency operations*.³

Integrated operations. Recognizing the need to bring greater precision to how we describe various operations, General Myers coined the term *integrated operations*. After introducing the term *enhanced jointness*, he later defined integrated operations to highlight the participation of entities other than military forces:

*The term joint once referred to multiple services working together. That is the baseline. Many services, Federal agencies, allies and their governmental agencies, corporations, and nongovernmental organizations must cooperate to meet the full spectrum of military operations, from peacekeeping to battle to the transition to a lasting peace.*⁴

This distinction is useful. Nevertheless, the question becomes when and how interagency operations evolve into integrated operations. That is, where do integrated operations begin and interagency operations stop? An obvious divide is between operations involving one country and those involving more than one.

National integrated operations. While General Myers' strict definition of integrated operations focuses on multinational operations, we also need to distinguish and describe operations that involve many disparate participants within the confines of one country. The relief effort following Hurricane Andrew in Florida in 1992 involved Federal, state, and local emergency management and law enforcement entities, the military, the Coast Guard, and nongovernmental organizations such as the Red Cross, not to mention private businesses and churches across the country. To distinguish between integrated operations

within one nation and those involving multiple countries, our taxonomy sets *national integrated operations* apart from *multinational integrated operations*.

Combined integrated operations. Some in the defense and security community use *joint, interagency, multinational* to describe a type of operation that also fits in the *integrated operation* category. This variant involves multiple military services and government-level

governmental agencies work with their Iraqi counterparts at the national, regional, and municipal levels

entities from more than one sovereign country—but no nongovernmental entities. An example would be Military Observer Mission, Ecuador–Peru. This multinational peacekeeping effort helped resolve a border conflict that erupted between Ecuador and Peru in 1995. Representatives of military forces and of foreign affairs and defense ministries from Argentina, Brazil, Chile, and the United States monitored and coordinated this groundbreaking accomplishment. While our taxonomy

could have used the phrase *joint, interagency, multinational* for the sake of consistency—to identify clearly this variant as an integrated operation—we selected the term *combined integrated operation*.

Multinational integrated operations. General Myers' definition of integrated operations actually refers to a multinational operation. A prime example is the international relief effort responding to the tsunami in Southeast Asia in

late 2004. This initiative included military forces and governmental agencies from many nations; nongovernmental agencies

such as the International Red Cross, OXFAM, and CARE; international governmental organizations (IGOs), including the United Nations; and private industry partners who donated aid and relief supplies. The postwar reconstruction in Iraq, also called a *stability and support operation*, falls into this category. In addition to the militaries of many coalition countries accomplishing a variety of tasks, governmental agencies such as the U.S. Departments of State, Justice, and Defense work with their Iraqi counterparts at the national, regional, and municipal levels. IGOs such as the United Nations are involved in election assistance, while many multinational companies take on tasks ranging from fixing oil field machinery to constructing and repairing buildings, roads, power grids, and other infrastructure projects. In short, our taxonomy labels what General Myers calls an *integrated operation* as a *multinational integrated operation*.

Returning to the opening quotation, Confucius exhorts us to avoid arbitrary statements. In that spirit, and with General Myers' effort to achieve standardization in mind, this commentary seeks to provoke debate on how to describe more accurately and efficiently today's

nontraditional operations. While we have tried to capture the variety of interagency and integrated operations based on the participants involved, there are other ways to approach such a categorization. Moreover, there will be disagreement on terms. Some may question whether a separate category is warranted if one or more participants listed in a type of operation is missing.⁵ Such issues and the discussions they generate will help bring greater precision to how the defense and security community understands and discusses interagency and integrated operations. As the Chairman's term *integrated operations* reflects the growing participation of disparate national and international entities, achieving clarity is increasingly important to building greater understanding, unity, and interoperability with interagency, nongovernmental, and foreign counterparts. **JFQ**

NOTES

¹ Richard B. Myers, "A Word from the Chairman," *Joint Force Quarterly*, no. 37 (April 2005), 5.

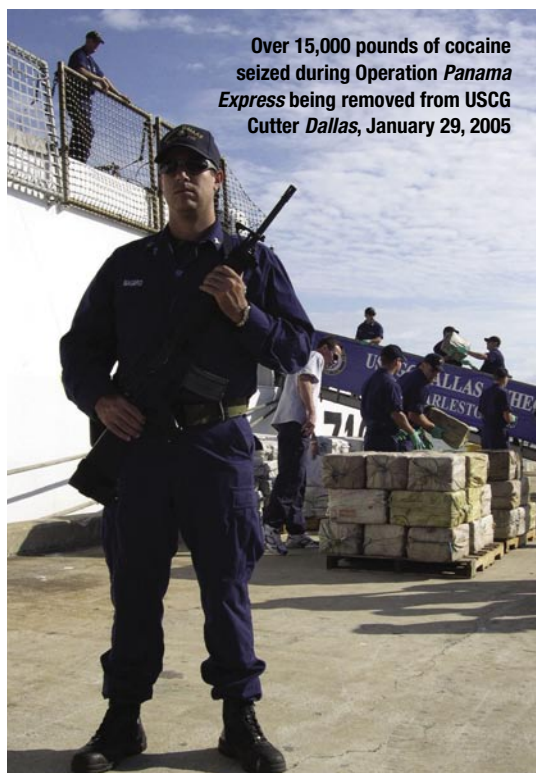
² Note that the use of *joint* in this example of joint terrorism task forces is not consistent with the military usage, which again highlights the requirement for standardization across all participants.

³ Although the Intergovernmental Personnel Act uses *intergovernmental operations* to describe activities involving governments at the Federal, state, and local levels, this phrase fails to distinguish varieties of domestic municipal, state, regional, and provincial governments from sovereign national governments.

⁴ Richard B. Myers, "A Word from the Chairman," *Joint Force Quarterly*, no. 36 (January 2005), 10.

⁵ In other words, does the fact that a nongovernmental or an international governmental organization does not participate mean that the activity is not a multinational integrated operation?

The Center for Hemispheric Studies is located at the National Defense University and is one of five DOD regional centers.



U.S. Coast Guard (Tony Russell)

C-2 aboard USS *Harry S. Truman*
in support of Operation *Enduring
Freedom*, February 2005



USS *Harry S. Truman* (Christopher Wilson)

How Joint Are We and Can We Be Better?

By CHUCK HARRISON

The U.S. military does not have a system in place to institutionalize, direct, or even require regular joint tactical training. When I discuss this deficiency with senior military officers

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and civilian analysts, they point to the Goldwater-Nichols Act as testament to our jointness. We believe that the Goldwater-Nichols Act cured most of our ills and pronounced it good enough. But it is not good enough, and there is ample evidence. We need to develop a management system to ensure effective training at the joint tactical level.

Because of the nature of its mission, the Army depends on the other services for help. It relies on the Air Force or Navy for close air support from their fixed-wing bombers, supplies, weapons, and for movement to a combat zone. It depends on the Air Force for command and control, strategic attack, and interdiction as well as such forms of intelligence as the Joint Surveillance and Target Attack Radar System.

The other services depend on the Army to provide security around airfields and ports and along ground routes. But by and large, these are missions that the Army prepares for during internal training. The tactics, techniques, and procedures for these operations do not change when working with other services and do not require training with them. The special operations community does conduct considerable joint tactical training and has a system that ensures that it takes place. Since the Army is the service most dependent on the other services,

this article focuses on joint training involving the Army, but the lessons apply to the entire joint community.

It is important that we define *tactical training* to ensure that the debate does not become entangled with the Goldwater-Nichols Act, which addressed strategic issues and joint operational level training. Joint Publication 1-02, *Department of Defense Dictionary of Military Terms*, defines the *tactical level of warfare* as:

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.

The *operational level of war* is defined as:

The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or other operational areas. Activities at this level link tactics and strategy by establishing operational objectives needed to accom-

joint coordination, and explicitly joint fires coordination, seemed to improve during Operation Iraqi Freedom

plish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives.

The tactical level of war, for the Army at least, is that of the division and below but will increasingly become that of the brigade and below. Therefore, it is increasingly important to conduct joint tactical training for

the Army brigade, or what the Army will refer to as the *unit of action*.

How Joint Are We?

Recent combat experiences suggest that we are fighting as an integrated joint team. However, integration problems remain. Major General Frank Hagenbeck, USA, Commander, 10th Infantry Division, started an interservice debate over his contention that close air support (CAS) was unresponsive during Operation *Anaconda* in Afghanistan.¹ Joint coordination, and explicitly joint fires coordination, seemed to improve during Operation *Iraqi Freedom*, although command, control, communications, and intelligence (C³I) digital systems are still incompatible among the joint forces. The timeliness of CAS did not seem to be a widespread problem during *Iraqi Freedom*, but there are concerns due to lack of tactical training and understanding of the capabilities of the CAS pilots from the Army perspective and the capabilities of ground forces from the perspective of CAS pilots.

The 3^d Infantry Division's after-action report from *Iraqi Freedom* has positive things to say about the availability of CAS during its rapid advance to Baghdad. The report specifically gives accolades for the enlisted tactical air controllers assigned to the brigade combat teams. However, the controllers experienced problems in talking pilots onto the targets, delaying CAS in a counterfire role against Iraqi artillery. This was reportedly due to the inability of the pilots to identify the targets and a misunderstanding with ground forces on what constituted positive identification of targets as enemy. While the ground forces were satisfied with their counterfire radar acquisitions as a positive identification, the special instructions (SPINS) for the pilots did not authorize engagements based on acquisitions alone. On the surface, this appears to be a rules-of-engagement problem and should be addressed accordingly. But if the ground

forces had trained more with live pilots prior to the war, they would have known that SPINS normally requires a CAS pilot or observer to positively identify targets. Additionally, the situation in Iraq was skewed by the fact that the fixed-wing aircraft were nearly all rigged for bombing rather than counterair. This is important because in a conflict with a country with fighter jets, many of our fixed-wing assets would conduct counterair operations rather than bombing. Therefore, it is imperative that each CAS aircraft is used efficiently and effectively.

The Goldwater-Nichols Act of 1986 is widely praised as having reformed the Department of Defense (DOD) and contributed to making the U.S. military the most powerful ever assembled. Today's capabilities to plan and operate at the strategic level are unequaled. Prior to the legislation, officers often avoided joint duty, preferring to stay within their services. Goldwater-Nichols forced the services to send some of their best personnel to joint billets by setting an objective that joint officers would be promoted at the same or higher rates than officers not joint qualified. Additionally, the law created critical joint billets that had to be filled by the services. As a final incentive, the law made it mandatory for all officers to be joint qualified prior to flag rank. Many believe that the law has changed the military culture. However, the cultural change is only now filtering down to the operational level. It is imperative to ensure that it continues to the tactical level.

There are ongoing efforts by U.S. Joint Forces Command (JFCOM) to create a Joint National Training Capability (JNTC). These initiatives show great promise in bringing joint forces together in the live, virtual, and constructive environments to train at the operational level. The Deputy Secretary of Defense formally established the joint national training concept in January 2003 and made JFCOM responsible for the initiative. JNTC is envisioned as linking the tactical,



Checking Patriot equipment during Exercise Foal Eagle, Korea, March 2003

U.S. Air Force (Reynaldo Ramon)

operational, and strategic players in a single exercise to increase joint effectiveness. Although the approach shows promise, little has been accomplished in bringing the joint players together at the operational and tactical level.

An operational-level exercise was recently conducted by III Corps headquarters, acting as the coalition joint task force (CJTF) headquarters. CJTF commanded and controlled forces from Arizona to Texas in live, virtual, and constructive environments and

declared the exercise successful. The III Corps Commander wrote an article arguing that the exercise validated the joint training concept.² Although we should applaud the efforts of all involved to execute and validate this difficult and overdue training event, we should ask just how joint the exercise was and at what level. The table in the article showed the training audience for the exercise, but conspicuously missing was any participation from services other than the Army.

Potential participants are listed in the table below, with their involvement annotated.

Was this joint training? As the author pointed out, this was a test to validate the JNTC concept, but it seems implausible to validate a joint training system when the full joint team is not participating. Even if the joint forces air component commander or the Combined Air Operations Center took part, there was no tactical participation of CAS or reconnaissance aircraft.

Looking for Opportunities

Discussions with numerous former and serving battalion and brigade commanders and former combat training center (CTC) observer/controllers indicate that joint tactical training is simply not happening often enough. Where it does occur, it takes place mainly through a valiant effort, mostly by an individual Army staff officer or Air Force air liaison officer (ALO), who must persuade other joint forces to become involved. The following are just a few examples from my own experiences serving in both the United States and the Republic of Korea.

The 6th Cavalry Brigade (Air Combat) is U.S. Forces Korea's reserve in the event of conflict on the Korean Peninsula. It consists of two AH-64 Apache helicopter squadrons and a Patriot air defense battalion. Plans call for elements of the brigade to work with the Navy during the early stages of a potential conflict. The brigade conducts over-water training for this eventuality both with the Navy and independently. Because no other Apache unit in the Army has a similar mission, new crews must learn the particular tactics, techniques, and procedures. Training with the Navy is key to executing the operation. However, there is no mechanism to ensure that this training takes place other than the good relations between 6th Cavalry and the fleet. There is no command above either of the organizations responsible for planning and resourcing joint training. The result is that scheduled joint training is sometimes cancelled due to changes in

Potential Participants

Element	Participation
Joint Force Air Component Command	None
Combined Air Operations Center and Battlefield Coordination Detachment	Fixed Cost Contracting
Air Force/Navy/Marine Corps fixed wing attack	None
Suppression of Enemy Air Defense (SEAD)	None
Lethal and nonlethal SEAD	None
Joint Airborne Command Center/Command Post	None
Airborne Warning and Control System	None
Joint Surveillance and Target Attack Radar System	(Simulation Only)
Unmanned Aerial Vehicle	(Simulation)
Combat Search and Rescue	None

Source: Thomas F. Metz and Christopher A. Joslin, "Time to Train How We Fight: Validation of the Joint Training Concept," *Army Aviation* (December 31, 2003).

the operational calendar for one or the other commands with little regard for the priority of joint tactical training.

When I served as a squadron commander in 6th Cavalry Brigade, my staff searched for opportunities to train in a joint environment, especially in live fire conditions. Since we had a low priority on live fire ranges in Korea, we turned to the Air Force 25th Fighter Squadron (A-10s) to conduct training. This proved to be a beneficial opportunity for both organizations because they had access to a range, and both

we should not depend on tactical-level commanders to find joint training opportunities

received excellent joint air attack team training while over water. Although this worked occasionally, we should not depend on tactical-level commanders to find joint training opportunities as the only alternative.

The 2^d Infantry Division is the Army's forward-deployed ground force in the Republic of Korea. The division executes quarterly brigade-level exercises to keep its edge honed for combat. My squadron participated in the training because the division's Apache unit was undergoing training back in the States as a Longbow battalion. The division had issued an operations order to the brigade that was conducting the training, and the brigade had completed its analysis and was issuing its operations order to the subordinate commanders and to the division commander. Unfortunately, the exercise had to be conducted with no CAS and critical training was lost.

An observer not familiar with the Joint Readiness Training Center (JRTC) would probably think it is operated by a joint organization with full support of the joint team. Actually, the Army operates the center and depends on agreements with the other services, particularly the Air Force, for their participation in the training. The JRTC staff is constantly working to line up CAS sorties and lift aircraft to ensure

that brigades rotating through the center receive the best joint tactical training possible. But when CAS and lift aircraft are cancelled, the brigades are relegated to "replication," the bane of serious trainers everywhere. The fix is again an agreement between the services since JFCOM does not command combat forces in either the Army or the Air Force.

Finally, despite years of increased focus, with talking and more talking on joint operations by Congress, DOD, and military commanders at all levels, the General Accounting Office (GAO) issued a critical report on joint CAS training.³ CAS for ground forces is a hot issue when joint tactical operations are discussed, but problems remain. The report specifically notes that the Department of Defense has had limited success in overcoming the barriers that prevent troops from receiving the realistic, standardized close air support training necessary to prepare them for joint operations. This is the result of four interrelated factors:

- ground and air forces have limited opportunities to train together in a joint environment
- home station training is often restricted and thus does not always provide realistic training to prepare troops to perform the mission
- the services use different training standards and certification requirements for personnel responsible for coordinating close air support
- within the individual services, joint close air support training is often a lower priority than other missions.

The report goes on to say that when CAS training for ground forces does occur, usually at one of the combat training centers, it does not meet the requirements of the ground commanders because units are not adequately trained prior to their arrival at the center. Additionally, the CTCs are the only maneuver training areas that offer adequate range areas to conduct realistic training, but individual brigades only get to train at the CTCs every 12 to 18 months. As the senior

aviation observer controller at JRTC in 2002–2003, I came to the same conclusions. Units conducted the training they needed prior to their arrival at the CTCs rather than executing proficiently on arrival. Reports from Army CTCs and the Center for Army Lessons Learned confirm that ground forces need to conduct more CAS training.

The Joint National Training Capability concept attempts to fix the training center problem by integrating the entire joint force. But brigade or battalion commanders will likely be involved less often than is currently the practice at the "dirt" CTCs such as JRTC and the National Training Center.

Why We Must Train Jointly

The issue of joint training is important for the Army because the service is truly dependent on the other services for specific capabilities that do not exist in its inventory, especially CAS and airlift. Army and joint doctrine call for the close integration of ground and air components in executing tactical operations. A major problem, however, is that the individual services are responsible for training and equipping their combat units. Title 10, U.S. Code, defines the Army's



Members of air support operations squadron call in close air support during combat operations in Fallujah, November 13, 2004

55th Signal Company (Johncharles van Boers)

responsibility to organize, train, and equip forces primarily for ground combat.⁴ Within the continental United States, the senior conventional Army commander is Commander, U.S. Army Forces Command, and he is responsible for training the forces within his command. Each overseas unit is led by a senior Army commander in the region, such as the 8th Army Commander in South Korea. The regional combatant commanders, such as U.S. Central Command's, have responsibility for war planning and fighting

the regional combatant commanders have responsibility for war planning and fighting but no tasking authority to individual service organizations for training

but no tasking authority to individual service organizations for training. Any joint training is accomplished by cooperation among individual commanders rather than any higher commander having the authority to direct joint training across the services. Some argue that this arrangement is acceptable and the military does not need another

training directive issued by a headquarters not in touch with the units affected. But the consequences of not conducting joint tactical training are potentially catastrophic.

The one command that has authority for directing and resourcing joint training is U.S. Special Operations Command. Joint training within the command is fairly routine since forces from all the services fall under one commander. Air support and operations for ground and maritime forces are coordinated and directed

by the higher joint headquarters and are only subject to change by that headquarters. However, because the command lacks CAS

fixed-wing aircraft, close air support remains a problem within the community; at least two incidents of friendly fire occurred in Afghanistan against Special Forces troops by CAS aircraft.

The GAO report cited earlier points out that there are no standards across the services for close air support

training or for how often controllers must train to the task. Air Force CAS controllers assigned to Army brigades and battalions are there only temporarily and are subject to the orders of their Air Force parent unit and may not be available for training with Army forces.⁵ This issue becomes of even more concern as the Army transitions to units of action that are roughly equivalent to our current brigades, or more accurately to the brigade combat team that is formed from the standing maneuver brigade (infantry or armor) with all its support forces from other brigades within a division. Over the last decade, Army deployments have involved smaller and smaller units to the point that we are now putting battalion task forces and brigade combat teams on deployments that used to involve at least a division level commander and staff. Lower level commanders must therefore deal with increasingly complex issues. What has not been created is a system to ensure that joint training is taking place at the brigade and battalion level. Not only will joint tactical training become even more important, but also commanders at lower levels must become more adept at joint operations at the operational as well as the tactical level.

Joint Interdependence

There is much discussion about joint interdependence within the Department of Defense and specifically the Army. The argument is that we achieved the ability to deconflict joint operations sometime in the 1990s and moved on not only to deconflict but also to integrate joint operations in *Iraqi Freedom*. The argument, as articulated in *The Army Strategic Planning Guidance*, goes further to say that now, in order to reduce redundancies and gain efficiencies, we must become *interdependent*. That is, each service must depend on the other services for certain tasks so the entire force can function at the lowest cost. Given the Army's decision to reduce organic fire support assets in lieu of more ground

Army team loads Hellfire missile aboard Apache Longbow at Kunsan Air Base, South Korea, October 2004



8th Communications Squadron (Michael R. Holzworth)



U.S. Air Force (Suzanne M. Jenkins)

Paratroopers board C-17 during joint exercise at Pope Air Force Base, May 2004

forces, dependence on CAS is increasingly an issue. The bottom line is that support from the other services is necessary for Army success in current and future combat.

There are several options for improving joint tactical training ranging from redesigning the entire Department of Defense as “purple suiters” to maintaining the status quo. One is to align all tactical Army, Navy, Marine, and Air Force combat elements for training with each other based on a re-

the services must identify key joint tasks that offer high-payoff training

gional alignment under the combatant commanders of the unified commands. Combatant commanders would direct multi-echelon joint training and issue training development guidance to the service commands. Commanders of each of the aligned service component commands would then develop, resource, coordinate, and execute multi-echelon joint training. This method fits well with the new Army doctrine of a capabilities-based force that is ready to deploy, rapidly plug into a joint task force, and win the fight.

Another option is to charge the JFCOM commander with synchronizing assets to ensure that joint tactical training is taking place. A quarterly joint

training conference could take place similar to the current joint airborne/air transportability training conferences in which aircraft are resourced for parachute and transport training and operations. This system has enabled the Army to achieve mission success in maintaining parachute proficiency for an entire division of paratroopers and other conventional and Special Operations Forces (SOF). It has also worked for scheduling lift aircraft. The most logical extension of this conference would be adding close air support aircraft coordination.

Additional players in the joint coordination arena are Navy carriers for joint shipboard operations and naval surface gunfire. The subsequent close interaction of the entire joint team would inevitably bring up other training opportunities that would benefit all the services and further reduce redundancies across the board.

Prior to any of these options, the services must identify key joint tasks that offer high-payoff training. Obviously, CAS is one of those areas. The services should establish joint standards for aircrews, controllers, companies, battalions, and brigades that require training in key joint tasks. Next, enlisted tactical air controllers and ALOs should be assigned directly to the command they support.

Due to the changing operating environment, it is becoming more critical that all forces are able to operate together, including SOF. As a corollary, all SOF troops should be included in training conferences to better enable conventional forces to schedule training with them.

Electronic training sensors for ground and air combat forces are another key aspect of enticing units to train jointly. The Navy and Air Force are correctly concerned that aircraft training involve the replication of enemy air defenses, and both have built sophisticated training areas for their crews. The Army has sophisticated ground force training systems at their CTCs and increasingly at home bases, especially in the urban training environment. Nowhere in the military do we have both systems tied together to totally enable joint tactical training and hold commanders accountable. Decisionmakers should review all planned and current electronic training systems.

Warriors should not have to figure out how to fight jointly under fire. It is not that we are not training in the Army, Navy, Marine Corps, and Air Force; we just do not do it together well enough. We are executing together in combat, so let us not waste the lessons from the last several years of combat by failing to incorporate them into a truly joint training system. **JFQ**

NOTES

¹ Franklin L. Hagenbeck, “Afghanistan: Fire Support for Operation *Anaconda*,” *Field Artillery Journal* (September-October 2002), 5–9.

² Thomas F. Metz and Christopher A. Joslin, “Time to Train How We Fight: Validation of the Joint Training Concept,” *Army Aviation* (December 31, 2003), 51–54.

³ U.S. General Accounting Office, “Military Readiness: Lingering Training and Equipment Issues Hamper Air Support of Ground Forces,” GAO-03-505, May 2003.

⁴ Title 10, U.S. Code, subtitle B, part 1, chapter 307, section 3062.

⁵ GAO-03-505, 9.

Marine views demolition of weapons cache in Iraq from HEV Cougar, the Marine Corps' newest vehicle, wrapped in steel armor and ballistic glass



U.S. Marine Corps (Will Lathrop)

Getting Transformation Right

By RICHARD D. HOOKER, JR., H.R. McMASTER, and DAVE GREY

Today, as never before, the military establishment is committed to dynamic and revolutionary change to produce new forms of warfare and new warfighting capabilities. Transformation

offers an exciting vision of future war with fewer casualties, quicker victories, and a lower price tag. It could secure U.S. military dominance for generations to come. But there are risks. Getting transformation right is second only to success on the battlefield as the most important challenge facing the military.

Transformation plays to American strengths in technology and engineering, allays the fear of casualties, assumes

Colonel Richard D. Hooker, Jr., USA, is Commander, XVIII Airborne Corps Combat Support Brigade; Colonel H.R. McMaster, USA, is Commander, 3^d Cavalry Regiment, and author of *Dereliction of Duty*; and Colonel Dave Gray, USA, is Commander, 1st Brigade, 101st Airborne Division (Air Assault).

a reduced requirement for vulnerable ground troops, and promises short, sharp campaigns. It does not rely as heavily as current warfare on uncooperative allies. Theoretically, it could enhance deterrence through the prospect of decisive, overwhelming defeat of adversaries. There is a danger, however, in embracing the transformation agenda entirely without addressing its potential shortcomings.

The Power of the Microchip

What is meant by *transformation*? The Department of Defense Office of Force Transformation defines it somewhat elliptically as “a process that shapes the changing nature of military competition. . . . First and foremost,

defense transformation seeks to exploit the power of the microchip to control information

transformation is a continuing process. It does not have an end state.”¹ While clearly an ongoing procedure, the lack of precisely defined waypoints, operating parameters, a bounded and developed transformational concept for joint operations, or disciplined programmatic means that service and joint planners cannot easily prioritize programs and resources to satisfy what remains an ambiguous agenda. Many major programs predate the advent of force transformation by many years. They represent not the dramatic restructuring of military organizations and institutions in accordance with transformational concepts, but the continuation of Cold War programs originally conceived to cope with the Soviet threat and now repackaged as “transformational.”

In general terms, defense transformation seeks to exploit the power of the microchip to control information. Various descriptions as *network-centric* or *effects-based* warfare, it focuses on the use of precision-guided munitions employed at standoff ranges—all networked to the same information grid—to defeat opponents in major

theater war and lesser contingencies. This approach emphasizes the use of high technology on future battlefields. The thrust is the exploitation of America’s edge in high technology to achieve rapid victory with smaller ground forces and fewer casualties. In this construct, networked, digitized intelligence and information systems can give a precise and uniform picture of the battlefield to commanders for immediate targeting and engagement.

Force transformation had its roots in the revolution in military affairs debates of the 1990s and gained a new level of interest after the 2000 Presidential election. This thinking was heavily influenced by business innovations and practices that exploited new information technologies to achieve business efficiencies. In many places, business strategies and jargon have been grafted wholesale into transformation documents, suggesting that armed conflict and the marketplace are somehow analogous if not equivalent. The intent was to apply business practices and emerging technologies to transform the Armed Forces from an industrial- to an information-focused military.

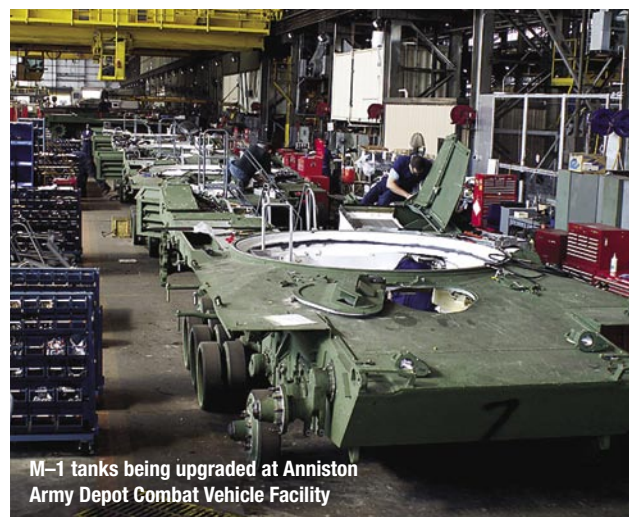
Today, transformation is focused on technology and the networked information grid. Human factors receive far less attention. Intellectually, transformation envisions an interconnected sensor grid able to pass information and intelligence instantaneously to firing platforms. In theory, this grid will provide full situational awareness to commanders, who can then select and attack the most critical and vulnerable target sets for maximum effect. Information superiority, enabled by systems that can seamlessly relay data from sensors to shooters, thus translates into faster decision cycles, forestalls enemy

reactions, creates more friendly options, and minimizes risks.

Beyond Theory

After several years, however, translating this general description of future war into detailed and specific systems and operating concepts—concrete capabilities placed in the hands of warfighters—has not progressed much beyond the theoretical stage. Exactly how, for example, a satellite image of a high value target or a signal intercept picked up by national technical means would be relayed to one tactical unit among hundreds for real-time engagement remains to be seen. To date, no joint command, control, communications, computers, intelligence, surveillance, and reconnaissance system that can interface securely and digitally across all services and commands is in sight. Exactly how specific systems might fit into an overarching transformation framework remains sketchy. To be useful to the warfighter, transformation must progress beyond broad rhetorical generalities to grapple with the specific realities of future war.

A second flaw in transformation thinking is a misconception about the nature of war. Transformation proponents insist that certainty can be approached in war. But war is grounded in the human condition—in the hopes, fears, pride, envy, prejudices, and passions of human beings organized



Newly designed C-model A-10 makes first flight at Eglin Air Force Base, January 2005



U.S. Air Force

Forum

into political communities and military bodies. Far more than the clash of weapons or the neutralization of target sets, war is a contest of wills. As much today as yesterday, war is emotional, irrational, and erratic—the antithesis of the coldly logical and calculating view of many transformation proponents. War may begin for logical and rational reasons, and leaders will strive to keep it that way. But very quickly passions become inflamed, populations become resentful, regimes totter, and ambitions expand. War aims and policy objectives are changed, careers and administra-

if war can be reduced to the delivery of standoff, precision munitions, the political consequences of casualties decline correspondingly

tions rise and fall, allies rethink their positions, and enemies begin to act in unexpected ways.

Rejecting this reality, many transformation supporters instead ground their theories in the expectation of certainty, believing that war can be controlled, ordered, and regulated. Explicit in their discussion is the ability not only to see the enemy everywhere,

all the time, but to actually anticipate and predict “all opposing moves.” Full situational awareness will largely if not completely dissipate the fog and friction of war.

This is a dangerous and unwarranted assertion. The expectation of certainty in battle betrays a misplaced faith in technology that is hard to overstate; in fact, it is to misconceive war altogether. As Frederick Kagan pointed out, the essence of this vision is the simple reduction of warfare to a targeting drill.² In this schema, wars and campaigns appear as lists of targets

to be located, attacked, and destroyed. This “technicist” view reflects the experiences and intellectual predispositions of many transformation advocates who come from air and naval backgrounds. Their

briefings reveal few conceptual distinctions between the levels of war. Further, they betray a misunderstanding of war’s intensely human character, a failure to recognize the different war-fighting domains of land, sea, air, and space, and a misreading of service core competencies and their contributions to joint warfare. Future war, like past war, will be characterized by complex-

ity, ambiguity, and uncertainty—an operating environment conspicuously absent from current transformation presentations.

Relatedly, at the core of much current thinking about transformation lies a desire for more politically acceptable forms of warfare. Indeed, in military operations since 9/11, air and naval forces have sustained negligible casualties relative to ground forces, which are higher by a factor of 100. If war can be reduced to the delivery of standoff, precision munitions against key targets, the political consequences of casualties decline correspondingly. Wars that can be fought quickly and decisively, without the need for major allies, mobilizing congressional and popular support, or calling up the Reserve, pose lower political risks domestically and internationally. But such an approach may not be realistic or desirable. Few would argue that rapid and decisive victory is a negative. But perhaps wars that can be fought without involving the Nation at large ought to give pause.

An Emphasis on Land

If one looks closely, a fundamental assumption is at work here: the U.S. military is now, or soon will be, inad-

equate to its national security tasks. Inexplicably, our military dominance in recent conflicts and our growing superiority relative to adversary states are conjugated as a “profound change in the strategic environment” sufficiently alarming to “compel a transformation of the U.S. military.”³ Official publications attempt to describe a nexus between nonstate actors such as al Qaeda and an urgent need to embrace network-centric warfare (NCW)—as though shadowy, low-tech terrorist organizations were somehow more, not less, vulnerable to precision strike. In fact, NCW was first articulated years before 9/11 and is clearly more suited to attacking fixed nodes and targetable centers of gravity than small cells of loosely organized terrorists who communicate by messenger and encrypted email.

There can be no question that the emerging threat posed by international terrorists possessing weapons of mass destruction (WMD) is profoundly dangerous. Destroying terrorists along with their infrastructure and assets is relatively straightforward, however, once they are located. Tracking their communications, funding, movement,

and access to unconventional weapons is far more important and has little to do with military transformation and much to do with improving human intelligence capabilities, interagency processes, and sharing information with allies. In this regard, the strategic nexus that has been drawn between the war on terrorism and transformation seems somewhat forced, since the resources allocated to “transformational” systems such as the F-22 may actually detract from solving the first order problem of defeating WMD-equipped terrorism, a far more serious threat to national security than the prospect of state-on-state conflict.

Advancing technology is yielding striking improvements in precision-guided weaponry and in the battlefield architecture for command, control, communications, and intelligence-sharing. The technology gap that has opened between our likely opponents and ourselves will only widen. These trends reinforce the arguments of transformation theorists, who have long contended that information and precision weapons alone can largely determine the outcome of wars

fought on land. The debate intensified following the collapse of the Soviet Union, which brought an end to the Air Force preoccupation with air-to-air combat and the Navy focus on blue-water sea control. The emphasis for all four services today is found on land. For the Air Force and Navy, in particular, this translates into standoff precision attacks against key land targets. The recent campaigns in Afghanistan and Iraq provide a preview of current transformational thinking applied to the battlefield. Indeed, it is likely that campaign planning itself was crafted at least in part to advance the transformation agenda. Our swift initial victories over primitive opponents convinced many that the age of transformation had arrived.

Nevertheless, overemphasis on airpower, precision engagement, and information superiority at the expense of an ability to seize and hold ground will pose grave risks for decisionmakers if allowed to crowd out, rather than complement, other critical capabilities. There is no question that airpower, encompassing missile strikes and unmanned aerial vehicles as well as manned aircraft, is the jewel in America’s national security crown. Its flexibility, speed, range, and crushing punch make it a first among equals.

The Problem of Data Transmission

For all its virtues, airpower has constraints. It lacks staying power. Limited by aircrew endurance, weather, weapons load, proximity of friendly bases, tanker support, availability of trained observers on the ground, and other factors, combat aircraft cannot stay on station indefinitely to dominate and secure terrain. The targeting process is only as good as the intelligence it is fed. While fixed targets can be attacked with good results, a thinking, adaptive enemy (particularly if blessed with an integrated air defense system) will frequently move high-value targets, conduct deception operations, and take refuge in



Artist's conception of littoral combat ship, designed to ensure maritime dominance and access for the joint force

Lockheed Martin Corporation



Contractor explaining features of heads-up display of F/A-22 simulator at Sheppard Air Force Base

U.S. Air Force (John Ingle)

civilian areas. Most importantly, airpower cannot physically seize and control terrain. While airpower is unquestionably the most effective form of military might in the U.S. arsenal, its limitations will persist for years to come. Airpower alone left the enemy in Iraq unimpressed in 2003, but it proved phenomenally effective combined with advancing ground forces.

Similarly, overreliance on information superiority carries risks of its

transmitting accurate information in real time to systems and units that can act on it immediately is the challenge

own. The advent of digitization and the proliferation of unmanned drones, increasingly capable satellite platforms, joint surveillance and target attack radar systems, and a host of other systems increasingly promises a high-resolution picture of the battlefield

that will enable joint commanders to locate, attack, and destroy an enemy while remaining hidden themselves. This concept of a view of the other side of the hill suggests to many that the friction and fog of the battlefield may soon be a thing of the past.

If technology alone were the answer, this might be true—although seeing everything militarily significant will probably never happen. But seeing the enemy is only half the battle.

Transmitting accurate information in real time to systems and units that can act on it immediately is the challenge. Because battlefield information and intel-

ligence flows through and across multiple organizational boundaries and interfaces, it will inevitably be delayed, altered, or otherwise distorted. Staffs will take time to analyze and interpret new information and propose courses of action rather than immediately

pass it unfiltered to subordinate and adjacent formations.

In this regard, the fundamental factor not addressed by transformation advocates is how human beings process information. This is independent of the network's technical ability to transfer information. The decision to engage any target requires a human decision informed by analysis. Separating the important from the unimportant has always daunted commanders and staffs. Time rushes on as commanders and staffs wrestle with the thorny problems of battle command. What is the best system to engage an emerging target? How can we be sure who is really there? Is this important enough to postpone other engagements? What about collateral damage and innocent civilians? How much information should be pushed down to small units, and how much can they digest? Who else needs to know? Are there friendly elements in the area that are not on

the grid, such as intelligence elements, local supporters, or sources? Who must approve the strike?

These and other factors affect the technical problem of data transmission. They are not trivial concerns, nor are they particularly susceptible to technical solutions. In fact, the explosion of automation and computer systems in headquarters has brought an increase, not a decrease, in the size of headquarters staffs. So long as people make battlefield decisions, they will stop and think. So long as militaries are hierarchical, commanders will use their discretion. Whenever information crosses an organizational boundary, it will be altered, however subtly.

Perceptive adversaries will always strive to influence this cycle by altering commanders' perceptions—at times by using our technological edge against us to reinforce our operational and strategic prejudices and assumptions. Perhaps more than any other, this dimension of transformation remains neglected. We should work tirelessly to improve the link between sensor and shooter. It seems clear that order-of-magnitude increases in lethality and timeliness are at hand. Nevertheless, any vision of war that posits a "frictionless" battlefield,

a "seamless" flow of information, and "persistent and pervasive" intelligence is deeply flawed.

The Need for Strategic Balance

There is also the very real question of the fragility and vulnerability of the network. The investment needed to achieve the capabilities outlined in the transformation agenda will be massive, but effective asymmetric countermeasures are relatively cheap and readily available. The technology to build, field, and employ radiofrequency weapons, also known as high-power microwave weapons or "e-bombs," is rapidly proliferating. In fact, "any nation with a 1950s technology base capable of designing and building nuclear weapons and radars" can build a crude version now, and "simple and effective microwave weapons are ready to go."⁴ These weapons can profoundly affect information systems, particularly as most systems fielded since the Cold War (especially miniaturized, wireless, and off-the-shelf commercial systems) are not hardened against electromagnetic pulse and related effects.

The fact that many of our likely adversaries will not be technologically advanced states with easily targetable

centers of gravity also reinforces the need for strategic balance. These opponents may fight us on the low end to bleed us over time, communicating by messenger, wearing no uniforms, and existing in the midst of large populations unsympathetic to American war aims. Asymmetry cuts both ways, as the Russians have found in Chechnya, the Israelis in the occupied territories, and coalition forces in Iraq.

All this is not to say that the relationship between different forms of military power remains unchanged. We may well have evolved to the point where the traditional roles of ground and air forces are reversed in major conventional operations. Tomorrow's wars, like Afghanistan and Iraq, will likely see ground formations forcing the enemy into the open, where airpower and precision strike play the decisive role. But in urban settings, close terrain like Korea, or postconflict operations like Iraq, a strong ground capability will be central to success. Tomorrow's joint force cannot seize and hold ground from the air or depend on surrogate armies with their own agendas and doubtful capabilities. The interrelationship between all forms of military power—ground, sea, air, space, and information—is the wellspring of American strategic might.

That synergy is in fact precisely the point. For decades, the Pentagon's greatest strategic asset has been strength in all dimensions. Able to project all forms of military power over great distances and sustain them virtually indefinitely, the United States combines powerful land forces, overwhelming air forces, superior naval forces, and unrivalled nuclear, space, and information capabilities, making it the most dominant power on the planet by a wide margin. But recent military successes must not obscure the fundamental basis of that strength. In postconflict or stability operations and major combat operations alike, a strong and sustainable ground force will be indispensable to achieving political objectives. That capability must not be allowed to wither in the rush to transform.



Virtual Battlefield System One, fully interactive, 3-D training application provides synthetic environment small unit tactics

U.S. Marine Corps

Viewing Transformation Cautiously

The history of armed conflict in the 20th century supports the thesis that advanced technology alone is not enough. In 1940, the Germans were equipped with fewer tanks, guns, and troops than their opponents, and the equipment they did have was inferior. Yet they overran the Norwegians, Danes, French, Belgians, Dutch, and British in a few weeks. Eighteen months later, they owned all of Europe, from the Arctic Circle to Crete, and from the Atlantic to the gates of Moscow. The sources of German power lay not in numbers, equipment, or technology, but in leadership, training, organization, and doctrine.

The Korean and Vietnam conflicts are also instructive. Although dramatically outmatched in air and naval power, and lacking most of the high-tech weaponry of the United States, North Korea and North Vietnam fought American forces to a standstill in prolonged wars that saw Washington commit hundreds of thousands of soldiers. Technology was unable to convincingly defeat a resolute opponent fighting on favorable terrain, enabled by “off-limits” sanctuaries across the border, and motivated by ideological goals.

The examples of the Korean War in 1950, the Gulf War in 1991, and the 9/11 attacks also demonstrate that confidence in our ability to assess future threats and conflicts must be heavily qualified. We cannot know for certain where, when, and under what conditions the U.S. military may be called on to fight. In fact, the very certainty with which transformation advocates assert their theories gives pause. Foreknowledge of adversary intentions and political dynamics is an art as much as a science, one not always amenable to signal intercepts and satellite photos.

A conflict on the Korean Peninsula, for example, could obviate lessons learned from Afghanistan and Iraq. The prize of Seoul lies just across the border, well inside North Korean artillery range. Pyongyang would almost

certainly move to interdict U.S. air and sea ports of debarkation, employing chemical or biological weapons far behind the initial line of contact. American airpower and precision engagement would be severely degraded by weather, mountainous terrain, and fortifications shielding much of the North’s artillery and command and control. With massive forces facing each other at close range, the effectiveness of stand-off weapons would be lessened as well. Hard fighting in complex terrain will be needed to prevail in Korea.

Most military officers share the above concerns intuitively and experientially. Recent war college studies reveal that members of all four services view transformation more cautiously than their civilian counterparts. While supportive of information-based warfare as a way to achieve more decisive results with lower casualties, a strong majority are unwilling to reduce force structure or readiness in favor of new approaches to warfare. Most serving officers express confidence in the military’s ability to cope with current and projected threats without radically altering the force, especially in a time of unprecedented turbulence. Among

Army and Marine officers particularly, warfare is viewed as a human endeavor, not a technical exercise. Thus the character of war retains its human face.

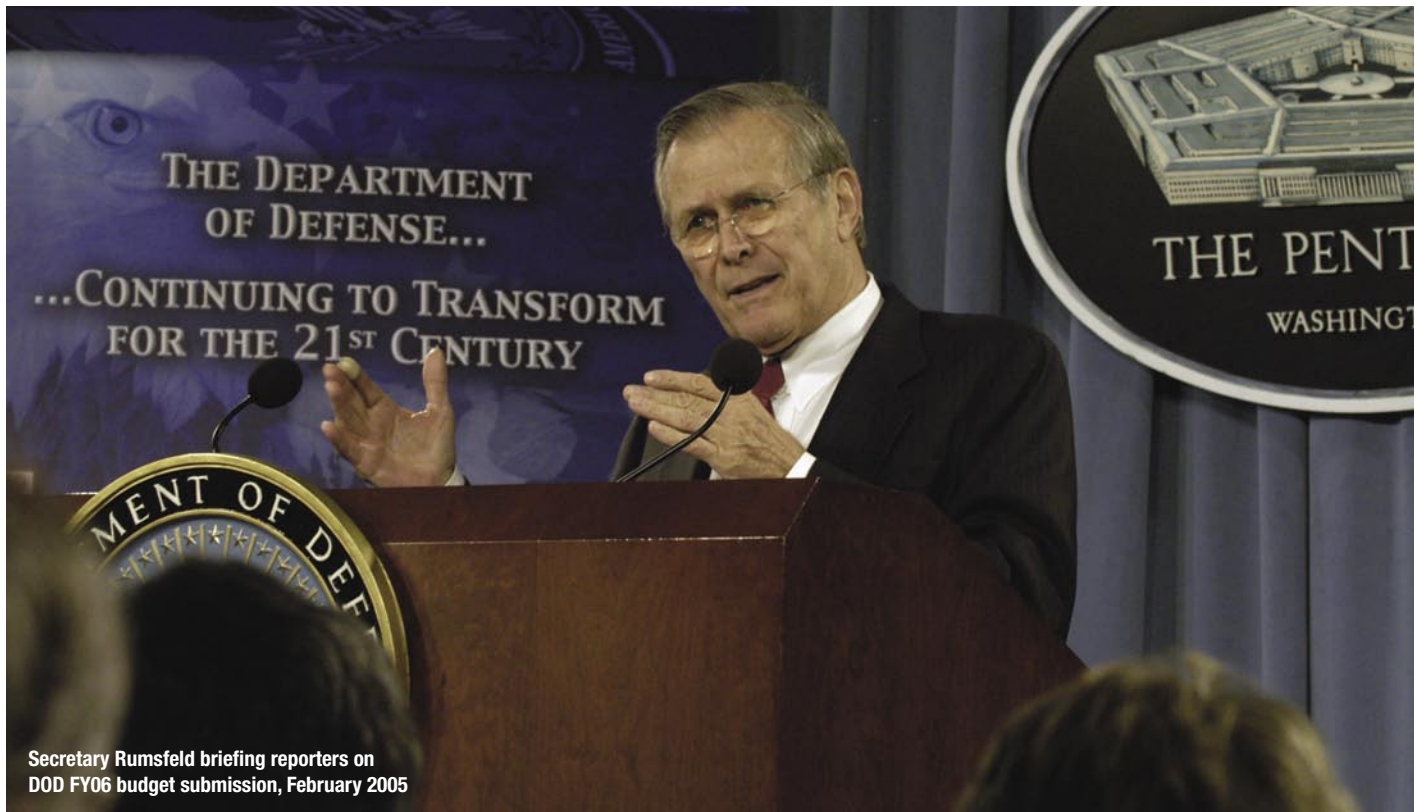
These considerations suggest the need for more serious analysis of transformation’s key concepts and assertions, as well as more specificity about desired capabilities, programs, and tradeoffs. Although the momentum behind transformation is enormous, the future of our national security demands that we think clearly and holistically and adopt a strategically balanced and perhaps more evolutionary approach. Revolutionary or radical change is exciting, but we cannot afford to get it wrong. In the business world, which has so profoundly influenced transformation thinking, the price of failure is a drop in earnings or corporate collapse. Failure in war brings infinitely more enduring penalties.

An aggressive but evolutionary approach to transformation, which pushes the envelope without breaking it, offers a balance between enhanced capabilities and acceptable strategic risk. That evolution need not be lengthy, but it must not risk everything on strategic doctrines that discount the fundamental principle of strategic balance.



Joint Direct Attack Munitions to be loaded on Marine F/A-18 supporting combat operations in Fallujah

U.S. Marine Corps (Paul Leicht)



Secretary Rumsfeld briefing reporters on DOD FY06 budget submission, February 2005

DOD (Helene C. Sticker)

A monist strategy, relying on information technology and precision strike while neglecting the means needed to actually seize and control the land, offers politically attractive but illusory benefits. If history teaches anything, it is that war is as unpredictable in its forms and processes as it is enduring in the realm of human affairs. Today, the United States enjoys an order of magnitude advantage over potential adversaries in the military sphere. By relying on a balanced and synergistic application of all forms of military power, we can be confident that our dominance will continue to serve our national interests.

By all means, the exciting potential of the information revolution should be harnessed to make America safer. The ability to share information more quickly and deliver weapons effects more precisely ought to be pursued vigorously. But we must not abandon the true sources of our military power as we transform. We must not become a military that can do only one thing: standoff precision strike.

While the conduct of war continues to change, its nature and character will not. The field of human conflict remains ineluctably human, not technical; inherently complex, not orderly; and inescapably defined by the land and the populations and resources found there.

All agree that transformation holds great promise for a more effective military and a safer America. All thoughtful professionals should applaud the push to enhance our ability to share information rapidly and attack enemies in a timely and precise manner. But we must not become so dependent on high-resolution information that we lose our capacity to fight without it. The debate about transformation must not be allowed to become an ideological litmus test. Despite efforts to tie everything the military is or does to it, transformation is not an end in itself. Enhancing the security of the Nation and its people must ever be the objective. Rigorous, searching analysis, which combines both hard-won combat experience in

the field and a strong intellectual foundation, is needed now.

In future years and future wars, America's sons and daughters in uniform will reap the rewards, or bear the cost, of transforming our military. They will man the legions that will largely determine the course of national security. We owe it to them and to the American people to get it right. **JFQ**

NOTES

¹ Department of Defense Office of Force Transformation, *Military Transformation: A Strategic Approach* (Washington: Director, Force Transformation, Office of the Secretary of Defense, 2003), 8.

² Frederick W. Kagan, "War and Aftermath," *Policy Review*, (August 2003), 22.

³ *Military Transformation*, 29.

⁴ See Michael Abrams, "The Dawn of the E-Bomb," *Spectrum* (November 2003), 11, 24-30.

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Soldiers mounting M-240 machine gun on top of M1-A1 Abrams tank in Najaf Province, Operation Iraqi Freedom

Combat Camera Group, Pacific (Edward G. Martens)

Transformation in Concept and Policy

By STEPHEN J. CIMBALA

The subject of military transformation has expanded to the point that it transcends focused discussion. From a cult phenomenon among military historians, government officials, and policy analysts in the 1980s and 1990s, the concept has morphed into a 21st-century all-purpose explanation for military decisionmaking. It provides a rationale for expanded foreign policy objectives. Further, it has been adopted as a touchstone by the Department of

Defense (DOD), especially the civilian leadership, to justify weapons programs and operational approaches. Finally, it has been the object of scholastic attention. Transformation is thus in danger of being the most oversold military-strategic concept since deterrence. A vast academic and military literature and extensive policy-related discussion have raised important questions about U.S. military policy, strategy, and war. Transformation, as understood by Pentagon planners and the punditocracy, has the

potential to improve military performance in important ways. But it is far from a guarantor of strategic success or sensible policy choices at the margin. This discussion asks pertinent questions about what transformation means and explores its implications for policy and strategy issues that have both immediate and longer-term importance.

A Nuclear Retro

Despite a large literature, uncertainty remains about exactly what transformation is. A transformed military presumably thinks differently about the art of war and about preparation for battle than one that is not transformed. It might also have a different relationship with the society it serves. Financing the Armed Forces is presumably also affected: transformation might make militaries more or less expensive, either per unit of effect or relative to other components of state budgets. Finally, transformation might lead to a rethinking of the very purposes of armies and the utility of war itself.

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Discussions of the revolution in military affairs, as military transformation was first known among aficionados, sometimes assumed that the impact of technology on strategy was straightforward and progressive. But history refutes the assumption of a linear relationship. Consider an example.

Nuclear weapons were first used in anger to bring World War II to a conclusion. Many observers assumed that atomic weapons were a continu-

the early stages of a military revolution may conceal more than they reveal about the ultimate impact of a particular set of technologies

ation of the industrial age technology of mass destruction. And so they were, from a strictly technical standpoint. Thus early Cold War military planning incorporated nuclear weapons within a broader strategic framework of total war with the Soviet Union. All available nuclear weapons would be used in the early phases of such a conflict. Once those were expended, a large-scale protracted conventional war between mass armies, air forces, and fleets would take place across Europe and Asia until one side or the other was exhausted of its war resources. Nuclear weapons did not appear to have changed military strategy and preparedness for major war in any fundamental way from this perspective.

It soon became apparent that strategy had been changed not only at the margin, but also in essence. Fighting to prevail in combat with the most destructive weapons at hand was now applicable only in wars fought below the nuclear threshold. Further refinement of strategic thinking established that the numbers of U.S. and Soviet warheads and delivery systems were less important than the survivability of those forces against any plausible first strike and their ability to inflict retaliation on enemy targets. It also came to be understood that not only did nuclear forces need to be survivable,

but also their command, control, and communications systems needed to be safe from two types of errors: launching a “retaliatory” strike when no actual attack was under way, or failing to launch a timely strike despite a clear indication that the United States was under attack.

This review of how nuclear weapons evolved, from apparent strategic garnishes on prior weapons of mass destruction into true instruments that revolutionized warfare, makes an important point. The early stages of a military revolution may conceal more than they reveal about the ultimate impact of a particular set of technologies on warfare and armed forces. Only in hindsight can we appreciate how far the U.S. and Soviet strategies of the Cold War had to depart from prior tradition and training. This example should be kept in mind as we generalize about the impact of the information age on warfare.

The Afghan Model

The conjunction of breakthroughs in electronics, communications, and cybernetics has impacted every aspect of American life, including military affairs. Accordingly, some argue that information-based warfare is a true military revolution, or a new revolution in military affairs, comparable to the Napoleonic, industrial, or nuclear revolutions, and potentially bigger on account of its global impact. The United States, by adapting faster and more effectively to information-based technologies, can achieve global military preeminence by linking a system of systems that will provide nearly comprehensive battlespace awareness for U.S. commanders while denying it to enemies.

The most pertinent technologies to be leveraged in order to maintain U.S. superiority in information-based warfare have been described as command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR); precision-guided weapons, especially those of

longer range; stealth or low-observable delivery systems; and more reliable and flexible networks, permitting coordination of battlespace awareness among diverse force elements; and the synchronization of multiple fires from various platforms and arms of service on assigned targets. In addition, the United States is assumed to require superior capability to exploit space for military purposes relative to the capabilities of any enemy. Space denial practiced against the United States would negate advantages in most of the categories of information age systems just noted.

Policymakers and defense analysts further contend that superiority in C⁴ISR and long-range precision strike, in particular, were displayed in Afghanistan and Iraq. Some find the Afghan model a particularly vivid demonstration of how leveraging technology can permit rapid and decisive victory at low cost in U.S., noncombatant, and even enemy lives. This new American way of war has, according to some, superseded the previously dominant U.S. military paradigm of protracted wars of attrition fought by mass armies, as in the American Civil War and the two World Wars.

Were the wars in Afghanistan in 2001–2002 and in Iraq in 2003 examples of successful transformation? The Donald Rumsfeld Pentagon thinks so. It has used these conflicts to sweep aside the more cautious proponents of gradual, as opposed to accelerated, changes in technology, organization, and doctrine (to include operational art and tactics). The sudden collapse of Iraqi resistance around Baghdad and the meltdown of Saddam Hussein’s crack Republican Guard divisions set to defend the capital appeared to silence the critics and justify the Pentagon’s strategy of substituting speed, agility, and savvy for size and strength. In the government as well as in the defense analytic community, proponents of network-centric warfare and “shock and awe” as new templates for U.S. warfighting felt vindicated. As Frederick W. Kagan noted:

*“Shock and awe,” network-centric warfare, dominant (or predictive) battlespace awareness—these are the critical concepts that define the current visions of U.S. military transformation as they are being planned, programmed, and executed today. They rely unequivocally on having essentially perfect intelligence about the enemy such that American commanders will be able to predict what he will do in time to take action to prevent it.*¹

Some experts doubt that the U.S. and allied war against the Taliban and al Qaeda in Afghanistan demonstrated an Afghan model of warfare that can serve as a paradigm for other conflicts. According to Stephen Biddle, Afghanistan is neither an example of military revolution nor an idiosyncratic fluke. The victory was made possible by the combination of long-range, lethal firepower and skilled ground maneuver in a campaign that was close to a typical 20th-century mid-intensity conflict. Biddle writes:

*Many now believe that in Afghanistan we turned a ragtag militia into conquerors who subsequently overwhelmed a superior enemy by simply walking forward in the wake of our precision bombing. This belief is largely responsible for the general perception of military revolution in Afghanistan—and if the war had really been fought this way, then the perception would be right. But the war was not actually fought this way. And what did happen was much closer to the long-standing historical precedent on the need for integrating fire and maneuver to overcome skilled, resolute opponents.*²

New technology makes it possible to apply the Afghan model where allies provide ground maneuver forces that are at least the equal of their enemies in combat skills. But fire superiority aided by all the bells and whistles of dominant battlespace awareness and special operations forces cannot guarantee victory where indigenous forces are poorly trained, led, or motivated compared to their opposite numbers. The Afghan model is less a generic template for future war than a model for those limited situations in which U.S. allies can pro-

vide sufficient maneuver forces to tip the balance against their adversaries.

The United States and Britain provided their own maneuver forces for Operation Iraqi Freedom in 2003. Indigenous allies such as Kurdish forces in northern Iraq and Shi’a militia in the south moved occupation forces into contested areas after the Americans had cleared them of the enemy. Transformation proponents found that the Pentagon had demonstrated a new way of fighting major regional conflicts or theater wars with limited numbers of ground forces and without significant indigenous assistance. U.S. and allied dominating firepower was supported by rapid and decisive maneuver warfare that rolled up resistance by organized Iraqi formations within several weeks. A campaign that began on March 19 was effectively finished by mid-April, and President Bush declared that the active combat phase concluded on May 1. According to Max Boot:

*Previously, the gold standard of operational excellence had been the German blitzkrieg through the Low Countries and France in 1940. The Germans managed to conquer France, the Netherlands, and Belgium in just 44 days, at a cost of “only” 27,000 dead soldiers. The United States and Britain took just 26 days to conquer Iraq (a country 80 percent the size of France), at a cost of 161 dead, making fabled generals such as Erwin Rommel and Heinz Guderian seem positively incompetent by comparison.*³

The contrast between the *Wehrmacht* thrust of 1940 and the U.S. military campaign against Iraq in 2003 might be misleading on several counts. First, the Pentagon was not fighting a military opponent of the first rank in Iraq, as was Germany against France. Second, Germany’s victory was not based on superior technology (French armor was actually better), but on its operational art and field leadership. In both wars against Iraq, the United States was dominant in technology and in operational art. Third, if the Germans had failed to conquer France and the Low Countries in a rapid and decisive cam-

paign, it would have spelled the end of their plans for expansion in Europe and quite possibly of Hitler’s political mastery at home. Germany had everything at stake in 1940. The United States, on the other hand, so overmatched its opponent in Baghdad that loss was inconceivable. A more delayed campaign than originally conceived was an outside possibility, but military defeat in Mesopotamia was not.

Numbers Matter

The most important transformation in the Armed Forces since World War II was the change from a draft to an all-volunteer force (AVF). Related was the deliberate shift in the relationship between the Active and Reserve forces.

The first change, ending the draft and creating the all-volunteer force in the 1970s, really made possible the American military preeminence of the latter Cold War, post-Cold War era (1990s), and early 21st-century. Those who fail to see this have put the cart before the horse, crediting technology with accomplishments that rightly belong to an empowered military with smarter and more motivated people. The all-volunteer force obtained quality personnel who not only enlisted but also reenlisted at unprecedented rates. This improvement was critical for enhancing the quality of the force, for reenlistees provided the nucleus from which the senior sergeants, chief petty officers, and other drivers of combat effectiveness in the field were recruited. Although the AVF recruitment had a rocky beginning in the 1970s, by the end of the Reagan years the military, compared to its 1950s or Vietnam counterparts, was unrecognizable in terms of the motivation, cognitive ability, and leadership skills of its junior officers and enlistees.

Military innovation is both top-down and bottom-up. For technology to find its way into military transformation, it must impact on doctrine, organization, and training related to combat. DOD and service leaders must push from the top. Technologies not



Airmen preflight B-2 during air expeditionary force deployment to Andersen Air Base, Guam

U.S. Air Force (Via Gempis)

strong contrast to the Iraqi showing. Adaptive mission successes resulted from the impact of smart people exploiting technology for maximum effect. Predator drones were used not only as reconnaissance or surveillance platforms, but also as launchers of air-to-ground missiles that could be used to attack detected but elusive targets.

Special operations forces really came of age in the Afghan war. During most of the Cold War they were stepchildren, and a separate joint special operations command was not established until the Reagan administration, and then by congressional fiat. Special operations forces were accepted into *Desert Storm* with reluctance by the theater command and were used only for carefully circumscribed missions. By *Iraqi Freedom*, the emergence of special operations forces as pillars of strategy instead of optional adjuncts to regular forces was not an issue. Their performance there was followed by the DOD announcement that U.S. Special Operations Command (SOCOM) would have its own planning structure like other unified or specified commands. It would no longer be a mere supplier of forces but could now plan its own missions. The Pentagon decision in 2003 to appoint General Peter Schoomaker, USA (Ret.), formerly Commander, SOCOM, as Army Chief of Staff, sent a signal that the centrality of special operations forces in transformation was irreversible.

SOCOM had come a long way from the days when President John Kennedy had to authorize personally the green beret as approved headgear for Army special forces over the objection of the service brass. Equally telling was Army Chief of Staff General Eric Shinseki's controversial decision to assign black berets to regular Army troops. His move was widely derided by former Army Rangers and others who understandably coveted the black beret as a special symbol of valor and branch solidarity. But the critics missed the larger message: in a post-Cold War force that must be smaller, faster, and smarter, everybody is required to think "special" and be

owned by any service or supported by high-ranking officers have little chance of survival. Joint technology development requires collaboration across services and high-octane promotion from the Office of the Secretary of Defense. DOD and service technology development programs are part of the larger budgetary process, which Congress ultimately controls.

Technology means nothing in war if it is lodged with a general staff that is remote from the field forces and rankers who must apply it for more effective fire and maneuver against an enemy. Soldiers are the best arbiters of mission effectiveness, and the lower

transformation proponents found that the Pentagon had a new way of fighting with limited ground forces and without significant indigenous assistance

the rank, the more ground truth is obtained. The validation of technology effectiveness in terms of mission requires smart soldiers who are empowered to speak frankly. "Zero defects" mentalities or preformatted "lessons learned" are killers of the initiative required for a fast-moving, quick-thinking, and cyber-smart military. Even before the information age, militaries that encouraged lower-level initiative and responsibility were rewarded

with superior performances. The German armed forces in the World Wars are examples.

Command was optional prior to the information age. Armies could still prevail under a totally top-down system that treated the enlisted soldier and junior officer as serfs, as the Soviet army did in World War II. The option of cannon-fodder command no longer exists for any state that aspires to be a regional power, let alone a global one.

The United States provided a quick syllabus to this effect in *Iraqi Freedom*. The opposing military was decisively routed, and the regime was displaced in a matter of days. One reason was Iraq's obsolete command system, modeled on the Soviet structure. Lower-level initiative was precluded within the chain of command: all orders were bottlenecked through central bureaus and command centers. When those pressure points were rendered dysfunctional by destruction or cyber-corruption, orders to Republican Guard and other field commanders were nonexistent or garbled. Absent meaningful and timely orders, Iraqi commanders and rankers lay down their arms, defeated, or otherwise dissolved.

The performance of the U.S. Armed Forces in Afghanistan against the Taliban and al Qaeda stands in



Launching Tomahawk land attack missile from USS Porter, Operation Iraqi Freedom

U.S. Navy (Christopher Senenke)

“special.” There is no more room for menu-driven personalities.

A danger lurks in this otherwise optimistic assessment of military personnel. In the conduct of warfare, especially land warfare, numbers still matter—in peace, in war, and in the postconflict phase of nationbuilding. They matter for deterrence, defense, and postwar reconstruction. The military is currently spread too thin across geostrategic and sociopolitical space. Geostrategically, the United States has substantial troop commitments from Afghanistan to Bosnia. Planners say more instead of fewer troops may be needed to stabilize and rebuild Iraq, and Afghanistan has yet to be fully pacified or freed of danger from warlords and the Taliban. Sociopolitically, increased operational tempos imposed on a smaller active-duty force have strained the patience of military families and caused the Pentagon to rethink its rotation policies in Iraq. The postconflict phase of *Iraqi Freedom* has already exposed an interagency fiasco in prewar planning for postwar nationbuilding, including an underestimation of the numbers of troops needed for internal security and other nationbuilding missions.

Empires by Consent

This essay argues that the U.S. military supremacy of the 21st century is the result of a smarter and more motivated military that could take maximum advantage of technological innovation. Less competent personnel would have taken information technology into their bosoms more slowly and to less effect. There remains another issue: the character of civil-military relations.

After *Iraqi Freedom*, DOD announced plans to reorganize the Armed Forces so that prolonged or manpower-intensive deployments would require less Reserve component mobilization, especially in the Army. That seemed like a merely technical matter, but it was more far-reaching. The Pentagon's interest in relying less on Reserves and more on active-duty forces for overseas deployments and foreign wars has a history that should not be forgotten.

As the Army licked its wounds from Vietnam and considered how to adapt to the all-volunteer force, General Creighton Abrams, Chief of Staff, initiated important organizational reforms. He and other Army leaders decided to restructure the service so policymakers could never again wage a large-scale,

protracted war without mobilizing broad popular and congressional support. To that end, they placed important capabilities needed for any major regional contingency or theater war in the Army National Guard and Reserve.

This structure would raise the visibility of the deployments for members of Congress and the media, making middle America immediately aware of military call-ups and mobilizations. In short, there would be no more escalations of limited wars into major wars by stealth, as happened in Vietnam, with the Army left holding the bag after the aims of policymakers shifted from victory to stalemate. As the 1980s and 1990s demonstrated, a President can still act rapidly and decisively in a short and intensive military operation without extensive mobilization, as in Grenada, Panama, and Haiti. But apart from small wars and local conflicts, including humanitarian rescues and military operations other than war, the Reserve would be involved like Chicago voters: early and often.

Policymakers anxious for maximum flexibility in using military power, apart from the vicissitudes of public opinion, were understandably unhappy with the Abrams reforms that embedded vital military competencies in the Reserves. But noted academic experts on civil-military relations have also argued that the Abrams reorganization is too restrictive. Eliot Cohen, for example, after acknowledging that General Abrams was a true patriot and believer in the U.S. Constitution, argues:

This was, nonetheless, an extraordinary effort by the military to limit the choices available to their civilian masters, to tie the hands of policymakers through the seemingly technical manipulation of organizational structures. . . . It does not seem to have occurred to either soldier or statesman, however, that there is something highly improper, to say the least, in allowing the armed services to thus determine the ways in which they could be used in combat.⁴

The argument is clever but wrong. The issue is not constitutional subversion of policymakers' options, inten-

tional or otherwise. Properly framed, it is whether policymakers receive the most brutal and honest advice about the costs of war not only from their appointed civil and military counselors, but also from the American populace and their elected representatives in Congress. The Army belongs not to the Congress or the President but to the American populace. If the President cannot mobilize broad public support for a war, then he has no business sending troops into that theater for prolonged combat. This prescription is not a recipe for isolationism but for realism.

Proponents of a new American empire ignore the reality of historical European and other empires, even those that survived into the 20th century. America fights most effectively as a united country when it fights wars of liberation—not of imperial conquest or subjugation. Some argue that since the Spanish-American War, the United States has been in the business of steadily building an American global empire that has come to fruition at the dawn of the 21st century. The empire is fact: the only argument should be about how to run it.

The controversy over empire contrasts the European experience with American options. The empires of the 19th and 20th centuries preceded globalization and the information revolution. These domains, including the Soviet Union, have vanished. Nowadays, peoples are not as easily repressed in the name of a foreign power, ideology, or commonwealth. Future empires must thus be based on voluntary consent and exist within a global village of finance, information, and technology.

Influence is based on soft power—the appeal of national culture and norms—as much as on hard power—the ability to coerce or destroy. Information makes repression harder and resistance easier, even against totalitarian regimes. Mikhail Gorbachev was brought down by many forces, but among the more important was the information revolution, which leaped across state boundaries and revealed

to the Soviet peoples that they were locked into an archaic political system.

Whether the United States prevails in the postconflict stage of the Iraq war of 2003, for example, will have as much to do with its ability to exercise soft power as hard power. The information war and the culture war after May 2003 will dictate whether the active combat phase was a success or a premature declaration of victory. Regardless of the outcome, Washington is not headed for any empire in the Middle East, and its military is already spread so thin that taking on any additional opponent in that region is virtually precluded, even assuming there is no outbreak of war on the Korean Peninsula during the George W. Bush presidency. The second Gulf War that toppled Saddam revealed that, despite Pentagon denials, the Army is short of people for the missions it already has. Plans to replace some military positions with civilians might add to efficiency but will not make up for missing battalions and divisions. The case for reducing the number of active-duty divisions from 10 to 8, proposed prior to *Iraqi Freedom*, appears ever less convincing.

Arguments against an American global empire are not rebutted by citing the historical experience of U.S. forces fighting small wars in the Western Hemisphere, including Marine expeditions in the Caribbean and Central America. The banana wars and other engagements were of a different geostrategic character than expansive designs for a Middle Eastern or South Asian empire. The Western Hemisphere is the military and political U.S. back yard. Regimes hostile to American interests, especially those close to U.S. shores and connected to foreign adversaries, cannot be tolerated if the Nation is to maintain credibility as a great power. Acting as sheriff of the hemisphere is not an option. Nor is Washington free to withdraw its commitment to act, in concert with North Atlantic Treaty Organization (NATO) Allies, in support of European pacification and democratization. Making Europe a war-free

zone was one of the greatest political achievements of the 20th century, and U.S. support for NATO was a key element of that achievement. National credibility is also at stake in historic commitments to Israel, South Korea, Taiwan, and Japan.

Given commitments already tabled prior to our 21st-century wars in Afghanistan and in Mesopotamia, it seems imprudent for the military to remain mute in the face of policymakers' tastes for imperial overstretch. The best photo of the postwar occupation of Iraq in summer 2003 showed a Reservist driving a jeep whose windshield read: "One month my —." Whether full- or part-time, American soldiers are civilians in uniform, not janissaries or mercenaries.

U.S. soldiers are not a military class apart from their civilian origins. They draw their strength from family and friends in their communities. That strength is the cultural and spiritual expectation that they are doing the right thing for the right reasons. Under those conditions the United States is unstoppable. Absent those supports, war is a risky proposition, as likely to destroy what we value as enhance it. Our civil-military relations should not make wars easy to wage, but rather hard, so that once we agree, the debate can end and the fighting to good effect can begin. That is the real lesson about our 20th-century wars. **JFQ**

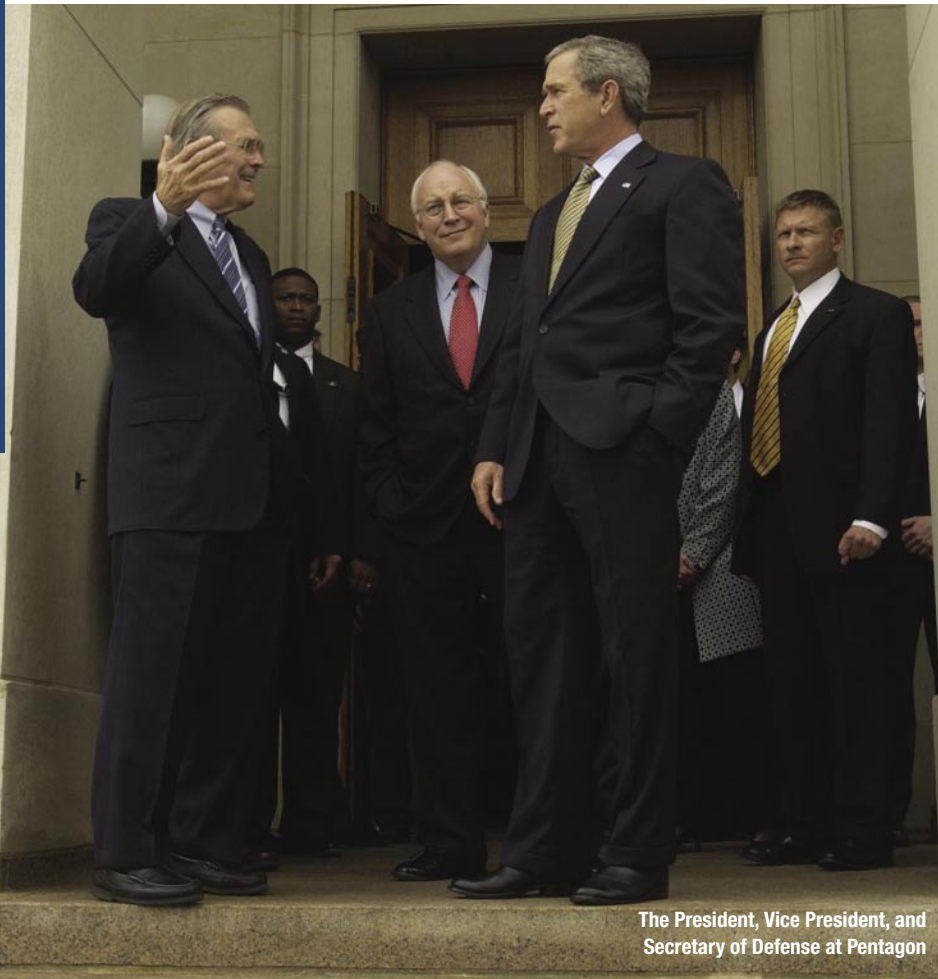
NOTES

¹ Fredrick W. Kagan, "War and Aftermath," *Policy Review* (August 2003), 5.

² Stephen Biddle, *Afghanistan and the Future of Warfare: Implications for Army and Defense Policy* (Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 2002), 48–49.

³ Max Boot, "The New American Way of War," *Foreign Affairs* (July/August 2003), 41–58, citation 44.

⁴ Eliot A. Cohen, *Supreme Command: Soldiers, Statesmen, and Leadership in Wartime* (New York: The Free Press, 1992), 187.



The President, Vice President, and Secretary of Defense at Pentagon

1st Combat Camera Squadron (James M. Bowman)

Beyond Goldwater–Nichols New Proposals for Defense Reform

By CLARK A. MURDOCK and RICHARD W. WEITZ

On March 18, 2004, the Center for Strategic and International Studies (CSIS) released *Beyond Goldwater-Nichols: Defense Reform for a New Strategic Era: Phase 1 Report*. This

event culminated almost 2 years of effort at CSIS, which began by developing an approach for both revisiting the Goldwater–Nichols Department of Defense Reorganization Act of 1986 and for addressing issues that were beyond

the scope of that landmark legislation. The project was officially launched in November 2002. When a CSIS team briefed Secretary of Defense Donald Rumsfeld and his top advisers on January 10, 2003, the Secretary urged CSIS to accelerate its efforts so the results would be available for the 2004 legislative cycle. In response, the center decided to address its issue agenda in two tranches, planning initially to release a Phase 1 report in February that both analyzed and made recommendations on a smaller set of issues, with a Phase 2 report to follow in December 2003.

Congressional interest in defense reform grew as a result of the Bush administration's last-minute (that is, shortly before the House and Senate voted on the defense authorization bill) submission of its proposals for changes in the military and civilian military personnel system. Although the provisions affecting military personnel were stripped from the authorization bill, the House version, which was largely accepted by the Senate during conference negotiations in the fall, substantially revamped the civilian personnel system. Congressional appropriators, however, decided that defense reform issues warranted additional attention and provided \$1 million in the fiscal year 2004 defense appropriations bill to support further work. This enabled CSIS to address a much broader range of issues during its Phase 2 effort, which will end with the release of its report. This article summarizes the Phase 1 report and outlines the Phase 2 agenda.

The CSIS Approach to Defense Reform

Acutely aware of the risks associated with making changes to organizational structures and processes, the Beyond Goldwater–Nichols study team employed a problem-centric approach to defense reform. It would recommend organizational or process changes only if the problems appeared sufficiently important to warrant the risks of unintended consequences.

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“If it ain’t broke, don’t fix it” was the first operating assumption.

For example, Goldwater–Nichols sought improved military effectiveness through greater jointness in the planning and conduct of military operations. Although one can identify insufficient jointness in how the U.S. military has planned (such as Operation *Anaconda* in Operation *Enduring Freedom*), it routinely conducts awesomely effective operations, making additional defense reforms unnecessary in this area. On the other hand, the

the unity of effort that Goldwater–Nichols brought to military operations has not characterized U.S. interagency operations

unity of effort that Goldwater–Nichols brought to the planning and conduct of military operations has not characterized U.S. interagency operations. As illustrated most recently in Afghanistan and Iraq, that problem is sufficiently severe to warrant accepting the risks associated with organizational change.

To enhance its understanding of these complex issues, the Beyond Goldwater–Nichols team relied heavily on the experiences of former practitioners to both identify problems and develop pragmatic recommendations. In particular, team members chaired multiple meetings of 5 working groups consisting of 120 former civilian and military officials who held senior positions in the national security apparatus. The team also drew on interviews, case studies, and real-life lessons learned. The initial drafts, findings, and recommendations were extensively vetted throughout the Department of Defense (DOD). John Hamre, President of CSIS, also hosted three “murder board” sessions of high-level former officials to review the Phase 1 results. Recommendations were arrived at not deductively from some ideal organizational end-state, but inductively from the collective experience of participants. The team developed experience-grounded solutions to clearly identified problems.

Although initially focused solely on defense reform, the CSIS approach soon looked beyond the scope of the original Goldwater–Nichols Act as it addressed national security issues that concern the entire U.S. Government, not just DOD. As we now see in both Afghanistan and Iraq, ultimate success requires that effective post-conflict “stability operations” ensue from victorious “major combat operations.” Defense reform must look beyond purely defense issues because, in many instances, ultimate success hinges on

how well DOD integrates with other government agencies and coalition partners. During its initial preparatory stages, the Beyond Goldwater–Nichols team identified lack of unity in strategy development, planning, and the conduct of interagency operations, as well as the increasingly difficult relationship between Congress and the Office of the Secretary of Defense (OSD), as two of the most vexing problems for DOD. Thus, it adopted the title *Beyond Goldwater–Nichols* rather than *Goldwater–Nichols Revisited* or *Goldwater–Nichols II*.

The team’s final operating assumption was its belief in the necessity of building capability to ensure that any individual or organization given new roles or responsibilities can execute them. Recommending that an institution, with its current structure and capabilities, assume expanded responsibilities in a new process is an empty mandate. Telling people to improve or change without providing the means and resources consistent with their new responsibilities typically leads to inaction, ineffectiveness, and failure.

In its approach to defense reform, the Beyond Goldwater–Nichols team has employed six guiding principles to shape its analysis. The first core principle is that preserving civilian control over the military represents a paramount value in the American political system and a prime responsibility of the Secretary of Defense. Since the es-

tablishment of DOD in 1949, the President has relied on the Secretary—who has absolute authority, subject to the consent of the President, over the department—to ensure the execution of laws, congressional mandates, and Presidential priorities in the area of defense policy. Over time, the Secretary has turned increasingly to his Under Secretaries as the principal means for exercising control of the military. The Service Secretaries, however, continue to assist in providing direction to the department.

The team’s second guiding principle is the need to maintain the institutional vitality of the military services. It is they who build and sustain the profession of arms in their respective mediums of warfare—that is, the body of expert knowledge and the men and women trained in the application of that knowledge to new circumstances. Identifying with the services also motivates young men and women to withstand the rigors of combat. In the words of Major General Tom Wilkerson, USMC, “I didn’t sign up to be a ‘DOD-er.’ I wanted to be a Marine.” As force providers to the combatant commands, the services are charged with formulating coherent budgets that balance the near-term demand of current operations with the need to invest in future capabilities.

The third principle guiding the team’s approach is that extending jointness in some areas will produce superior military, interagency, and coalition operations. Jointness, however, is not an end in itself, but a means to achieving improvements in areas of importance to national security. For example, the increasingly seamless use of forces in the field makes the lack of integration in how the services equip their forces less acceptable. As seen most recently in *Iraqi Freedom*, interoperability problems continue to plague tactical communications and contribute to friendly fire casualties. In an effort to overcome such problems, DOD has already restructured some functions, such as Special Forces and

missile defense, as integrated Department-wide programs. Extending notions of jointness to the interagency and coalition levels could also improve performance in these dimensions.

The fourth guiding principle is that defense resources should continue to be organized, managed, and budgeted along service lines. Goldwater-Nichols has helped enable the separate services to fight as a joint team. This success in enhancing jointness in the conduct of operations has led some to advocate additional jointness in how DOD organizes and prepares for warfare. The study team gave serious consideration to less service-centric approaches to managing resources, including the British Defence Ministry's reliance on joint capability managers to define requirements and a central procurement office for weapons acquisition. But the analysis showed that the services remain the single best source for coherent and integrated budgets

a balance must be struck between processes that ensure a diversity of views and processes that create competing power centers

within their respective domains. Therefore, the team does not advocate altering the basic organizational formula for how DOD allocates resources. Managing resources on a distributed basis, however, requires the continued development of coordinating structures to compensate for interservice seams.

The fifth guiding principle is that the combatant commanders, services, and defense agencies are the chief operating elements. The primary function of OSD is to supervise DOD management. The main responsibility of the Joint Staff is to oversee military operations. As a rule, the Office of the Secretary of Defense (OSD) should not manage programs and the Joint Staff should not function as an operational general staff. As staffs supporting the Chairman of the Joint Chiefs of Staff (CJCS) and the Secretary, OSD and the

Joint Staff should focus on policy formulation, policy representation, and policy oversight. These represent essential responsibilities that no other DOD element can perform.

The sixth guiding principle is belief in the need to ensure a healthy competition of ideas on major issues among the combatant commanders, services, Joint Staff, and OSD. Each of these DOD elements can offer valuable perspectives. Having a diversity of views informs decisions by ensuring the surfacing of all key considerations. A balance must be struck, however, between processes that ensure a diversity of views on the most critical issues and processes that create too many competing power centers and unnecessary friction.

Pragmatism has defined the Beyond Goldwater-Nichols study team approach to defense reform. The team relied heavily on experience when identifying and analyzing problems. It desired to preserve civilian control and maintain the institutional vitality of the services while extending and broadening jointness where it makes sense. While the team wanted the best ideas to emerge from a healthy struggle between competing offices, it sought to limit that competition to major issues. Organizational reforms are rife with unintended consequences. Like the sagacity of the Hippocratic oath, the core precept has been to do no harm.

Rationalizing DOD Structures

The current organizational structures of the military departments, the Joint Staff, and OSD too often produce unnecessary overlap. In addition, their sometimes oversized headquarters staffs promote a narrow focus on small issues and neglect of the big picture. Duplicative and excessive staffs also require wasteful coordination processes. The arduous drill of securing all the "chops" required to advance a proposal frustrates innovators because those supporting the status quo have so many opportunities to block or dilute suggested changes.

Focusing on the core roles and responsibilities of each principal DOD actor exposes those institutions that do not add sufficient value to outweigh these inefficiencies in process and structure. The team favors a targeted consolidation of organizational structures that preserves a diversity of ideas where warranted and strengthens civilian oversight without impeding independent military advice.

Fundamentally, all DOD elements should support the Secretary because he has ultimate responsibility for all actions of the department. By focusing on policy formulation, representation, and oversight, OSD serves the Secretary best. In the first role, the office conducts analyses, develops policy options, provides advice, and makes recommendations. It also represents the Secretary in the interagency process, before Congress and foreign governments, and with the general public. Finally, OSD oversees implementation of DOD policies and programs to ensure they are consistent with the Secretary's intent.

The office, of course, can perform other duties as the Secretary prescribes. Although OSD elements have managed programs on occasion (for example, environmental cleanup and nuclear threat reduction during the Clinton administration), their track record has been uneven. More importantly, managers of programs tend to become advocates. Program management compromises OSD's essential role in policy formulation, providing an independent source of advice to the Secretary. The office should renew its focus on policy formation and oversight and resist the temptation to manage programs, which is the proper province of the services. Its oversight should focus on what a particular program or activity is accomplishing rather than how it achieves those accomplishments.

The team also recommends consolidating all OSD housekeeping functions into one portfolio under an Assistant Secretary of Defense for Administration. Integrating the Washington Headquarters Service (currently a



Service chiefs speaking to Senate Armed Services Committee

U.S. Navy (Johnny Bivara)

field operating agency) and the Executive Secretariat will give the Secretary greater control over OSD mechanics.

The search for potential consolidation of OSD and Joint Staff offices should begin with the role of CJCS as the principal military adviser to the President and Secretary of Defense. Although the Secretary would welcome the Chairman's advice on all DOD matters, it is not clear that he needs CJCS to have independent staff on every issue before the department. On some issues, the Secretary would be

the most significant consolidation of staffs should occur at the level of the military departments

better served by having a consolidated staff of civilian and uniformed personnel that reports directly to him while keeping the Chairman informed. In particular, the team recommends integrating military and civilian staffs with respect to managerial functions

and retaining as separate organizations those Joint Staff directorates that fall most directly within the Chairman's military purview.

The Armed Forces increasingly wage joint and interdependent combat operations. Yet Operations *Enduring Freedom* and *Iraqi Freedom* show that DOD still fails to acquire and field joint interoperable command and control (C²) capabilities. Therefore, the team recommends the merger of J-6 (Command, Control, Communications and Computers [C⁴]) with appropriate elements of the Defense Information Systems Agency into an independent joint task force (with budgetary and acquisition authority) for joint C². An Under Secretary for Command, Control, Communications, and Intelligence (C³I) would be appointed to provide oversight of this critical area by elevating the C³ function to the Under Secretary level and combining it with Intelligence. For the personnel and logistics function, J-1 (Manpower and Personnel

and J-4 (Logistics) should be merged into integrated civilian and military offices under a military deputy who reports directly to its respective Under Secretary. J-7 (Operational Plans and Joint Force Development), whose responsibilities have migrated steadily to U.S. Joint Forces Command (JFCOM), should be disbanded.

The most significant consolidation of staffs should occur at the level of the military departments. The Secretary of Defense relies primarily on OSD for the oversight function, not the now-duplicative service secretariats. The civilian secretariats and the military staffs found in each military department constitute virtual mirror images. The team recommends merging most of them into a single smaller staff that reports to both the Service Secretary and the Service Chief of Staff. Creating integrated staffs that pair the Assistant Secretaries of each department with a military deputy would reduce frictions from coordination mechanisms, make service positions more coherent, and provide clearer lines of accountability.

Allocating Resources More Effectively

Many critics call the DOD resource allocation process "the Pentagon's real war." Deciding who gets what, and then making that decision stick, may be the Secretary's most formidable challenge. The Beyond Goldwater-Nichols team approach to achieving improvements in this area reflects the guiding principle that resources should be organized, managed, and budgeted along service lines. Adhering to this principle necessitates an elaborate structure to ensure that the services follow the Secretary's policy directives and build a collective defense program that balances resources across the largest organization in the world. In addition, the Constitution grants Congress a fundamental role in allocation with respect to defense and other policy areas. Elaborate systems and methods have evolved within DOD to help secure congressional funding. Given

these strictures, any system for allocating defense resources is bound to be complicated and sometimes inefficient.

Nevertheless, DOD decisionmakers too often find it excessively difficult to make tough tradeoffs between services and across military functions. Budgeting decisions remain dominated by factors other than strategy and planning. Since the services prepare the budgets, their priorities rather than joint perspectives typically dominate the process. Allocating resources that invariably fail to meet all demands requires Herculean efforts by all involved to avert the perennial “train wreck” while preparing the President’s budget request to Congress. The entire process consumes so much time and resources that DOD leaders can pay little attention to strategic decisionmaking, policy implementation, and program execution.

The Beyond Goldwater–Nichols team appreciates the substantial effort

current DOD leaders have made to strengthen strategic direction and build joint capabilities in the resource allocation process. The changes already introduced show considerable promise, but additional steps are necessary. In particular, the team recommends strengthening the capacities of the combatant commands so that they secure greater influence. The commanders should play an essential part in defining their short-term capability gaps as well as their proposed solutions. In addition, the combatant commands with global functional responsibilities should enjoy a larger role in addressing longer-term capability requirements. Special Operations Command, Transportation Command, Strategic Command, and Joint Forces Command all have service-like responsibilities and should act as advocates for the capabilities their successors will need 10 to 15 years in the future. Determining the capabilities for a par-

ticular mission requires experienced analysts. The combatant commanders need enhanced analytic staffs in their organic J–8s to compete in this arena, as well as enhanced representation in the Pentagon.

The team further favors strengthening the Office of Program Analysis and Evaluation. The office should be capable of providing independent analysis to the Secretary on a wide range of strategic choices, thereby supplementing the options generated by the services and the Joint Staff. In particular, it should conduct an annual zero-based analysis of two to three joint capability areas, including rigorous risk assessments. The goal should be to identify shortfalls and develop decision alternatives for the Secretary.

The Secretary also needs a mechanism for determining how well current policy is being implemented or current programs are being executed. Accordingly, he should create an independent, continuous policy implementation and execution review process under an office linked directly to OSD. This office would assemble all the department’s authoritative and directive guidance and provide a single, unified statement of its strategies, policies, and programs. This process would establish a clear standard to which all DOD components could be held accountable.

Strengthening Civilian Defense Professionals

Since the Cold War, DOD has had difficulty attracting and retaining talented career civil servants. The problem stems from private sector opportunities that often offer superior pay and fewer bureaucratic frustrations, complex and rigid government hiring and security clearance procedures that can take months, perceptions that the Government is a plodding bureaucracy where young talent lies fallow, and a changing labor market where few workers stick with a single employer throughout their careers. Although September 11 and the war on terror have increased interest in public ser-



The Chairman and Secretary of Defense briefing Pentagon press

1st Combat Camera Squadron (James M. Bowman)

vice, Americans still confront a frustrating government hiring process. Those who do become civil servants often complain of encrusted systems, needless hierarchy, and few opportunities for advancement to senior positions.

An explicit goal and notable success of the Goldwater–Nichols Act was to create incentives for the military's best and brightest to seek joint service, joint training, and joint education. Unfortunately, no parallel set of incentives or requirements exists to encourage professional development for DOD civilians or to broaden their experience base and skill set through education, training, or interdepartmental and interagency rotations. Whereas the military personnel system strategically marshals, manages, and maintains quality officers because it views its people as assets whose value can be enhanced through investment, the civilian human resources systems of the national security agencies do not follow this precept. They seem to

enactment of the National Security Personnel System gives the Secretary broader latitude to reshape the civilian workforce

lack an appreciation of the deep expertise, institutional memory, continuity across administrations, and seasoned perspectives on policies and programs their civilian professionals provide.

In the face of the coming retirement bow wave and current poor retention rates for young professionals, DOD leaders need to rethink and reform how the department manages its career civilians. Congress's enactment of the National Security Personnel System gives the Secretary significantly broader latitude to reshape the civilian workforce. He should use these powers, but he must take additional measures to attract, retain, motivate, and reward people.

The Beyond Goldwater–Nichols team recommends that Congress establish a new Defense Professional Corps to attract the best and brightest

civilians to DOD and to expand opportunities for professional development and career advancement. Like the Foreign Service, the Corps would have a competitive entry process designed to identify and entice talented people considering government service. Although most would join the Corps at the entry level, the system should allow mid-career professionals with valuable skills and experience outside government to join. Requirements for advancement should be designed to develop civilian leaders capable of operating effectively not only within DOD but also in the interagency context. Training, education, and interagency rotations for senior-level civil servants should become centerpieces of the new personnel system.

Like their military counterparts, DOD career civilians should receive the resources to enable them to undertake a sustained program of professional development. Congress allows the military services 10 to 15 percent additional end strength to create a personnel "float" that provides officers with opportunities for training, education, and joint rotations. A similar approach is needed for civilian personnel in OSD and the defense agencies to enable them to meet the professional development requirements of the new Defense Professional Corps. Congress should also reassess overly restrictive ethics rules to make it easier for defense professionals to move in and out of government. The Beyond Goldwater–Nichols team also advocates limiting the number of political appointees in DOD to enhance the incentives associated with career service.

Improving Interagency and Coalition Operations

The past decade of U.S. experience in complex contingency operations, from Somalia to Iraq, has demonstrated that success requires unity of effort not only from the Armed Forces

but also from across the Government and its foreign partners. In most cases, however, such unity has proven elusive, sometimes with disastrous results. The United States and its international partners have repeatedly failed to integrate fully the political, military, economic, humanitarian, and other dimensions of a given operation into a coherent strategy.

Goldwater–Nichols did not address the organization and functions of the National Security Council (NSC). The council needs to play a greater role in coordinating policy planning and overseeing policy execution with regard to regional crises. An enhanced role would help counter agency parochialism, identify potential disconnects and synergies, and elevate contentious issues to the deputies and principals for decision. The President should assign the NSC Deputy Assistant to the President lead responsibility for integrating agency strategies and plans and for ensuring greater unity of execution among agencies. He should also establish a new NSC office to review and integrate agency plans for complex operations, help close gaps between them, and monitor their implementation.

Shortly after assuming office, moreover, each President should review the guidance establishing standard operating procedures for planning complex operations. This guidance should articulate an interagency division of labor by specifying which agencies should lead or support others with various tasks, define the mechanisms and processes used to integrate interagency planning, and provide a standard planning paradigm. Each administration should build on the lessons learned and best practices of its predecessor.

Weaknesses in other Federal agencies have forced DOD to bear the main burden of nationbuilding. Enhancing civilian capacities for conducting complex contingency operations is imperative. The Beyond Goldwater–Nichols team recommends that all agencies likely to become involved in complex

operations abroad (for example, State, Treasury, Commerce, and Justice) establish small offices to lead development of agency plans and participate in the interagency planning process. For each contingency operation, the President should designate one senior official to take charge of and be accountable for integrating U.S. interagency operations on the ground.

Congress should establish a new Agency for Stability Operations, with a Civilian Stability Operations Corps and Reserve, that would prepare for stability operations; organize, train, and equip civilian capabilities for such operations; and have the capacity to rapidly deploy civilian specialists to the field. The team further recommends creating a new Training Center for Interagency and Coalition Operations that would be run jointly by DOD's National Defense University and the State Department's National Foreign Affairs Training Center.

The team urges Congress to increase funding for programs that expand opportunities for civilian planners and operators to work with their foreign counterparts. Such contacts and exchanges provide critical insights into partner approaches and capacities re-

the defense authorizing committees have less stature and influence than at any time in recent memory

garding complex operations. They also help develop standard operating procedures for international contingency planning and coordination. Congress should also provide additional resources for programs that enhance the operational capabilities of allies and partners regarding complex operations. Americans benefit from improvements in the ability of allies and potential coalition partners to contribute to operations, especially in areas where the United States does not have a comparative advantage or lacks essential resources.

Strengthening Congressional Oversight

Defense reform will occur only if members of the executive branch and Congress can agree on a set of recommendations and work together to achieve them. Unfortunately, congressional oversight of the defense establishment is languishing. Members of Congress engage in too few debates on major national security challenges and spend too much time on minor and parochial issues. The defense authorizing committees today have less stature and influence than at any time in recent memory. This decline in congressional oversight has contributed to deteriorating relations between Congress and OSD. It also deprives DOD leaders of the considerable benefits they would receive from a serious questioning of their plans, policies, and programs by members and their staffs.

The team offers the following proposals as suggestions, not recommendations, because only Congress can reform itself. The study team believes that congressional oversight would improve if the Armed Services committees focused more on "macro" strategy, policy, and organizational issues. Reducing the size of these authorizing committees and limiting claims of jurisdiction from other committees should also be considered. Also, it could prove profitable to experiment again with a 2-year authorization bill. Finally, members might consider following a procedure similar to that used for the base realignment and closure process and establish an independent group (perhaps of former congressional leaders from both Houses and parties) to recommend changes in committee memberships, structures, and jurisdictions that would enhance oversight.

Beyond Goldwater-Nichols, Phase 2

CSIS formally launched its Phase 2 effort in early May 2004 when the administrative arrangements for accessing its congressional funding were com-

pleted. To address the broader agenda of issues, CSIS expanded its Beyond Goldwater-Nichols study team to incorporate additional expertise and formed seven working groups of former officials. The Beyond Goldwater-Nichols working groups held scoping sessions in June and July 2004 to review how the study team defined the problem and its work plans for addressing them.

The first three working groups are closely interrelated. Working Group 1 identified the U.S. Government capabilities needed for its most pressing 21st-century missions: homeland security, stability operations, counterterrorism, and counterproliferation/WMD elimination. Once these national capabilities were determined, CSIS made recommendations on assigning roles and responsibilities. Working Group 2 addressed unified command plan issues (for example, the role of regional combatant commanders in an era of global missions and global force managements), as well as the interface between the military command structure and the Federal Government approach to conducting foreign and domestic operations. This latter issue is closely linked to the agenda of Working Group 3, which focused on improving the ability of the NSC structure and processes to plan and conduct interagency operations.

During vetting of the Phase 1 draft recommendations, the most common reaction to those pertaining to the interagency process was, "Good recommendations, but you need to do more." Working Group 3 built on the Phase 1 work, including a more unconstrained look at the structure established by the 1947 National Security Act. The recommendations emerging from Groups 2 and 3, in turn, were assessed for how they affect the ability of the Government to perform the missions being examined in Group 1. Because of the close interplay among these three working groups, participants were invited to all meetings.

In the belief that decades of acquisition reform have failed to build a

responsive, efficient acquisition process, Working Group 4 attempted to design a new process. Group 5 provided a zero-based assessment of five commercial-like defense agencies (for example, the Defense Logistics Agency). Although subject to internal controls, the defense agencies, unlike OSD, the Joint Staff, or the military services, are rarely subject to external review. In response to strong congressional interest, Working Group 6 assessed the implementation of the Goldwater–Nichols provisions on joint officer management and joint professional military education. It also took a “blue sky” look at more fundamental issues such as the role of education in an era when jointness is being pushed down to the tactical level. Finally, Working Group 7 addressed whether DOD is appropriately organized for operations in the domain of space and cyberspace.

Even as CSIS launched its Phase 2 effort, it closely monitored the implementation of its Phase 1 recommendations. The Beyond Goldwater–Nichols study team was pleased with the attention being paid to defense reform by the senior leadership of the Pentagon. Despite an extremely crowded policy agenda, senior civilian and military leaders, including the Secretary and Deputy Secretary of Defense, the Chairman and Vice Chairman of the Joint Chiefs of Staff, the Joint Chiefs themselves, and the Service Secretaries made time to review CSIS findings and provide feedback. Both OSD and the Joint Staff are actively considering which recommendations the Secretary and Chairman could implement together and which the Secretary could implement on his own authority. The study team believes that the senior leadership in DOD, both civilian and military, is clearly receptive to defense reform and is deeply grateful for the opportunity to serve in that cause.

JFQ

The report on Beyond Goldwater–Nichols Phase 2 was scheduled to be available through the CSIS Web page: <http://www.csis.org> in mid-2005.



Annual Chairman of the Joint Chiefs of Staff Strategy Essay Competition

For nearly a quarter of a century, the Chairman has challenged students at the Nation’s professional military education institutions to think and write creatively about national security issues. The best from across the military services and Federal Government spectrum compete for recognition of their efforts in The Chairman of the Joint Chiefs of Staff Essay Competition.

The 24th competition was conducted by NDU Press with generous support by NDU Foundation on May 18–19 at the National Defense University in Washington, DC.

Judges from participating senior-level schools selected the “best of the best” to meet the security challenges of the 21st century. The winning essays will be featured in the upcoming issue of *Joint Force Quarterly*, issue 39, 4th Quarter 2005.

Be Part of the Silver Anniversary

The 2005–2006 academic year is approaching. It is not too early to begin preparing for the 25th anniversary of the CJCS Strategy Essay Competition in Spring 2006. Look for updates on rules, eligibility, and awards for this special event on the pages of *Joint Force Quarterly* or visit the NDU Press Web site: www.ndu.edu/inss/nduphp.html



Al Qaeda as Insurgency

Lieutenant Colonel Michael F. Morris, USMC
U.S. Army War College



A Goldwater-Nichols Act for the U.S. Government: Institutionalizing the Interagency Process

Martin J. Gorman, Defense Intelligence Agency,
and Commander Alexander Krongard, USN
National War College



Guantanamo Bay:

Undermining the Global War on Terror

Colonel Gerard P. Fogarty, Australian Army
U.S. Army War College

America’s Strategic Imperative:

A National Energy Policy Manhattan Project

Lieutenant Colonel John M. Amidon, USAF
Air War College



Female Marine searching Iraqi woman at control point outside Fallujah

U.S. Marine Corps (Ryan B. Busse)

And when people are entering upon a war they do things the wrong way around. Action comes first, and it is only when they have already suffered that they begin to think.

—Thucydides, *The Peloponnesian War*

The Military Utility of Understanding Adversary Culture

By MONTGOMERY MCFATE

Cultural knowledge and warfare are inextricably bound. Knowledge of one's adversary as a means to improve military prowess has been sought since

Herodotus studied his opponents' conduct during the Persian Wars (490–479 BC). T.E. Lawrence (Lawrence of Arabia) embarked on a similar quest after the 1916 Arab rebellion against the

Ottoman Empire, immersing himself deeply in local culture: "Geography, tribal structure, religion, social customs, language, appetites, standards were at my finger-ends. The enemy I knew almost like my own side. I risked myself among them many times, to learn."¹ Since then, countless soldiers have memorized Sun Tzu's dictum: "If you know the enemy and know yourself, you need not fear the result of a hundred battles."

Although "know thy enemy" is one of the first principles of warfare, our military operations and national security decisionmaking have consistently suffered due to lack of knowledge of foreign cultures. As former Secretary of Defense Robert McNamara noted, "I had never visited Indochina, nor did I understand or appreciate its history, language, culture, or values. When it came to Vietnam, we found ourselves setting policy for a region that was terra incognita."² Our ethnocentrism, biased assumptions, and mirror-imaging have had negative outcomes

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during the North Vietnamese offensives of 1968 and 1975, the Soviet-Afghan war (1979–1989), India's nuclear tests (1998), the Iraqi invasion of Kuwait (1990), and the Shi'ite transformation of Iran (1979).

Despite the fact that cultural knowledge has not traditionally been a priority within the Department of Defense (DOD), the ongoing insurgency in Iraq has served as a wake-up call to the military that adversary culture matters. Soldiers and Marines on the ground thoroughly understand that. As a returning commander from

the ongoing insurgency in Iraq has served as a wake-up call to the military that adversary culture matters

3^d Infantry Division observed: "I had perfect situational awareness. What I lacked was cultural awareness. I knew where every enemy tank was dug in on the outskirts of Tallil. Only problem was, my soldiers had to fight fanatics charging on foot or in pickups and firing AK-47s and RPGs [rocket-propelled grenades]. Great technical intelligence. Wrong enemy."³ As this commander's observation indicates, understanding one's enemy requires more than a satellite photo of an arms dump. Rather, it requires an understanding of their interests, habits, intentions, beliefs, social organizations, and political symbols—in other words, their culture.⁴

This article argues that new adversaries and operational environments necessitate a sharper focus on cultural knowledge of the enemy. A lack of this knowledge can have grave consequences. Conversely, understanding adversary culture can make a positive difference strategically, operationally, and tactically. Although success in future operations will depend on cultural knowledge, the Department of Defense currently lacks the programs, systems, models, personnel, and organizations to deal with either the existing threat or the changing environment. A Federal initiative is urgently needed to

incorporate cultural and social knowledge of adversaries into training, education, planning, intelligence, and operations. Across the board, the national security structure needs to be infused with anthropology, a discipline invented to support warfighting in the tribal zone.

Changing Adversaries and Operational Environments

Cultural knowledge of adversaries should be considered a national security priority. An immediate transformation in the military conceptual paradigm is necessary for two reasons: first, the nature of the enemy has changed since the end of the Cold War, and second, the current operational environment has evolved fundamentally within the past 20 years as a result of globalization, failed states, and the proliferation of both complex and light weapons.

Although the United States armed and trained for 50 years to defeat a Cold War adversary, Soviet tanks will never roll through the Fulda Gap. The foe the United States faces today—and is likely to face for years to come—is non-Western in orientation, transnational in scope, non-hierarchical in structure, and clandestine in approach; and it operates outside of the context of the nation-state. Neither al Qaeda nor insurgents in Iraq are fighting a Clausewitzian war, where armed conflict is a rational extension of politics by other means. These adversaries neither think nor act like nation-states. Rather, their form of warfare, organizational structure, and motivations are determined by the society and the culture from which they come.

Attacks on coalition troops in the Sunni triangle, for example, follow predictable patterns of tribal warfare: avenging the blood of a relative (*al tha'r*); demonstrating manly courage in battle (*al-muruwwah*); and upholding manly honor (*al-sharaf*).⁵ Similarly, al Qaeda and its affiliated groups are

replicating the Prophet Mohammed's 7th-century process of political consolidation through jihad, including opportunistic use of territories lacking political rulers as a base, formation of a corps of believers as a precursor to mass recruiting, and an evolution in targeting from specific, local targets (such as pagan caravans) to distant powerful adversaries (for instance, the Byzantine Empire). To confront an enemy so deeply moored in history and theology, the U.S. Armed Forces must adopt an ethnographer's view of the world: it is not nation-states but cultures that provide the underlying structures of political life.

Not only our adversaries have changed. The 2001 *Quadrennial Defense Review* predicted that smaller-scale contingencies—military operations of smaller scale and intensity than major theater or regional wars, such as humanitarian, peacekeeping, peace enforcement, noncombatant evacuation operations, and combating terrorism—will characterize the future operational environment. The use of the military for humanitarian disaster relief, peacekeeping, and counterterrorism operations means that the military will be increasingly forward-deployed in hostile, non-Western environments "disconnected from the global economy."⁶ According to Andy Hoehn, former Deputy Assistant Secretary of Defense for Strategy, "The unprecedented destructive power of terrorists—and the recognition that you will have to deal with them before they deal with you—means that we will have to be out acting in the world in places that are very unfamiliar to us. We will have to make them familiar."⁷

Culture Matters Operationally and Strategically

Culture has become something of a DOD buzzword, but does it really matter? The examples below demonstrate three points: misunderstanding culture at a strategic level can produce policies that exacerbate an insurgency; a lack of cultural knowledge at an operational



Navy admiral discussing school construction in Najaf, Iraq, with tribal Sheik

U.S. Marine Corps (Robert K. Blankenship)

level can lead to negative public opinion; and ignorance of the culture at a tactical level endangers both civilians and troops. There is no doubt that the lack of adversary cultural knowledge can have grave consequences strategically, operationally, and tactically.

At a strategic level, certain policymakers within the Bush administration apparently misunderstood the tribal nature of Iraqi culture and society. They assumed that the civilian apparatus of the government would remain intact after the regime was decapitated by an aerial strike, an in-

when the United States cut off the hydra’s Ba’thist head, power reverted to its most basic and stable form—the tribe

ternal coup, or a military defeat. In fact, when the United States cut off the hydra’s Ba’thist head, power reverted to its most basic and stable form—the tribe. As a tribal leader observed, “We follow the central government. . . . But of course if communications are cut between us and the center, all authority will revert to our sheik.”⁸ Tribes are the basic organizing social fact of life in

Iraq, and the inner circle of the Ba’th Party itself was the purview of one tribe, the Al Bu Nasir. Once the Sunni Ba’thists lost their prestigious jobs, were humiliated in the conflict, and got frozen out through de-Ba’thification, the tribal network became the backbone of the insurgency.⁹ The tribal insurgency is a direct result of our misunderstanding the Iraqi culture.

At the operational level, the military misunderstood the system of information transmission in Iraqi society and consequently lost opportunities to influence public opinion.

One Marine back from Iraq noted, “We were focused on broadcast media and metrics. But this had no impact because Iraqis spread information through rumor. Instead of tapping into their networks, we should have visited their coffee shops.” Unfortunately, the emphasis on force protection prevented Soldiers from visiting coffee shops and buying items on the economy. Soldiers and Marines were unable to establish one-to-one relationships with Iraqis, which are key to both intelligence collection and winning

hearts and minds. A related issue is our squelching of Iraqi freedom of speech. Many members of the Coalition Provisional Authority (CPA) and Combined Joint Task Force 7 felt that anticoalition and anti-American rhetoric was a threat to security and sought to stop its spread.¹⁰ Closing Muqtada al Sadr’s *Al Hawza* newspaper contributed to an Iraqi perception that Americans do not really support freedom of speech despite their claims to the contrary, reinforcing their view of Americans as hypocrites.

Failure to understand adversary culture can endanger both troops and civilians at a tactical level. Although it may not seem like a priority when bullets are flying, cultural ignorance can kill. Earlier this year, the Office of Naval Research conducted a number of focus groups with Marines returning from Iraq. The Marines were quick to acknowledge their misunderstanding of Iraqi culture, particularly pertaining to physical culture and local symbols, and to point out the consequences of inadequate training. Most alarming were the Iraqis’ use of vehement hand gestures, their tendency to move in one’s peripheral vision, and their tolerance for physical closeness. One Marine noted, “We had to train ourselves that this was not threatening. But we had our fingers on the trigger all the time because they were yelling.” A lack of familiarity with local cultural symbols also created problems. For example, in the Western European tradition, a white flag means surrender. Many Marines assumed a black flag was the opposite of surrender—“a big sign that said shoot here!” as one officer pointed out. As a result, many Shia who traditionally fly black flags from their homes as a religious symbol were identified as the enemy and shot at unnecessarily. There were also problems at roadblocks. The American gesture for *stop* (arm straight, palm out) means *welcome* in Iraq, while the gesture for *go* means *stop* to Iraqis (arm straight, palm down). This and similar misunderstandings have had deadly consequences.

On the other hand, understanding adversary culture can make a positive difference strategically, operationally, and tactically. The examples below illuminate three key points: using preexisting indigenous systems creates legitimacy for the actions of the occupying power, indigenous social organization

postconflict reconstruction is most effective when the rebuilt institutions do not impose external concepts of social organization

(including tribal and kinship relationships) determines the structure of the insurgency, and avoiding the imposition of foreign norms will generate public cooperation.

Recognizing and utilizing preexisting social structures are the key to political stabilization in Iraq. While U.S. policymakers often seemed perplexed by the *sub rosa* tribal structure in Iraq, the British understood the indigenous system and used it to their advantage. Brigadier Andrew Kennett, commander of the British battlegroup

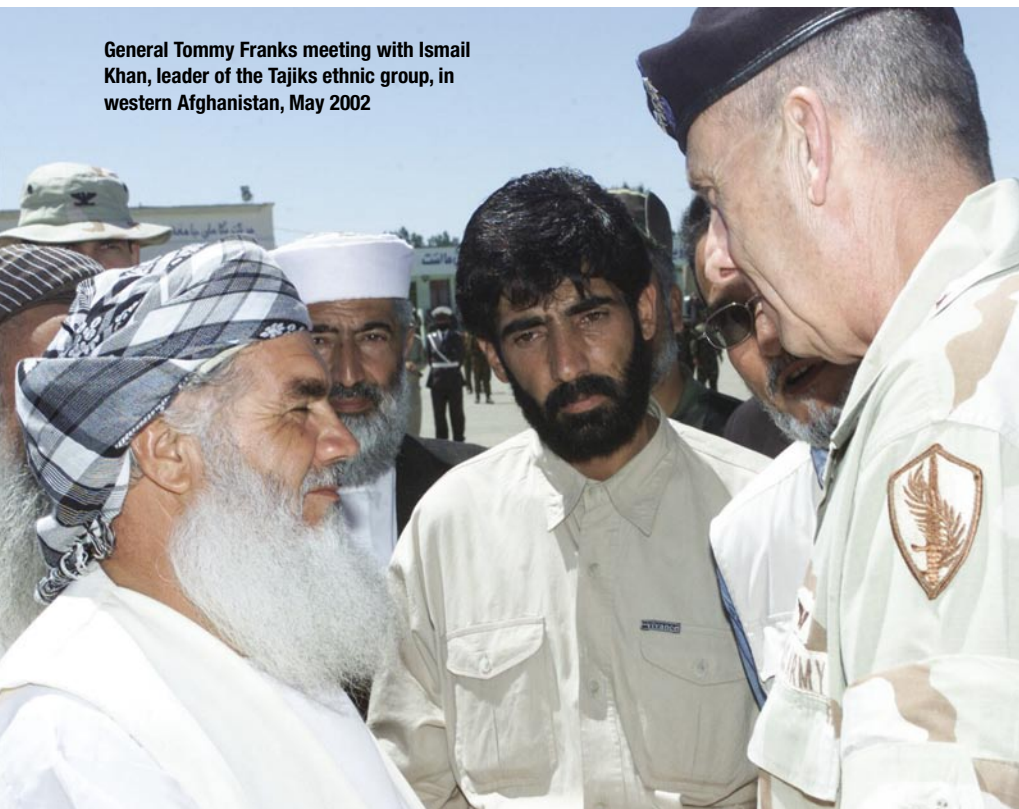
based in Basra, identified a core lesson learned during their history of empire: the importance of adjusting to local cultures and of not imposing alien solutions.¹¹ In Iraq, the most important element of local culture is the tribe and the associated patronage system. The majority of the population belong to one of the 150 major tribes, the largest containing more than a million members and the smallest a few thousand.¹² Tribes are invariably patronage systems in which powerful sheiks dispense riches and rewards to sub-sheiks, who in turn distribute resources to the tribal community. Sheiks always need money to generate loyalty from sub-sheiks. There is a saying in Iraq: you cannot buy a tribe, but you can certainly hire one.¹³ In Amara, the British did just that. They appointed tribal leaders to local councils and gave the councils large sums to distribute, reinforcing the sheiks' political standing. As one officer noted, "We deal with

what exists. In the five months we've been here, we're not going to change the culture of Iraq. We have to work with what there is."¹⁴

The structure of any insurgency will reflect the indigenous social organization of the geographical region. Thus, charting the Iraqi tribal and kinship system allowed 4th Infantry Division to capture Saddam Hussein. Although most U.S. forces were preoccupied with locating the 55 high-value targets on the Bush administration's list, Major General Raymond Odierno, USA, understood that relationships of blood and tribe were the key to finding Saddam Hussein.¹⁵ Two total novices, Lieutenant Angela Santana and Corporal Harold Engstrom of 104th Military Intelligence Battalion, were assigned to build a chart to help 4th Infantry Division figure out who was hiding Saddam. According to Santana, a former executive secretary, their first thought was "Is he joking? This is impossible. We can't even pronounce these names." Despite the challenges, they created a huge chart called "Mongol Link" depicting key figures with their interrelationships, social status, and last-known locations. Eventually, patterns emerged showing the extensive tribal and family ties to the six main tribes of the Sunni triangle: the Husseins, al-Douris, Hadouthis, Masliyats, Hassans, and Harimyths, which led directly to Saddam Hussein.¹⁶

Postconflict reconstruction is most effective when the rebuilt institutions reflect local interests and do not impose external concepts of social organization. For example, Iraqis tend to think of the central government as the enemy. The longstanding disconnect between the center and the periphery meant that Baghdad did not communicate down and city councils could not communicate up. The CPA misunderstood the relationship between Baghdad and the rest of the country and imposed a U.S. model based on central government control. Yet many Marine Corps units intuitively had the right approach and began po-

General Tommy Franks meeting with Ismail Khan, leader of the Tajiks ethnic group, in western Afghanistan, May 2002



U.S. Air Force (Joe Springfield)

litical development at the local level. A Marine captain was assigned to build a judicial system from the ground up. He refurbished the courthouse, appointed judges, and found the 1950 Iraqi constitution on the Internet. Because he used their system and their law, the Iraqis perceived the court as legitimate. Unfortunately, he was instructed to stop employing Ba'athists. It appears that we are often our own worst enemy.

An Inadequate System

Countering insurgency and combating terrorism in the current operational environment demand timely cultural and social knowledge of the adversary. As Andy Marshall, Director of the Office of Net Assessment, has noted, future operations will require an “anthropology-level knowledge of a wide range of cultures.” Currently, however, DOD lacks the right programs, systems, models, personnel, and organizations to deal with either the existing threat or the changing environment.

Socio-cultural analysis shops, such as the Strategic Studies Detachment of 4th Psychological Operations Group and the Behavioral Influences Analysis Division of the National Air and Space Intelligence Center, are underfunded, marginalized, and dispersed. Because they lack resources, their information base is often out of date. Task Force 121, for example, was using 19th-century British anthropology to prepare for Afghanistan. With no central resource for cultural analysis, military and policy players who need the information most are left to their own devices. According to a Special Forces colonel assigned to the Under Secretary of Defense for Intelligence, “We literally don’t know where to go for information on what makes other societies tick, so we use Google to make policy.”

Although the Army Intelligence Center at Fort Huachuca, 82^d Airborne Division, Joint Readiness Training Center, Naval Postgraduate School, and John F. Kennedy Special Warfare School



Religious leaders talk to military chaplain regarding male soldiers searching Iraqi women at checkpoint

56th Signal Company (Diga Steiert)

all offer some form of predeployment cultural training, their programs are generally rushed, oversimplified, or unavailable to all Soldiers and Marines who need them. Much so-called cultural awareness training focuses on do’s and don’ts and language basics and tends to be geared toward Baghdad. As one Army colonel noted, “In Western Iraq, it’s like it was six centuries ago with the Bedouins in their goat hair tents. It’s useless to get cultural briefings on Baghdad.” Troops rely on personal reading to make up for the lack of formal training. Inadequate training leads to misperceptions that can complicate operations. For example, Marines who were instructed that Muslims were highly pious and prayed five times a day lost respect for Iraqis when they found a brewery in Baghdad and men with mistresses. In actuality, Iraq has been a secular society for six

decades, and there were relatively few pious Muslims.

Even though all services now have a foreign area officer (FAO) program, the military still lacks advisers who can provide local knowledge to commanders on the ground. The FAO program is intended to develop officers with a combination of regional expertise, political-military awareness, and language qualification to act as a cross-cultural linkage among foreign and U.S. political and military organizations. Because few FAOs are ever subjected to deep cultural immersion totally outside the military structure, most do not develop real cultural and social expertise. Furthermore, most do not work as cultural advisers to commanders on the ground but serve as military attachés, security assistance officers, or instructors. The result is that commanders must fend for themselves. One Marine general

explained that his unit had no local experts when it deployed to Afghanistan. The Pastoo-speaking cook on the ship, who happened to be born in Afghanistan, became the “most valuable player” of the mission.

The current intelligence system is also not up to the task of providing the required level of cultural intelligence. Retired Admiral Arthur Cebrowski, USN,

during the Vietnam era, anthropologists excelled at bridging the gap between the military and tribes

Director of the Office of Force Transformation, noted that “the value of military intelligence is exceeded by that of social and cultural intelligence. We need the ability to look, understand, and operate deeply into the fault lines of societies where, increasingly, we find the frontiers of national security.”¹⁷ Rather than a geopolitical perspective, threat analysis must be much more concrete and specific. According to Lieutenant General James Clapper, Jr., USAF, the former director of the Defense Intelligence Agency, “Of course we still provide in-depth orders of battle, targeting data, and traditional military capabilities analysis. But we must also provide the commanders on the ground with detailed information regarding local customs, ethnicity, biographic data, military geography, and infectious diseases.” Producing intelligence on these factors can be challenging. As Clapper noted, “We provided detailed analysis on more than 40 clans and subclans operating in Somalia—far more difficult than counting tanks and planes.”¹⁸

Back to the Future

A Federal effort is needed to infuse the national security structure with anthropology across the board. While this idea may seem novel, anthropology was developed largely to support the military enterprise.

Frequently called “the handmaiden of colonialism,” anthropological knowledge contributed to

the expansion and consolidation of British power during the era of empire. In the United States, the Department of Defense and its predecessors first recognized culture as a factor in warfare during the Indian Wars of 1865–1885, resulting in the formation of the Bureau of American Ethnology under Major John Wesley Powell. During World War II, anthropologists such as Gregory Bateson served the war effort directly, first conducting intelligence operations in Burma for the Office of Strategic Ser-

vices, and later advising on how to generate political instability in target countries through a process known as *schizmogogenesis*. American anthropologists produced ethnographies on the Axis powers that facilitated behavioral prediction based on national character. While Ruth Benedict’s 1946 study of Japanese national character, *The Chrysanthemum and the Sword*, is the best known, studies such as Ladislav Farago’s *German Psychological Warfare* (1942) collect dust on library shelves. Their predictions were often highly accurate: following recommendations from anthropologists at the Office of War Information, President Franklin Roosevelt left the Japanese emperor out of conditions of surrender.¹⁹

The legacy of World War II anthropology survives in the form of the Human Relation Area Files at Yale University. Established by the Carnegie Foundation, the Office of Naval Research, and the Rockefeller Foundation, this database provided information on Japanese-occupied former German territories of Micronesia. Although the database was maintained for decades after the war with Army, Navy, Air Force, and Central Intelligence Agency funds, U.S. Government agencies seeking “an anthropological-level of knowledge” have sadly now forgotten its existence.

During the Vietnam era, the defense community recognized that familiarity with indigenous, non-Western cultures was vital for counter-

insurgency operations. The Director of the Defense Department’s Advanced Research Projects Agency, R.L. Sproul, testified before Congress in 1965 that “remote area warfare is controlled in a major way by the environment in which the warfare occurs, by the sociological and anthropological characteristics of the people involved in the war, and by the nature of the conflict itself.” To win hearts and minds, counterinsurgency forces must understand and employ local culture as part of a larger political solution. As General Sir Gerald Templer explained during the Malayan Emergency, “The answer lies not with putting more boots into the jungle, but in winning the hearts and minds of the Malayan people.” Thus, the U.S. defense community determined that it must recruit cultural and social experts. Seymour Deitchman, DOD Special Assistant for Counterinsurgency, explained to a congressional subcommittee in 1965:

*The Defense Department has . . . recognized that part of its research and development efforts to support counterinsurgency operations must be oriented toward the people . . . involved in this type of war; and the DOD has called on the types of scientists—anthropologists, psychologists, sociologists, political scientists, economists—whose professional orientation to human behavior would enable them to make useful contributions in this area.*²⁰

During the Vietnam era, the special warfare community understood that success in unconventional warfare depended on understanding indigenous, non-Western societies, and they turned to anthropologists. U.S. Special Operations Command’s *Special Operations in Peace and War* defines *unconventional warfare* as “military and paramilitary operations conducted by indigenous or surrogate forces who are organized, trained, equipped, and directed by an external source.” To conduct operations “by, with, and through,” Special Forces units must have the support of the local population, which can be decidedly difficult to secure. While he was acting as an

adviser to U.S. troops in Vietnam in 1965, British expert Sir Robert Thompson suggested that anthropologists be used to recruit aboriginal tribesmen as partisans. Indeed, anthropologists excelled at bridging the gap between the military and tribes. Special Forces in Vietnam, for example, were assisted by Gerald Hickey in working with the Montagnards.

So where are the anthropologists now that the Government needs them? Although the discipline's roots are deeply entwined with the military, few anthropologists are interested in national security. Their suspicion of military activity stems from a question of ethics: if professional anthropologists are morally obliged to protect those they study, does their cooperation with military and intelligence operations violate the prime directive? They believe it does. This conclusion was based on a number of defense projects that sought to use anthropological tools in potentially harmful ways. In 1964, the Army launched Project *Camelot*, a multinational social science research project, to predict and influence politically significant aspects of social change that would either stabilize or destabilize developing countries. The effort was canceled in July 1965 after international protests erupted in target countries. Critics called *Camelot* an egregious case of "sociological snooping."²¹

While anthropological knowledge is now necessary to national security, the ethics of anthropologists must be taken into account. In addition to direct discussion and debate on using ethnographic information, policymakers and military personnel must be trained to apply anthropological and social knowledge effectively, appropriately, and ethically.

The changing nature of warfare requires a deeper understanding of adversary culture. The more unconventional the adversary, and the further from Western cultural norms, the more we need to understand the society and underlying cultural dynamics. To defeat non-Western opponents who are

transnational in scope, nonhierarchical in structure, clandestine in approach, and who operate outside the context of nation-states, we need to improve our capacity to understand foreign cultures.

The danger is that we assume that technical solutions are sufficient and that we therefore fail to delve deeply enough into the complexity of other societies. As Robert Tilman pointed out in a seminal article in *Military Review* in 1966, British counterinsurgency in Malaya succeeded because it took account of tribal and ethnic distinctions, while similar U.S. efforts in Vietnam were bound to fail because they lacked anthropological finesse.²² **JFQ**

NOTES

¹ T.E. Lawrence, quoted in B.H. Liddell Hart, *Lawrence of Arabia* (New York: DeCapo, 1989), 399.

² Robert S. McNamara, *In Retrospect* (New York: Random House, 1995), 32.

³ Steve Israel and Robert Scales, "Iraq Proves It: Military Needs Better Intel," *New York Daily News*, January 7, 2004.

⁴ Culture is "those norms, values, institutions and modes of thinking in a given society that survive change and remain meaningful to successive generations." Adda Bozeman, *Strategic Intelligence and Statecraft* (New York: Brassey's, 1992), 57.

⁵ Amatzia Baram, "Victory in Iraq, One Tribe at a Time," *The New York Times*, October 28, 2003.

⁶ Greg Jaffe, "Pentagon Prepares to Scatter Soldiers in Remote Corners," *The Wall Street Journal*, May 27, 2003, 1.

⁷ *Ibid.*, 1.

⁸ Baram.

⁹ *Ibid.*

¹⁰ Christopher Varhola, "The U.S. Military in Iraq: Are We Our Own Worst Enemy?" *Practicing Anthropology* 26, no. 4 (2004), 40.

¹¹ John F. Burns, "The Reach of War: The Occupation," *The New York Times*, October 17, 2004.

¹² Neil MacFarquhar, "In Iraq's Tribes, U.S. Faces a Wild Card," *The New York Times*, January 7, 2003.

¹³ Baram.

¹⁴ Charles Clover, "Amid Tribal Feuds, Fear of Ambush and the Traces of the Colonial Past, UK Troops Face up to Basra's Frustrations," *Financial Times* (UK), September 6, 2004, 11.

¹⁵ Vernon Loeb, "Clan, Family Ties Called Key to Army's Capture of Hussein," *The Washington Post*, December 16, 2003.

¹⁶ Farnaz Fassihi, "Charting the Capture of Saddam," *The Wall Street Journal*, December 23, 2003.

¹⁷ Arthur K. Cebrowski, Director of Force Transformation, Office of the Secretary of Defense, statement before the Subcommittee on Terrorism, Unconventional Treats, and Capabilities, Armed Services Committee, United States House of Representatives, February 26, 2004.

¹⁸ Lieutenant General James R. Clapper, Jr., "The Worldwide Threat to the United States and Its Interests Abroad," statement to the Senate Committee on Armed Services, January 17, 1995: <http://www.totse.com/en/politics/terrorists_and_freedom_fighters/wrldthrt.html>.

¹⁹ David Price, "Lessons from Second World War Anthropology," *Anthropology Today* 18, no. 3 (June 2002), 19.

²⁰ Irving Louis Horowitz, ed., *The Rise and Fall of Project Camelot: Studies in the Relationship Between Social Science and Practical Politics* (Cambridge, MA: MIT Press, 1967).

²¹ *Ibid.*, 47-49, 232-236.

²² Robert O. Tilman, "The Nonlessons of the Malayan Emergency," *Military Review* 46 (December 1966), 62.

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U.S. Defense Attaché to Sierra Leone providing information for emergency evacuation of personnel in Liberia, July 2003



786th Communications Squadron (Justin D. Pyle)

with congealing national and cultural identities, including a rediscovery of native languages long suppressed under Soviet policies.

The fragmentation of Cold War-era nation-states and the growing number of failed governments challenge U.S. diplomatic missions across the globe. Anti-Americanism and radical movements directed against the United States are on the rise. Even some traditional allies are no longer reliable. The U.S. military footprint grows smaller in many regions, raising the importance of maintaining access points with countries that are receptive to U.S. policies *before* a crisis occurs. Combatant commanders rely heavily on the diplomatic work conducted by Embassy country teams. But a decade after the lifting of the Iron Curtain, the Department of Defense (DOD) has not adequately adjusted to the security challenges facing the attaché corps and its military-diplomatic mission. This article outlines how transformation of the military attaché corps will substantially improve capabilities.

Supporting these diplomatic missions are Defense Attaché Offices (DAOs), ranging in size from an established organization comprised of 14 attachés under a general/flag officer in Moscow to fledgling, one-deep operations headed by Army majors in some Central Asian and Caucasus countries. The DAO is the permanent DOD office assigned to U.S. diplomatic missions. Headed by the Defense Attaché (DATT), it has complex command relationships with the ambassador, the combatant commander, Office of the Secretary of Defense, the Joint Staff, and the Defense Intelligence Agency. The ambassador's country team is a microcosm of the interagency with representation by most Federal agencies, all under the umbrella of the U.S. Embassy. The DATT represents all DOD organizations on the country team and manages complex command relationships with all these elements inside and outside the Embassy. In most cases, however, the attaché does not have formal authority

Transforming Military Diplomacy

By TIMOTHY C. SHEA

Since the collapse of the Soviet Union and concurrent with the war on terror, military attachés have been fully involved in a wide range of defense-related activities supporting national policymakers and combatant commanders. The political map has changed in the last decade, increas-

ing the importance of soldier-diplomats serving abroad. Since 1945, the international system has expanded from 51 sovereign states to almost 200 today. Ten years ago, the United States opened new Embassies in 14 countries on the territory of the former Soviet Union. Each of these newly independent Eurasian states has emerged

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Members of Defense Attaché Corps working on psychological survival factors during computer-based training, Fairchild Air Force Base

92nd Communications Squadron (Lapedra Tolson)

over other elements but merely coordinates their activity. The combatant commander has no direct link to the country teams within his area of operations. This flawed arrangement misses a tremendous opportunity to enhance interagency coordination.

Other obstacles undermine the effectiveness of military diplomacy, such as the prevailing view that an

the combatant commander has no direct link to the country teams within his area of operations

attaché assignment does not enhance promotion prospects. Unlike many officers who later became major military figures of the First and Second World Wars, few of today's general/flag officers have served as military attachés. The relative absence of intelligence professionals with attaché experience also inadvertently works to diminish the potential impact of its military-diplomatic mission. The situation is analogous to the Special Operations Forces (SOF) community before the value of its unique capabilities, professional sophistication, and small numbers was appreciated by the mainstream military some 20 years ago.

The transformed military attaché corps consists of three components: a new attaché headquarters at the combatant command, a fully manned DAO that handles all DOD functions and missions in-country, and an enhanced operational role for military attachés. Too much coordination at present takes place well forward in the Embassy because the "interagency process" is crippled at the combatant command level. It occurs primarily inside the Beltway or inside the Embassy. An attaché headquarters at the combatant command in the form of a new directorate could better reconcile guidance and policy both internally and with other Federal agencies to direct more effective operations in-country.

Especially in light of the recent Unified Command Plan (UCP) change moving Russia to the European Command area of responsibility, it makes good sense to reassign military attachés directly to combatant commands. During the Cold War, large portions of the globe were not assigned to combatant commanders, necessitating a centralized headquarters for attachés. Other DOD stovepipe organizations with narrow responsibilities managing in-country security assistance or arms control could

be eliminated and consolidated with other duties performed by military attachés. Reflagging these billets to more highly trained military attaché positions will improve efficiency without a net increase in overall DOD manpower. This realignment will better accommodate the valuable operational role of DAOs, increase attaché access to host nation counterparts, raise the level of bilateral cooperation, substantially reorder skewed mission priorities, improve information operations, and streamline the synchronization of assets in-country for improved strategic agility.

More than Protocol, Alcohol, and Cholesterol

The term *attaché* has a significant and precise meaning in diplomatic usage. A military officer simply sent abroad is not an attaché; he must be accorded full diplomatic status and, as such, is afforded complete diplomatic immunity. From the beginning, the military attaché was something of a hybrid in the world of international relations. He was part diplomat, part soldier, part scout, and perhaps, as Lord George Curzon suggested, not entirely welcome. Military attachés were the Nation's eyes and ears abroad in the days before satellite photography and sophisticated electronic collection techniques. For example, most of the information about Axis armed forces before December 1941 came from routine, tedious, and often unappreciated peacetime observations by Army attachés. The services sought congressional approval in September 1888 to establish a number of Army and Naval attaché positions in Berlin, London, Paris, Rome, St. Petersburg, and Vienna. Regulations authorized wear of the *aiguillette*, an item of military ornamentation and the international symbol of the military attaché, in 1910. At the outbreak of war in 1914, Washington had 23 attachés assigned abroad, and they had become a regular feature of the majority of Embassies.

During the Cold War, Secretary of Defense Robert McNamara designated

a senior military attaché in each foreign country—the DATT—to supervise and coordinate the work of all service attachés. While every military organization requires someone in charge, the current system arbitrarily designates the DATT from the various services to particular countries. The Army and Air

the primary attaché function of reporting is often considered to conflict with nonintelligence activities

Attachés are often the same rank, and even though one may be vastly more qualified to serve as the DATT, principles of service equities take precedence over competence. Selecting the best-qualified officer would dramatically improve the effectiveness of military diplomacy and ultimately force all services to develop serious foreign area officer programs.

The defense attaché system structure, mission, and manning have not evolved with the changes of the last decade that require increased levels of involvement in operational activity. The primary attaché function of observing and reporting is often considered to be in direct conflict with time and energy spent on other nonintelligence activities. Intelligence and military-

diplomatic activity are not zero-sum competing requirements. Narrow specialization by other DOD elements has undermined the overall effectiveness of the military attaché by reducing access to the host nation military. DOD representation abroad should be the military attaché. Security assistance and arms control would be better managed by trained attachés with the requisite language skills, cultural knowledge, and regional expertise. This approach

would eliminate parochialism, reduce overhead, streamline operations, and simplify bilateral coordination for the host nation military.

Transformation of the military attaché corps begins at the higher headquarters. The nature and function of a headquarters influence the priorities of its subordinate elements. By eliminating stovepipe organizations inside the U.S. Embassy in a consolidated DAO, the combatant command headquarters will need to establish a Politico-Military Directorate to manage, deconflict, and synchronize the activities of military attachés. This transformed organization will integrate national requirements for observing and reporting, supporting operational and exercise taskings, security assistance, and strat-

egy and policy. More coherent policy and guidance will enable the military attachés to apply the informational instrument of national power more effectively. Making the director of this new organization within each combatant command a general/flag officer with attaché experience will brighten the promotion prospects for attaché duty and attract higher quality officers.

Realigned Mission Priorities

Security cooperation and the war on terror have increased the strategic importance of military attachés serving abroad. Considering the extensive actions to coordinate the deployment of U.S. forces against the Taliban in Afghanistan and support the train-and-equip operation in Georgia, attachés provide a tremendous value to the combatant commanders as operators and reporters. Independent of transformation, they have four main missions that seamlessly blend.

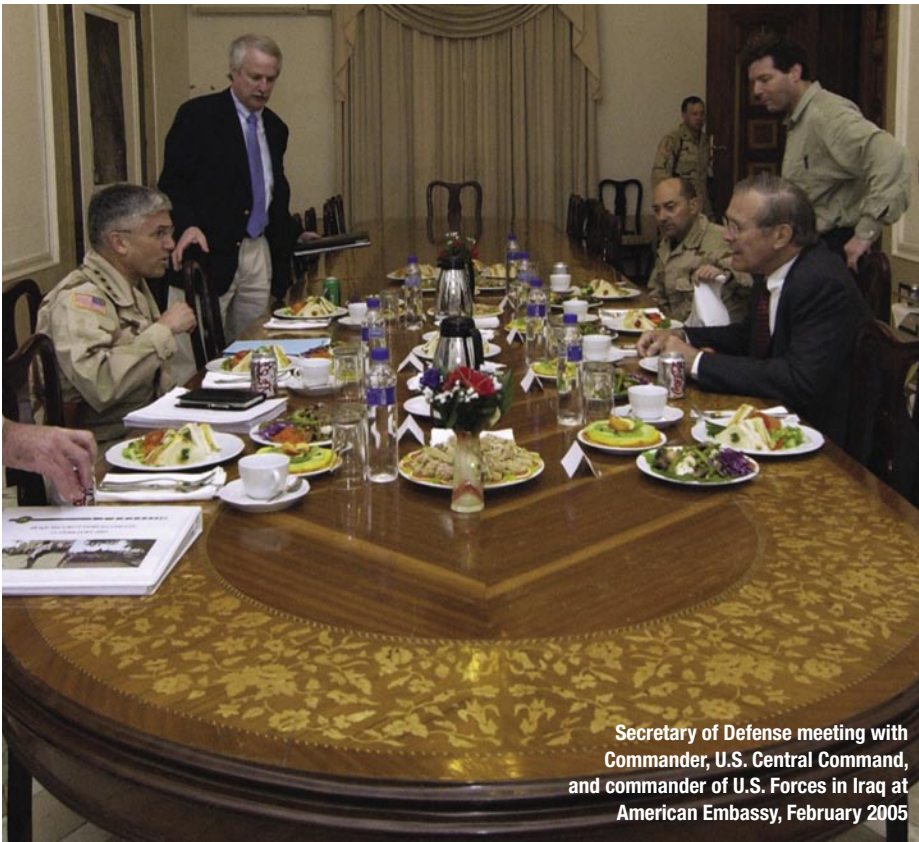
Advising the Ambassador. Military attachés must know the host nation military and strategic environment and be intimate with the U.S. military's capabilities to support diplomatic and engagement measures. The DATT provides advice on the full range of issues concerning regional security, to include the attitudes and intentions of the host nation and other nations engaged in regional activities. Finally, most DATTs also serve as the U.S. defense representative charged with managing the coordination of administrative and security matters of all DOD personnel who fall under responsibility of the U.S. Ambassador. However, this command relationship would be more effective with defense attachés assigned to the same higher headquarters as the other DOD elements—the combatant command.

Representing DOD to the host nation. More than playing a ceremonial role, military attachés are a highly visible symbol of the Armed Forces. Especially

DOD leaders and Defense Attaché in Copenhagen host meeting with Danish Minister of Defense at Pentagon, August 9, 2004



DOD (Robert D. Ward)



Secretary of Defense meeting with Commander, U.S. Central Command, and commander of U.S. Forces in Iraq at American Embassy, February 2005

1st Combat Camera Squadron (Cherie A. Thurlby)

critical in Eurasia where the Iron Curtain allowed for little interaction with Americans during the Cold War, they provide daily access to the host na-

many countries recognize the strategic importance of their attachés and send only their best abroad

tion military regarding information, capabilities, and strategies. They are generally contacted before all others in a crisis. They serve a large public diplomacy function as well.

Reporting conditions in the host country. Attachés observe military conditions and developments. This is a continuous mission that must be integrated into all their activities. To succeed in security cooperation, policymakers and decisionmakers require actionable information. It is often attaché input that makes for effective security cooperation programs. During periods of heightened tension and crisis, the attaché supports the combatant

commander by becoming his eyes and ears on the scene, responding quickly to time-sensitive information requirements. Increasingly, military attachés serve as the conduit for sharing information, especially in support of the war on terror. Lastly, corruption remains a huge problem in Eurasia, and military attachés provide oversight to monitor whether U.S. resources and funds are used appropriately.

Managing security cooperation programs. Worldwide, about half of all DAOs manage formal security assistance programs such as the International Military Education and Training (IMET) program and Foreign Military Financing (FMF). In activities unique to the former Soviet Union, the military attaché already plays a substantial role in coordinating and executing the extensive military-to-military programs, exercises, and deployments, which frequently dwarf IMET and FMF responsibilities. Even in coun-

tries with security assistance offices, attachés still make recommendations on spending priorities and approve IMET candidates.

Improved Manning Posture

Many DATT positions in remote regions are occupied by hard-working but junior majors or senior first-time attachés with limited choices for their terminal assignment. Lack of experience, language skills, rank, or maturity is not a recipe for success. Many countries recognize the strategic importance of their military attachés and send only their best abroad. Because of the symbolic and ceremonial importance of rank, and the requirement for experience and maturity, DATT billets should be filled by colonels (or Navy captains) and represented by the service that logically corresponds to that which dominates in the host country. Most importantly, DAOs must have sufficient depth to permit attachés to operate in multiple geographical locations.

To what degree is the United States able to resort to military power without dependence on foreign governments? The military attaché manages the day-to-day bilateral relations for national policymakers and combatant commanders. Transforming the attaché corps will substantially improve the steady state military diplomacy that must be conducted *prior* to any crisis. Changing the status quo will improve interagency coordination and provide the combatant commander the representation he needs within his area of responsibility. The military attaché corps must adapt to the new strategic environment, which demands skillful military diplomacy and knowledgeable professionals. Like the Special Operations Soldiers who achieved fame in Afghanistan by demonstrating their strategic value, military attachés have the potential to provide significant returns in the area of military diplomacy, while at the same time providing better reporting on a wider range of important issues.

JFQ

Soldiers preparing to depart Aviano Air Base, Italy, to become Combined Joint Task Force 76 in Afghanistan, Operation Enduring Freedom



31st Communications Squadron (Bethann Caporaletti)

The joint force, because of its flexibility and responsiveness, will remain the key to operational success in the future. The integration of core competencies provided by the individual services is essential to the joint team. . . . To build the most effective force for 2020, we must be fully joint: intellectually, operationally, organizationally, doctrinally, and technically.

— Joint Vision 2020, 2000

Expert Knowledge in a Joint Task Force Headquarters

By JOSEPH C. GERACI

Officers receive service-specific education and undergo experiences within their components that provide the expert knowledge that enables them to operate in their respective military departments. Given the Department of Defense (DOD) emphasis on service interoperability, what addi-

tional expert knowledge, if any, is necessary for an officer to operate effectively in a joint task force (JTF) headquarters? This article contends that officers in the grades of O-3 and O-4 (captains and majors, or lieutenants and lieutenant commanders in sea services) do *not* require additional formal expert knowledge because they receive an adequate amount during their service component education. Instead, it argues that informal expert knowledge in the form of true integration is essential to operate in a JTF headquarters.

Captain Joseph C. Geraci, USA, is the assistant chief of operations, G-3, U.S. Army Southern European Task Force, and served as a Joint Task Force Liberia battle captain at the JTF Main.

Marine CH-46E from USS *Iwo Jima* in Sierra Leone to evacuate personnel, August 2003



U.S. Air Force (Justin D. Pyle)

Officers in the grades of O-3 and O-4 generally receive little accredited formal joint education and have limited joint experience prior to operating in a JTF headquarters. Those in the grade of O-3 typically do not receive additional joint education outside of their service-specific primary schooling and usually do not have the experience of operating in a JTF headquarters or serving in a joint position identified in the approximately 9,000 billets on the joint duty assignment list. Even though many O-4s receive their first phase of accredited joint professional military education (JPME), most do not have previous JTF headquarters experience.

This article uses JTF *Liberia* as a case study to examine the issue of additional expert knowledge. This task force is especially interesting because its joint manning roster consisted of 101 officers, with 32 percent being O-3s and 31 percent O-4s. These percentages were the highest of any grades serving in the JTF headquarters. Therefore, these

grades made up the majority of officers, and they successfully performed their duties, with most utilizing only the knowledge and experience developed through their respective service component duties and education systems.

JTF *Liberia* was activated on July 25, 2003, and was operational until October 9, 2003. Its mission was to mitigate a humanitarian crisis in Liberia resulting from civil strife. The headquarters for U.S. Army Southern European Task Force, stationed in Vicenza, Italy, served as the core for the headquarters and received augmentation from all of the service components. At the height of operations, 5,000 members from the headquarters in Italy were spread throughout 9 West African countries or were afloat on USS *Iwo Jima* in the joint operations area off the coast of Liberia. The task force played a crucial role in coordinating the efforts of a 3,500-member force from 8 member states of the Economic Community of West African States (ECOWAS). To accomplish its mission,

the JTF headquarters also interacted closely with the United Nations, humanitarian organizations, the State Department, and an array of U.S. Embassies. In recognition of the accomplishments of the headquarters during JTF *Liberia*, the Chairman of the Joint Chiefs of Staff presented it the Joint Meritorious Unit Award.

Expert Knowledge of the Professional Officer

Armies and navies have existed for thousands of years but did not organize into the professional institutions recognizable today until the mid- to late 1800s. After the experiences of the U.S. Civil War, military leaders recognized the need to establish the officer corps as a profession in order to provide a dependable Army. William Tecumseh Sherman,

Commanding General of the Army from 1869 to 1883, sparked a professional reform movement by emphasizing education and training as a method of creating an officer corps that was “a truly professional body.”

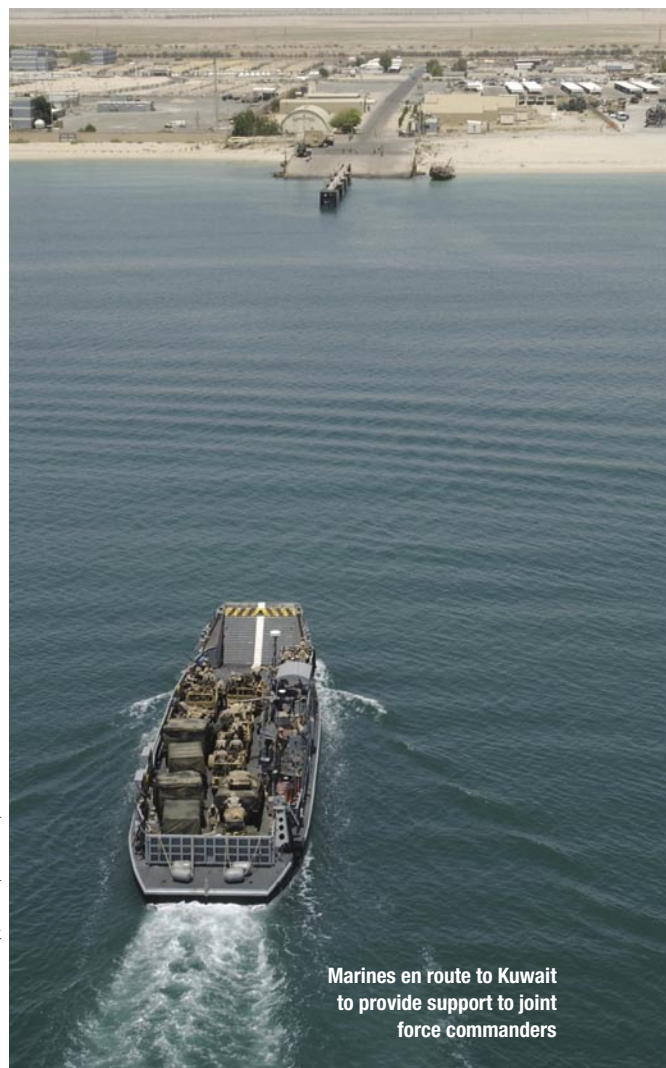
Social scientists began identifying the military officer corps as a profession in the mid-20th century. Pioneer studies by Samuel Huntington (*The Soldier and the State*, 1957) and Morris Janowitz (*The Professional Soldier*, 1960) both defined the officer corps as a profession whose members possessed expert knowledge. Huntington provided the basis for the theoretical model by which this article will analyze the JTF *Liberia* case study as it pertains to the acquisition and use of expert knowledge.

Huntington states, “The modern officer corps is a professional body and the modern military officer a professional man.” They are professionals because they possess the distinguishing characteristics of professionals—expertise (or expert knowledge), responsibility (to protect a defenseless society), and corporateness (self-policing with a regulative code of ethics). An officer’s expertise is in the field of “management of violence” and provides him a competence that is common to all officers—land, sea, and air. The expert knowledge is acquired through prolonged education and experience.

This article builds on Huntington’s model by further defining expertise as consisting of both formal and informal expert knowledge. Formal expert knowledge, acquired through educational institutions, provides officers a minimum founda-

tion to enter into their respective military fields. It consists of instruction in the form of doctrine, strategy, and tactics. Officers receive formal expert knowledge through two phases, according to Huntington: “a broad, liberal cultural background and specialized skills of knowledge of the profession.”

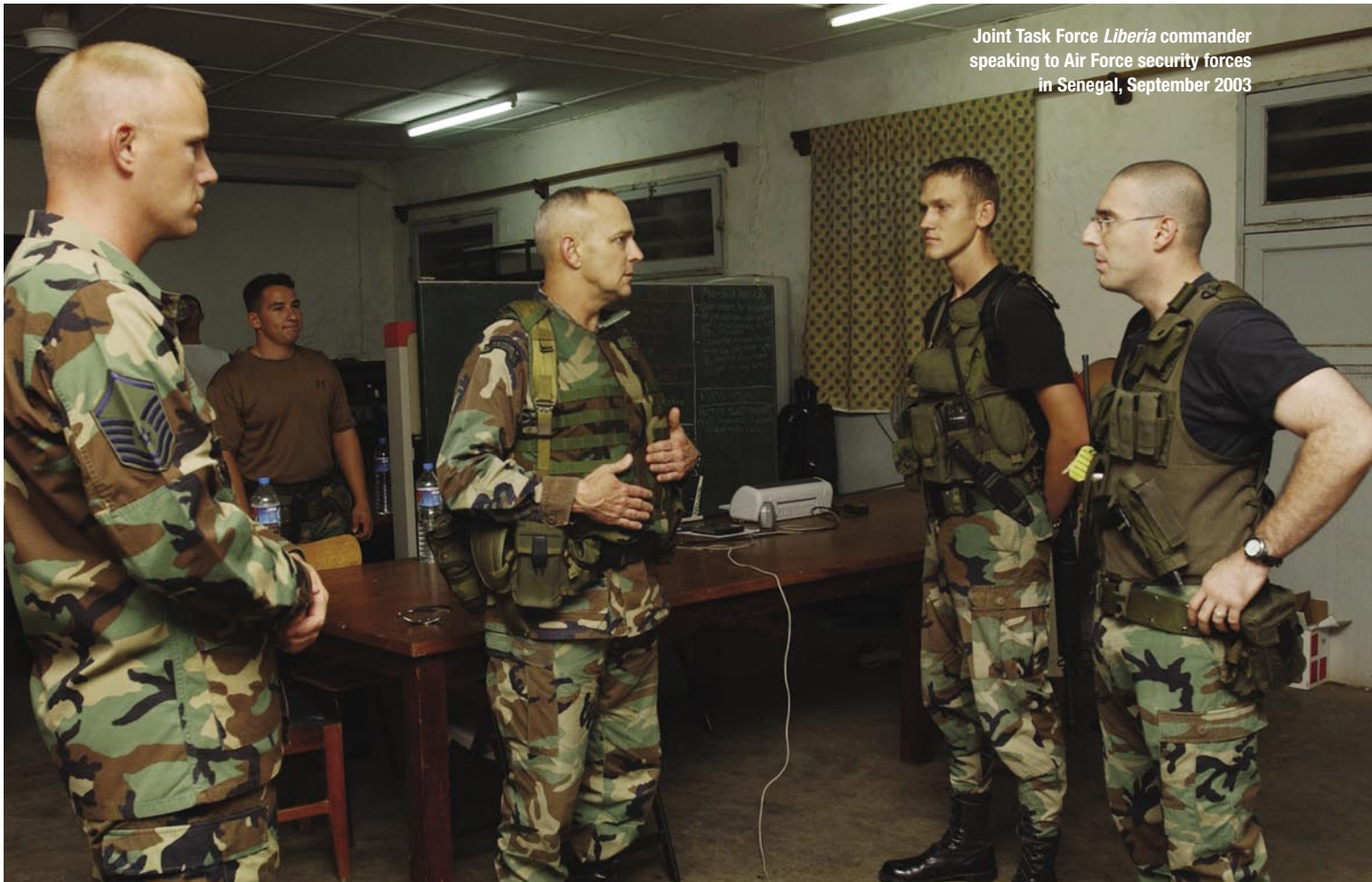
Informal expert knowledge is more experiential and builds on the foundation of formal expert knowledge. It assimilates officers into specific organizations and enables them to operate effectively in their assigned positions. It is acquired through an indoctrination and integration process that consists of an orientation to the specific operating systems, procedures, and idiosyncrasies of the duty position and organization. Both forms of knowledge are imperative for an officer to operate in a specific environment. The formal type provides the foundation, and the informal type enables officers to apply this knowledge as they execute their specific duties.



Marines en route to Kuwait to provide support to joint force commanders

Combat Camera Group, Pacific (Bart Bauer)

after the U.S. Civil War, leaders recognized the need to establish the officer corps as a profession to provide a dependable Army



Joint Task Force *Liberia* commander speaking to Air Force security forces in Senegal, September 2003

52nd Communications Squadron (Karen Z. Slocott)

Development of the Professional Officer

The Chairman of the Joint Chiefs of Staff (CJCS) has continued the legacy of cultivating officer professionalism initiated by General Sherman by developing the educational requirements for membership in the officer corps. Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 1800.01A, “The Officer Professional Military

Education,” structures the development of the professional officer and provides common educational standards and joint learning objectives for all professional military

education (PME) institutions. The instruction identifies areas of emphasis at five military education levels: precommissioning, primary, intermediate, senior, and general/flag officer. By providing the educational standards and joint learning objectives for each level, CJCS has identified the formal expert knowledge necessary for officers to begin in their respective fields. This formal expert

knowledge is sufficient for junior officers to enter a JTF headquarters.

CJCSI 1800.01A provides educational standards at each officer developmental stage. Only the first three phases will be discussed here since they deal directly with the targeted O-3 and O-4 grades. For the precommissioning education level (service academies, Reserve Officer Training Corps, and officer training and candidate schools), PME requires that institutions—as Huntington suggests—provide a broad, liberal arts education for military professionals while also orienting officer candidates/cadets to an education in basic U.S. defense structure, roles and missions of other military services, the combatant command structure, and the nature of American military power and joint warfare.

During the next education level for officers, the primary level (for O-3s), PME institutions are required to impart specialized skills of technical knowledge to provide newly commissioned and junior officers with the formal expert knowledge for service in their respective branch, warfare,

with effective integration into a JTF headquarters, officers can operate in a joint position with limited joint experience

or staff specialties. As part of the primary education level, service component PME institutions provide education covering the following joint learning objectives:

- fundamentals of joint warfare, JTF organizations, and the combatant command structure
- characteristics of a joint campaign
- national and joint systems support of tactical-level operations
- capabilities of the systems of other services.

The third level is the intermediate educational level (primarily for O-4s), consisting of the service intermediate-level PME institutions, Joint and Combined Staff Officer School, and service-recognized equivalent fellowship and international military colleges. The institutions at this level focus on warfighting within the context of operational art and expand student understanding of joint force employment. During training at this level, officers in the grade of O-4 receive their first accredited joint educational instruction in the form of JPME phase I. The joint learning objectives are national military capabilities and command structure; joint doctrine; joint and multinational forces at the operational level of war; joint planning and execution processes; and information operations and command, control, communications, and computers.

By providing education to meet the standards and joint training objectives outlined in CJCSI 1800.01A, PME institutions provide officers with sufficient formal expert knowledge to enter a JTF headquarters. This education provides O-3s and O-4s with a joint foundation. With the addition of informal expert knowledge in the form of an effective integration into a JTF headquarters, these officers can operate in a joint position even with limited joint experience.

Effective Integration

Effective integration enables officers in the grades of O-3 and O-4 to operate competently in the joint arena as part of a JTF headquarters. It is also critical to the joint reception, staging, and onward movement of units that can meet the combatant commander's operational requirements. Moreover, a deliberate integration process provides officers with the informal expert knowledge to assimilate augmentees into the staff quickly.

During JTF *Liberia*, most O-3s and O-4s performed their duties using only the knowledge and experience developed through their respective service component duties and education. No officer in the grade of O-3 came to the headquarters

with any accredited joint education instruction, and only 3 percent of those had previous JTF headquarters experience. No O-4 who served in the JTF *Liberia* headquarters completed any joint education instruction beyond JPME phase I, and only 16 percent of those officers had previous JTF headquarters experience.

After these officers were integrated into the headquarters, they were able to perform effectively while filling essential positions on the joint manning roster. Key examples were J-1, Chief of Strength Management Division (filled by an O-3); J-2, Assistant Joint Intelligence Support Element Chief (filled by an O-3); and J-3, Joint Operations Center officer-in-charge (filled by an O-4). The officers who filled O-3 and O-4 positions performed duties that proved absolutely vital to JTF *Liberia*. That was possible because they came to the headquarters with sufficient formal joint expert knowledge and were then integrated.

So what is effective integration and how is it accomplished? The integration process should contain an orientation in at least four elements:

- the current operating situation
- JTF headquarters joint standard operating procedures (JSOP)
- command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR) systems—battlespace management
- capabilities of each service component involved in the operation.

During the orientation to the current operating situation, a designated agent from each staff element should provide an overview from the element's perspective. This orientation should cover current and previous disposition of friendly and enemy forces and significant activities and present the published orders from both the JTF headquarters and the higher headquarters. It should also cover the command relationships with higher and subordinate units. This orientation would bring new officers up to date on the current situation and help them understand the commander's intent, critical information requirements, and the concept of operations. The end-state for the orientation should be that new officers have the same operating picture as the JTF commander and the subordinate components. The integration process should next focus on the JSOP for the JTF headquarters.

The JSOP provides guidelines and standard procedures to help new officers perform their duties in the joint headquarters. It enables them to understand how their position relates to other

personnel and the specific day-to-day duties expected of them. Such activities may include the time and format for the battle update briefings; boards, centers, cells, and working group meetings; shift procedures; maintenance of situation awareness through periodic staff huddles; and staff drills for actions ranging from mission planning and orders production to joint operations center actions during battle drills. Knowledge of the JSOP is important because it also shows how the JTF staff plans, disseminates information, and communicates with subordinate units and higher headquarters.

With the advanced technology used in the JTF headquarters, an orientation to the battlespace management systems is an important part of integration. New augmentees must know how to apply the capabilities of the systems in order to plan, execute, and communicate with subordinate units, different staff elements in the headquarters, and higher headquarters. JTF *Liberia* possessed a suite of compatible information management tools that enabled it to maintain situational awareness, conduct parallel planning, and widely disseminate information.

with the advanced technology in the JTF headquarters, an orientation to the C⁴ISR systems is an important part of integration

The C⁴ISR systems facilitated all elements of the task force to share a near-real-time and commonly shared understanding of operations. While contractors and technical support were available to establish and troubleshoot the battlespace management systems used by JTF *Liberia*, training was required during integration to enable augmentees to operate and gain maximum benefit from the systems. The following overview of the C⁴ISR systems used by the task force highlights the importance of JTF headquarters having an orientation to battlespace management systems as part of the integration process.

■ *JTF Liberia Web page.* The JTF Web page provided a globally accessible and secure means for users to gain and maintain situational awareness. It also enabled the joint task force to distribute information widely. Members of the Army and joint staffs frequently accessed the Web page for timely information. Each JTF headquarters staff section was responsible for updating its own link. The headquarters conducted update briefings to the JTF commander using the Web page platform in conjunction with secure video teleconferencing, which enabled a widely distrib-

uted audience to maintain a shared and current understanding of the situation and the evolving commander's guidance.

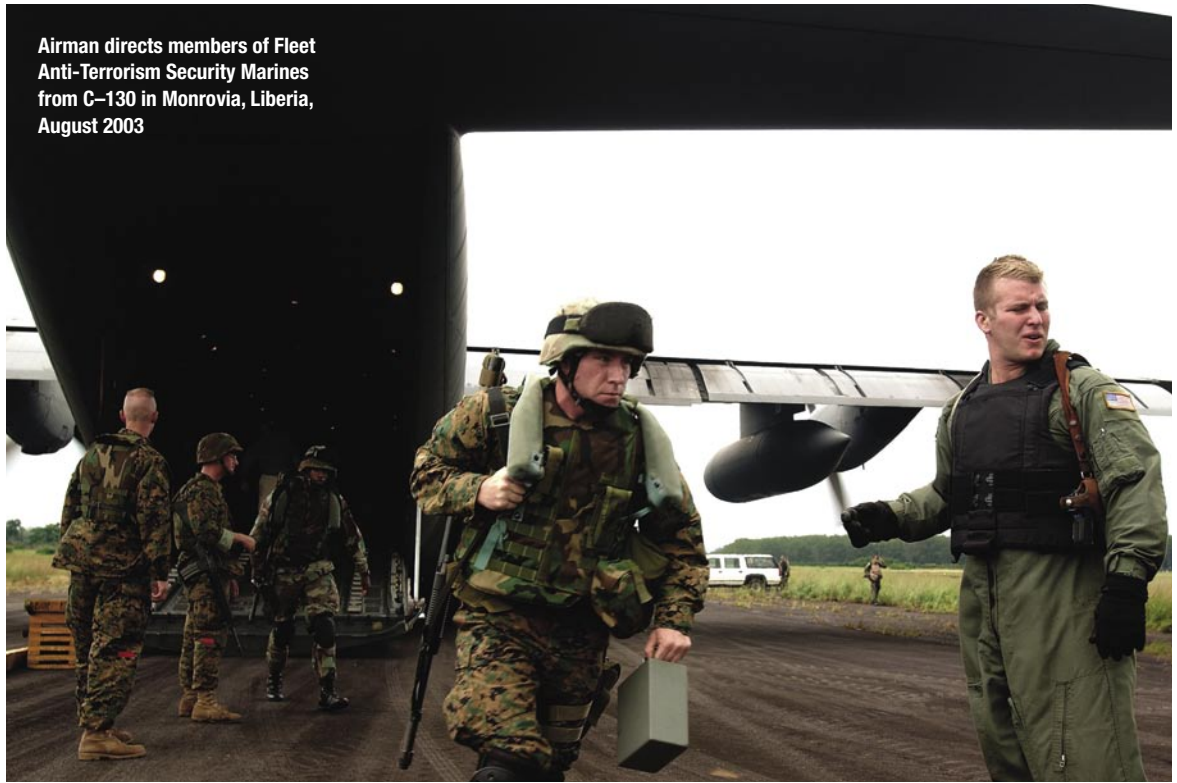
■ *Defense collaborative tool suite (DCTS).* For collaborative parallel planning, JTF *Liberia* used the DCTS routinely. For example, during the daily commander's conference call, the headquarters utilized it to tie in Special Operations components in Europe, Air Force components in Africa, a JTF liaison officer team to ECOWAS, the JTF Main in Europe, and the JTF Forward. One Marine commander used it to conduct a backbrief for his plan for noncombatant evacuation contingency operations to the JTF *Liberia* commander and supporting components. The real-time capability of DCTS provided a common understanding of the mission and the commander's guidance instantaneously.

■ *Global broadcasting system.* This system enabled the JTF headquarters to transfer high-bandwidth files, link the JTF with national and theater systems, and access real-time feeds—for example, from unmanned aerial vehicles. It also provided access to U.S. and international news media.

■ *Global Command and Control System—Army (GCCS-A).* The command and control personal computer (C²PC), a system of GCCS-A, is what JTF *Liberia* primarily used to display deployed forces in near-real time. C²PC displayed forces in a standard format on any type of map data available from the National Geospatial-Intelligence Agency from 1:5 million scale down to 1-meter imagery. This system gave headquarters a common operating picture 24 hours a day, 7 days a week.

The next recommended element of the integration process is an orientation to the service components. Even though officers receive a basic orientation through PME institutions, they need a more detailed familiarization with the specific services involved in the JTF headquarters. A representative from each service should provide an orientation ranging from ranks and service-specific vernacular, to the details of the systems and units the service has dedicated to the headquarters. This explanation echoes Joint Publication 1 in that “all members of the Armed Forces must understand their fellow services to the extent required for effective operations.” An orientation to the vernacular is important because the services daily use the same words with different meanings. For example, the Navy uses *casualty* for a maintenance shortfall on a vessel, while the Army uses it to describe a Soldier injured, killed,

Airman directs members of Fleet Anti-Terrorism Security Marines from C-130 in Monrovia, Liberia, August 2003



786th Communications Squadron (Justin D. Pyle)

or missing under hostile fire. Also, new officers in the headquarters must know the capabilities of the assets committed by each service component.

The joint task force successfully used an integration process that resembled this proposed model. As an example of its effectiveness, during the JTF *Liberia* experience, a joint planning group consisting of an O-3 from each service component developed a detailed plan to deploy the JTF

new officers in the headquarters must know the capabilities of the assets committed by each service component

Liberia Forward personnel and equipment from Italy to USS *Iwo Jima* before it entered the joint operations area. This was one of the first times a JTF headquarters was established aboard a Navy vessel that was committed to another operation (*Iraqi Freedom* in the Persian Gulf). The deployment entailed the JTF Forward leaving Italy on Air Force C-130s, Air Force personnel in Africa transloading the JTF Forward from the aircraft via contracted material handling equipment, and then Marine Corps CH-46s and CH-53s transporting the personnel and equipment to the vessel just before it steamed into the region. Without providing junior officers with the informal expert knowledge in the form of an effective integration, this complex and detailed plan could not have

been executed as effectively.

Professional military education institutions provide officers with formal expert knowledge. Adding informal expert knowledge in the form of an effective integration brings to fruition Samuel Huntington's statement that an officer's expertise provides him with a competence that is common to all officers—land, sea, and air. Professional military educational institutions provide officers in the grades of O-3 and O-4 with sufficient formal expert knowledge to enter the JTF headquarters. Of critical importance is the ability of a headquarters to receive the officers and provide them the informal expert knowledge to be integrated into the staff. The proposed model contained herein suggested covering four elements for the integration to succeed: orientation to the current operating situation, the JSOP, battlespace management systems, and service-component capabilities. As demonstrated by JTF *Liberia*, it is absolutely necessary to assimilate these officers fully by providing informal expert knowledge in the form of an effective headquarters integration process. **JFQ**

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Members of NATO Response Force,
Dogانبey, Turkey, 2003

A Deployable Joint Headquarters for the NATO Response Force

By MICHAEL L. MCGINNIS

At the North Atlantic Treaty Organization (NATO) summit held in Prague in November 2002, the central topic was how to deal with threats from international terrorism, hostile regimes, and rogue states. Recognizing the need for a military force capable of responding quickly to crises outside NATO's traditional area of operations, the nations voted unanimously to create a standing, deployable joint task force.

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In October 2003, the North Atlantic Council stood up the NATO Response Force (NRF), which will consist of 22,000 to 24,000 soldiers, sailors, airmen, and special operations personnel when fully operational in the fall of 2006. The NRF will provide a credible joint task force capable of deploying within 5 days of a North Atlantic Council decision to commit forces and conducting "stand-alone" operations for 30 days. NRF experimentation through certification in 2006 serves as a catalyst for transforming NATO into agile forces for new missions ranging from humanitarian relief to forced entry into a hostile environment.

This article focuses on two major aspects related to standing up a new headquarters for the NRF: transforming a traditional joint staff (J-staff) into a deployable, flexible organization capable of planning and assessing effects-based operations (EBO); and bridging the gap between EBO concepts and putting them into practice.

Command and Control

Command and control of the NRF will be accomplished through a small, deployable joint task force (DJTF) headquarters, commanded by a one- or two-star officer, and capable of planning and coordinating a relatively new application concept for conducting military operations called effects-based operations. Command will rotate yearly among three static parent headquarters: Joint Force Command (JFC) Brunssum, Netherlands; JFC Naples, Italy; and a new three-star Joint Headquarters near Lisbon, Portugal.

The DJTF headquarters (HQS) will serve as the joint force commander's forward command post. The headquarters must meet the same deployment and sustainment standards as the NRF forces and cover the core J-staff functions (J-1 through J-9) of the parent headquarters. A generic NRF command structure illustrates how the parent headquarters is supported by a three-star advisory staff representing each service component—land, sea, and air—and the liaison relationships between the three-star advisory staffs and two-star component commands. The forces are generated from the two-star land component command, maritime component command, and air component command.

Operation Stavanger

Preliminary work to establish a deployable joint headquarters at JFC Naples involved weeks of home station planning that produced a draft document of staff responsibilities and standing operating procedures. This phase culminated with Brigadier General Rick Lynch, USA, Assistant Chief of Staff for Operations, and his staff planning a 7-day deployment exercise to build the headquarters team and conduct vignette-driven, effects-based staff training.

Key assumptions and operational factors important to DJTF HQS design were obtained from NATO documents and guidance from NATO

leaders such as General James L. Jones, Jr., USMC, Supreme Allied Commander, Europe, and Admiral Gregory G. Johnson, USN, combatant commander, Joint Force Command Naples.

- The NRF was to demonstrate initial operational capability by October 2004 and reach full capacity by October 2006.

- The DJTF headquarters is limited to about 90 personnel assigned to JFC Naples. Operational capabilities include deploying within 5 days of a decision by the North Atlantic Council; conducting self-sustained, 24-hour operations for 30 days; and covering the J-1 through J-9 staff functions of the parent headquarters.

On February 1, 2004, over 90 military personnel from 11 nations assigned to Joint Force Command Headquarters Naples, designated as NATO's first deployable joint task force headquarters, departed from Naples to Stavanger, Norway, under the command of General Lynch. The location for the deployment exercise was NATO's new Joint Warfare Center (JWC) at Ulsnes, outside Stavanger. According to British Army Major General James Short, JWC Chief of Staff, the JFC Naples contingent was the first group to use the training facility, which was recently converted from a Norwegian naval station. Modernization will continue to network and digitize the center for NATO staff training. In addition to training headquarters personnel, the exercise was intended to build team cohesion among headquarters personnel and engage the JFC Naples staff responsible for providing reach-back.

Challenges to Standing Up

NATO is in the midst of shifting the focus of its forces from symmetric warfare against the former Warsaw Pact countries to deployable response to asymmetric threats across a much broader range of missions outside Alliance boundaries. Change is hard under any circumstances but especially in a joint, multinational environment for a variety of reasons:

Varying language skills. Although English is NATO's official language, many individuals assigned to multinational staffs have limited English skills. Language differences present serious communication barriers to transformation and operational effectiveness.

Disparity in military experience. Each nation in the Alliance has a unique leadership development program. In a multinational headquarters, rank alone is no guarantee that an individual assigned to a position has the requisite education and experience.

the deployable joint task force headquarters will serve as the joint force commander's forward command post

ongoing operations have exposed serious gaps with traditional J-staff processes for planning and conducting operations against asymmetric threats

National caveats. NATO operations require significant consensus building. All 26 member nations must be in general agreement on the scope of operations before the North Atlantic Council

will issue an activation order to take military action. Even after such an order is issued, nations may decline to conduct specific operations, invoking national caveats. Claiming these or other restrictions, individuals assigned to a multinational headquarters may forego exercises or deployments.

Intelligence sharing, computers, and information systems. Successful operations depend on shared intelligence, clear communications, and interoperability of computer and information systems across echelons and headquarters and with multinational, international, and private nongovernmental organizations. NATO has not yet resourced a full suite of interoperable communications, information systems, and support infrastructure for conducting such operations.

Deployability constraints. North Atlantic Council consent is required to plan contingency operations and to take preliminary actions such as coordinating logistics, lines of communications, sea- and airlift, and host nation support. Council restrictions will constrain rapid deployment of the DJTF headquarters.

Stovepiped headquarters. Ongoing operations in Bosnia, Kosovo, Afghanistan, and Iraq have exposed serious gaps with traditional J-staff processes for planning and conducting military operations against asymmetric threats. Pursuing a broader range of lethal and nonlethal effects will drive changes to military headquarters, especially at the joint operational level.

Time-driven planning process. The DJTF headquarters is required to deploy within 5 days of alert. Time horizons mandated for headquarters planning are: current operations, 0 to 72 hours; future operations, 3 to 10 days; and future plans, 11 to 30 days. Time-driven planning over a rolling horizon presents unique challenges that demand proficiency, speed, agility, and flexibility across all aspects of headquarters operations.

These challenges, mandated operational requirements, and past experience with headquarters design led General Lynch to break with a traditional stovepiped organization and adopt a flexible, modular, matrix architecture composed

of loosely coupled cells able to work collaboratively to produce joint, operational-level fragmentary orders (FRAGOs).

Applying Effects-Based Operations

After 15 years of dynamic changes to the global geographical-political-military landscape, a new set of threats to peace and stability has emerged in the form of asymmetric drug cartels, crime syndicates, and terrorist groups that are often either harbored or sponsored by rogue states. Asymmetric threats operate outside societal norms to destabilize, undermine, or compromise legitimate governments through terror, violence, brutality, and intimidation. In operating against these elements, military forces have relearned the lesson that an elusive, less sophisticated adversary can function effectively, even when outnumbered and overmatched, by circumventing and neutralizing the size and technological advantages of modern forces. Effects-based operations are one approach to countering asymmetric threats that takes a holistic system-of-systems view of the battlespace.

Effects-based operations is not a new theory of warfare; its principles have been practiced for centuries. In the era of modern warfare, however, EBO represents a new application concept that pursues a higher order of effects beyond the physical results achieved from applying military means to military objectives. It offers planners a way to anticipate, trace, and exploit both physical and psychological effects of military and nonmilitary actions on all systems that make up the battlespace. However, complex relationships among societal groups, key persons, systems, decisions, actions, and means make it difficult to predict effects and outcomes.

The driving premise behind EBO is to control or influence the state of the battlespace through actions that control or influence the systems, key individuals, and societal groups inside and outside the battlespace. Its actions are intended either to maintain the current state of a nation or its social systems, or to change their state. Desirable states typically reflect conditions such as stability and security while undesirable states are characterized by disorder and insecurity. Undesirable states generally result from deliberate actions by a nation, rogue state, or group to destabilize a nation or society, or from gross neglect, abuse of power, incompetence, poor governance, or a lack of stewardship by leaders. Effects-based operations seek either to restore the desirable state or, in event of a conflict, to dictate conditions such



NATO

Turkish troops rappelling from helicopter, Exercise Allied Response 2003

as the tempo of operations, thereby denying adversary forces the means, will, and opportunity to carry out coordinated and effective actions.

A review of the literature yields a substantial body of research on the theory of effects-based operations. However, with the exception of effects-based joint targeting by the Air Force, there is little discussion of practical aspects of applying EBO or reorganizing a military headquarters for effects-based planning at the operational level. Insights into applying EBO within the DJTF headquarters came primarily from four sources:

- discussions with military strategists, analysts, and personnel who either were researching EBO or had recent experience in warfighting headquarters at the joint, operational level
- lessons learned from recent warfighting experiments such as Millennium Challenge '02 and NATO Multinational Exercise '04
- personal experience with headquarters design

- General Lynch's experiences operating against asymmetric threats at JFC Naples and as the Assistant Chief of Staff, Kosovo Force Main, Kosovo.

Given past professional experiences and fundamental principles of effects-based operations distilled from background research, the authors developed an iterative three-phase methodology for applying EBO within the deployable, joint, operational-level headquarters. Phase I decomposes the battlespace into a system-of-systems in a way that broadens the scope of how military planners see and understand it. Phase II lays out how to plan and apply EBO across the full spectrum of battlespace systems, using military and nonmilitary means to achieve higher order effects beyond those of military means alone. Phase III focuses on the assessment of effects-based actions to ensure that operations progress toward the desired endstate.



NATO Response Force change of command, June 2004

as the exercise progressed, the product-focused cell structure forced the staff to work outside their previous headquarters staff experience

Maturing the DJTF Headquarters

Operation *Stavanger* was carried out in four phases: alert and predeployment preparation; deployment; battle staff training and after action review, including senior mentor feedback; and redeployment. Different aspects of headquarters functionality were evaluated during each phase.

Metrics for evaluating progress and success of the deployment are listed below.

Deployment assessment. Verifying that personnel assigned to the DJTF HQS have 12 months remaining at JFC Naples to be stabilized on the DJTF team; manifesting and processing headquarters personnel for deployment via military airlift from Naples to Stavanger with no discrepancies; and conducting movement of the team to JWC Ulsnes without incident.

DJTF HQS staff training assessment. Assessing English-speaking skills of assigned personnel; through exercise events, stimulating the staff to work at least four of seven NRF missions; putting

effects-based concepts into practice by conducting effects-based planning and assessment; measuring the time required to complete a crisis action cycle from crisis event to issuance of military orders; and publishing a draft DJTF HQS staff standing operating procedure by the end of the exercise.

Redeployment assessment. Redeploying the team from JWC Ulsnes without incident.

During the training phase, a series of three vignettes drove evolution of the headquarters design, forced maturation of staff processes, and exercised reach-back with JFC Naples. These vignettes also gave the headquarters opportunities to exercise interoperability, command and control, communications, and information systems. In response to each vignette, the DJTF HQS staff planned contingency operations and issued FRAGOs based on the commander's guidance while tracking the commander's critical information requirements, conducting crisis action responses, developing operational-level decisive points, and planning stability and support operations, counterterrorism operations, and demilitarization of local paramilitary groups.

Between vignettes, the cells refined routine and crisis action procedures, and the entire headquarters conducted after action reviews led jointly by Generals Lynch and Short. Feedback guided changes to headquarters design and helped refine standing operating procedures and information and workflow models. During the first few days of the exercise, the staff tended to work exclusively within assigned cells as they struggled through the vignettes. As the exercise progressed, the product-focused cell structure forced the staff to work outside their comfort zone of previous headquarters staff experience. By the final vignette, the staff was observed working collaboratively across cells to develop an integrated, synchronized plan for applying military and nonmilitary means to achieve the commander's intended effects. The organization evolved from a stovepiped headquarters to a matrix, information-centric structure of loosely coupled cells.

Overview of Headquarters Cells and Liaisons

The command group supports the commander, manages DJTF staff operations, and ensures that the intent and guidance from both the joint task force and DJTF headquarters commanders are clearly communicated and understood. Command group members include the chief of staff, information operations officer, political adviser, legal adviser, public information officer, and medical adviser.

USS *McInerney* departing Rendsburg, Germany, en route to joining NATO Response Force, February 15, 2005



U.S. Navy (Frank Behling)

The Combined Joint Operations Center (CJOC) serves as the central point of communications and information management while submitting and responding to requests for information. Other members include the psychological operations officer, civil and military cooperation officer, nuclear, biological, and chemical officer, and component command liaisons.

The Operations and Intelligence Cell combines J-3 operations and J-2 intelligence functions. It manages the battlespace by synchronizing all military and nonmilitary means, develops situational awareness, coordinates effects-based operations with JFC and component commands, and analyzes friendly and enemy capabilities, risks, and vulnerabilities.

The Effects Cell develops and analyzes effects-based plans and coordinates and assesses effects-based operations. Other responsibilities include identifying effects and subeffects, recommending metrics for measuring progress and success, and analyzing and recommending operational-level means (diplomatic, political, information, military, and economic) for achieving intended effects and the desired endstate.

The Sustainment Cell coordinates and schedules J-4 operations and host nation support. Other responsibilities include personnel (J-1), computer and technical support (J-6), resources and contracting (J-8), medical, terrain, and weather analysis, and determination of sustainment risks for movement control and protection of main supply routes and air- and seaports of debarkation.

The Crisis Action Team (CAT) and Joint Planning Team (JPT) give the headquarters a way to react rapidly to unanticipated crises that cause a breakdown in the DJTF headquarters normal battle rhythm. The ad hoc teams form when the CJOC transmits a net call to deal with a specific crisis. The CAT scopes out and bounds the problem, briefs the commander, and recommends whether all or part of the crisis should be handled by the DJTF headquarters and NRF or passed to the parent headquarters. Based on commander's guidance, the Crisis Action Team disbands and a Joint Planning Team works through the EBO process to bring the crisis to an acceptable end state. Once the JPT produces a FRAGO that lays out effects, metrics, and means, in the form of a course of action approved by the DJTF headquarters commander, the team stands down.

The Observation, Liaison, and Reconnaissance Team provides initial information gathering, situational awareness, and intelligence and

establishes liaison and conducts initial coordination of support with the host nation, nongovernmental organizations, and private volunteer organizations prior to arrival of the DJTF headquarters.

Component command liaisons communicate and coordinate orders, actions, and effects with their respective headquarters. Other key responsibilities include representing component force commanders and providing advice and expertise on standing operating procedures, tactics, and processes.

The small operational footprint of the forward deployed DJTF HQS simplifies force protection and life support requirements for the headquarters, but also limits capabilities and functionality to what is mission essential. Therefore, parent headquarters provide support via reach-back, including supplying paper and digital maps, providing operations analysis, preparing higher-level orders and plans, developing prioritized joint target lists, identifying infrastructure (power, roads, water, sewer), preparing country-specific studies and profiles of key leaders, and coordinating and communicating through high-level diplomatic, political, and military channels.

Accomplishments of the DJTF Team

The initial effort to stand up a deployable NATO headquarters during Operation *Stavanger* simultaneously transformed the headquarters into a flat, efficient team organized for 24/7 operations. Conventional staff processes for generating decisions and orders were reengineered around the flow of information, making it possible for the headquarters to prepare decision briefings quickly and efficiently and produce joint, operational-level orders. The combination of strong leadership by senior members of the DJTF team, an aggressive training agenda, and feedback from the JWC observers/trainers took headquarters proficiency beyond what was initially anticipated. The headquarters also bridged the gap between EBO theory and application. The deployment to Stavanger, Norway, also resulted in several NATO firsts:

- first major training exercise to be conducted at NATO's new Joint Warfare Center
- first deployable NATO headquarters to be stood up capable of deploying within 5 days of alert and conducting self-sustained 24-hour-a-day operations for 30 days
- first NATO headquarters to be reorganized from a traditional J-staff military headquarters into a cell-based organization for effects-based operations.

Perhaps the most important accomplishment of Operation *Stavanger*, however, was the high cohesion the DJTF achieved in the first 48 hours. On arriving at Stavanger, General Lynch immediately set the tone for the week by delaying the start of training so he could clearly communicate the goals of the exercise to all DJTF members and JWC observers/trainers. He also set aside time the first evening for the team to socialize. Training was again delayed the next morning for a group meeting where all 90 members of the DJTF team from 11 nations stood up in front of the group and, in English, introduced themselves and gave their military backgrounds. The introductions were the first time many had spoken before a large body, and they later said it made them feel more "connected." The socialization and introductions were the beginning of trust relationships. By the end of the week, the team had become a highly cohesive unit. The camaraderie and enthusiasm were never more evident than at the end of the flight back from Stavanger, when General Lynch stood at the bottom of the stairs and shook hands with everyone who deplaned. The enthusiastic, backslapping goodbyes on the tarmac demonstrated the collective spirit. And observations and lessons learned were plentiful.

Information bottlenecks not eliminated. Although the headquarters made only modest progress at reducing information queues and technology related bottlenecks, the flat, modular cell structure demonstrated superb agility throughout the exercise in responding to both routine and crisis actions.

Improved information flow. Restructuring the headquarters cell structure around the flow of information improved that flow, which improved decisionmaking. By the end of the exercise, decision cycle time from crisis to communication of orders was improved by over 25 percent, reducing the time from 12 to between 8 and 10 hours.

Transformation takes time. Maturing staff processes and liaisons with parent and component commands will require time and training. A significant breakthrough in efficiency will call for headquarters at all levels to fully integrate modern information, computer, and communications technologies and to adopt an enterprise approach to information and workflow processes.

Value-added products and services. As an intermediate headquarters, the DJTF HQS adds value by delivering timely, useful products and services to component commands. Examples include analysis that connects the dots by providing insights into,

and anticipation of, enemy intents, capabilities, and vulnerabilities; developing a complete and accurate effects-based picture of the battlespace; and producing orders that coordinate and synchronize the efficient, effective use of joint assets to accomplish effects-based operations.

Selecting the right people and stabilizing the team. Progress made during Operation *Stavanger* confirms that creating a deployable, multinational joint task force headquarters is an attainable goal. However, sustaining the headquarters will be a challenge. NATO nations must acknowledge that NRF missions place unique demands on the DJTF team and assign personnel to the headquarters with the knowledge, experience, and communication skills to:

- conduct effects-based operations
- conduct regular training to develop and maintain the expertise required of a combined, joint, operational-level headquarters
- synchronize assignments with operational requirements, stabilizing personnel for a full tour so that once trained, the team remains together throughout the operational phase.

Operation *Stavanger* helped transform the DJTF team into an adaptive, innovative learning organization. NATO must develop new strategies for educating and for developing and conducting the individual and collective staff training necessary to continue this mission.

Headquarters staff at all levels must become technically competent at using information technologies, data management mining techniques, computer simulation models, and communications technologies to support planning, analyzing, and assessing effects-based operations.

The DJTF headquarters is by no means fully trained at effects-based operations, nor is it yet able to plan the full range of EBO. Nevertheless, in the exercise the headquarters clearly established a baseline capability for EBO. The team will refine information and product flow as well as staff responsibilities and battle rhythm. Lessons learned from Operation *Stavanger* will be incorporated into future DJTF headquarters designs and will help Allied Command Transformation in Norfolk, Virginia, to develop new NRF doctrine.

Dynamic Action '04 in March 2004 at JFC Naples focused on refining standing operating procedures, exercising reach-back with the parent headquarters, and maturing liaison with component commands. In April, the deployable joint task force headquarters conducted a no-notice



NATO

deployment exercise to an undisclosed location to test deployment procedures and verify deployability of personnel assigned to the headquarters. *Allied Action '04* in late May and early June forward deployed the headquarters to Persona, Italy, to conduct a major exercise leading to initial operating capability in October. Building on progress made thus far will ensure that NATO fields a capable operational force for meeting its broader goals of fostering military cooperation among member nations and strengthening joint, international planning for the common defense of the Alliance.

JFQ



E-8C Joint Surveillance Target Attack Radar System (JSTARS), an airborne battle management and command and control platform that conducts ground surveillance

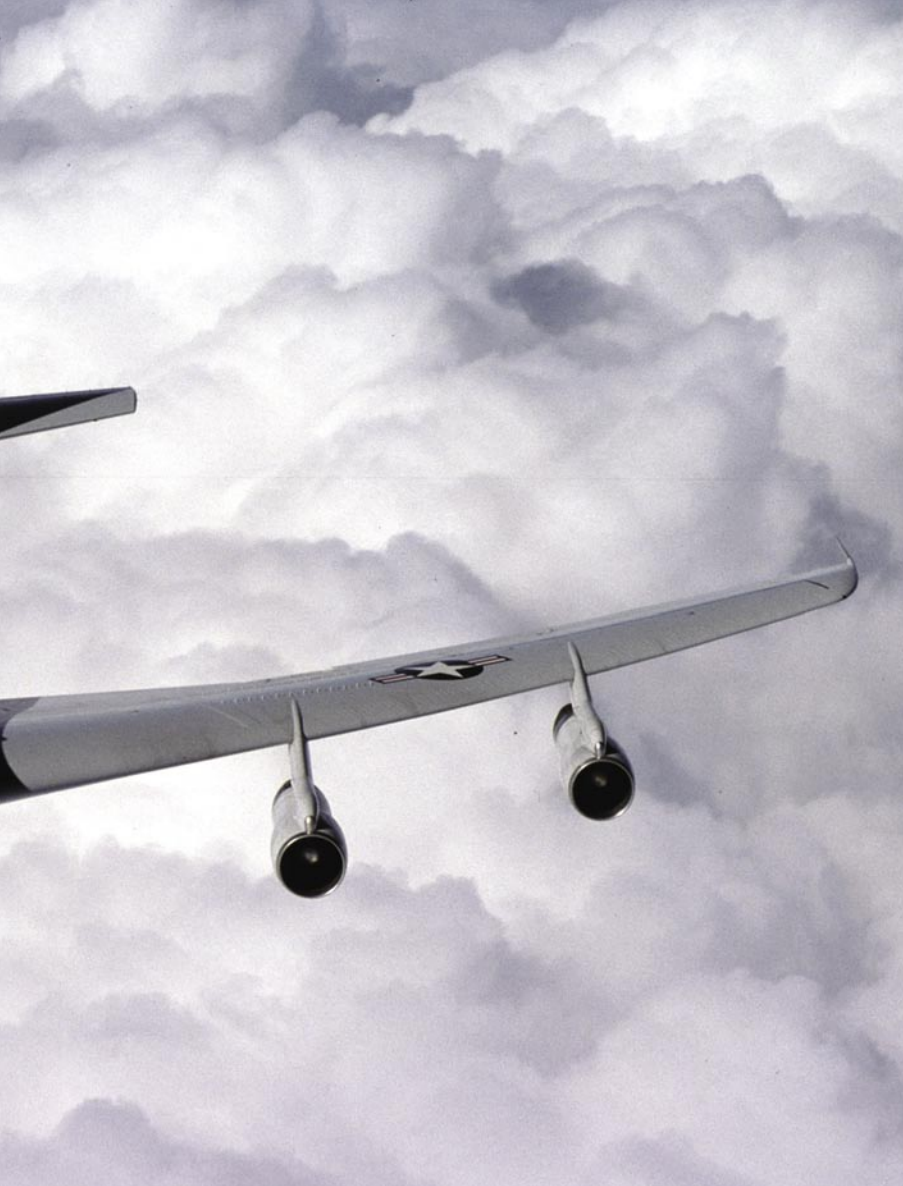
The value of information exists in time since information most often describes fleeting conditions. Most information grows stale with time, valuable one moment but irrelevant or even misleading the next.

—Marine Corps Doctrine Publication 6

Expeditionary Airborne Battlespace Command and Control

By PAUL DOLSON

Paul Dolson is developing command and control architecture concepts in Lincoln Laboratories at the Massachusetts Institute of Technology.



U.S. Air Force

capabilities. Yet unlike many of the technological developments exploited in past wars, developed largely by or for the military, today's advances are predominantly the result of commercial enterprise and are available to virtually anyone with the resources to purchase them and the wherewithal to use them. As a result, the advantage afforded U.S. forces by information superiority will become even more fleeting. That fact, particularly in light of the quicker, lighter, more mobile, and more lethal forces envisioned by *Joint Vision 2020* and the vision of the Joint Chiefs of Staff for joint operational concepts, leaves little doubt that speed of command will become increasingly important in future conflicts.

This article suggests that within its command and control (C²) doctrinal precepts and architecture, both current and proposed, the Air Force will find it difficult to integrate seamlessly within and become an indigenous part of a transformed future dominant maneuver force. Furthermore, it suggests that forward air control—commanding from the front rather than the rear—is an enduring principle of airpower. The airborne battlefield command and control center (ABCCC) was more than a flying radio relay platform or a long loiter forward air controller (FAC); it was a forward air command element engaging in maneuver warfare.

Background

As they get further and further away from a war they have taken part in, all men have a tendency to make it more as they wish it had been rather than how it really was.

—Ernest Hemingway

Throughout history, combatants have sought an advantage over their adversaries in large part by achieving some degree of information superiority. They have sought greater knowledge of enemy troop dispositions, preparedness, intentions, and weapons, all the while concealing similar information about themselves. Always, the advantage such knowledge afforded was ephemeral; commanders had to act rapidly, while the information was still relevant and the advantage still existed. Always, speed of command and action has been critical to a military's ability to seize and maintain the advantage. And always, exploiting such an advantage has required a force capable of moving with enough speed, agility, surprise, and lethality to create a rapidly deteriorating situation with which an adversary could not cope—the essence of *maneuver warfare*.

Today, the U.S. military enjoys a tremendous advantage in terms of rapid and reliable communications technology as well as in advanced intelligence, surveillance, and reconnaissance (ISR)

The ABCCC was originally developed in the 1960s during the Southeast Asia conflict. The requirement for such a capability resulted from the unique characteristics of the counterinsurgency and unconventional warfare operations encountered in Southeast Asia. According to one declassified report, "Control of ground areas fluctuated; clear-cut battle lines were usually nonexistent; [and] air operations were not conducted solely in South Vietnam." Flexibility and the ability to make quick command decisions to respond to rapidly changing tactical situations were key elements of the ABCCC concept of operations. Continued the report, "The heart and soul of the air effort in Laos and the reason for any success achieved was largely attributable to the forward air control team consisting of an ABCCC and



F-16s testing interoperability upgrades with NATO Airborne Warning and Control System aircraft

U.S. Air Force (Tom Reynolds)

FAC.” The Vietnam experience demonstrated the value added by the ABCCC’s ability to provide more responsive and reliable close air support (CAS) to ground forces. More importantly, it also demonstrated how greater speed of command can contribute to the efficacy of airpower by identifying and exploiting fleeting opportunities when they appear on the battlefield.

The ABCCC was a vital link in the battlespace C² chain during Operation *Desert Storm*. From

the airborne battlefield command and control center was a forward air command element engaging in maneuver warfare

January 16 to February 28, 1991, the EC-130E flew 201 sorties, providing an almost constant command and control presence. Because the ABCCC was airborne,

it was able to communicate with and manage tactical forces operating beyond the normal communications coverage of other tactical air control system elements, such as the Air Support

Operations Center and the Control and Reporting Center. “The mobility and communications advantage inherent in the Airborne Battlefield Command and Control Center platform enabled it to stay abreast of the current ground and air situation within its assigned area of responsibility.” Among the conclusions and lessons learned from a command and control perspective was that “ABCCC battlestaff could indeed serve as the joint force commander’s on-the-scene, air-to-ground battle managers, allocating CAS to the most lucrative targets.”

During operations in Kosovo, the ABCCC once again provided a key command and control link helping North Atlantic Treaty Organization (NATO) air commanders to manage air support for Operation *Allied Force*. Kosovo illustrated the tremendous complexity of managing the battlespace and performing real-time targeting in urban environments. Even in the absence of significant ground forces and the resultant low

CAS requirements, Kosovo demonstrated that the combined forces air component commander needed an on-the-scene command presence. The elusiveness of the Serbian forces further complicated an already daunting NATO targeting process. Finding and striking them proved difficult and was exacerbated by the distances involved for the strike aircraft, which resulted in shorter target area loiter times and less time to locate and strike targets. Had the United States not possessed an ABCCC, the targeting information the strikers and FACs had to work with would have been only as good as the location information they had when they took off. The ABCCC was able to relay critical targeting information in real time between the Combined Air Operations Center (CAOC) in Vicenza, Italy, and the airborne FACs and strike aircraft in the Balkans, providing an increased combat effectiveness that otherwise would not have existed.

In the two most recent operations involving U.S. forces, the EC-130E ABCCC platform was not available. The Air Force had retired it in 2002 on the premise that the CAOC would have sufficient communications resources to exercise command and control over vast distances in a widely distributed battlespace. In the absence of an ABCCC, the airborne warning and control system (AWACS) and joint surveillance and target attack radar system (JSTARS) had to fulfill the battlefield management role. This led to problems, both real and perceived, in providing air support to ground forces in a widely distributed battlespace.

In the cockpit of upgraded U-2 reconnaissance plane



U.S. Air Force

For example, Afghanistan presented a number of problems to commanders during Operation *Enduring Freedom*, a truly distributed series of combat operations. The air war was run from the CAOC at Prince Sultan Air Base, Saudi Arabia; the ground operations were controlled from Kandahar, Afghanistan; and supporting aircraft came predominantly from 479th Air Expeditionary Wing at Al Udeid Air Base in Qatar, joined occasionally by aircraft participating in Operations *Northern* and *Southern Watch*. These distributed operations led to coordination problems between air and ground forces that were exacerbated by the absence of an ABCCC. Because of the tremendous distances involved, the CAOC could neither communicate directly with, nor provide command and control to, many aircraft in the Afghanistan theater. As a result, AWACS crews pulled double duty, providing deconfliction and radar control to aircraft transiting the airspace while simultaneously responding to numerous requests for CAS. Providing command and control and establishing communications with battlespace participants proved difficult. There were instances of preplanned strike aircraft flying through the formation of aircraft attempting to support ground forces.

During Operation *Anaconda*, crews flying in AWACS were overwhelmed by requests for CAS. According to one account, "Without ABCCC to sort through the CAS requests and prioritize the missions of strike aircraft . . . officers flying in E-3 AWACS aircraft and working from the CAOC struggled to sort out dozens of urgent requests from troops under fire." The incident at Tarnak Farms, in which an F-16 inadvertently attacked Canadian forces while they were conducting a live-fire exercise, demonstrated the potential for tragedy in a dynamic and widely distributed theater.

The resounding success of *Iraqi Freedom* might lead one to believe the military is right where it needs to be in terms of command and control; however, air support to the rapidly moving and widely distributed ground forces again proved problematic. In its after-action report, 3^d Infantry Division complained of inadequate coordination between air support and their ground operations. Because of the tremendous speed of its movement and the lack of both responsive "on the scene" air command and control and a reliable means of relaying radio communications, there were cases of airstrikes in the 3^d Infantry Division area of control. In one instance, an F-15E mistook a multiple launch rocket system for a

surface-to-air missile battery, killing three and wounding six Soldiers. The Marines also encountered problems coordinating ground support in the absence of the ABCCC. Their solution was to reconfigure several of their KC-130s to be used as airborne Direct Air Support Centers.

Although AWACS and JSTARS performed admirably in their respective design roles, as an ad hoc ABCCC they were not as effective as the Air Force hoped. While both did well with kill boxes,

each had difficulty responding rapidly to changes and opportunities in the battlespace, and CAS operations quickly overwhelmed them. Their ability to control kill boxes, however, did not demonstrate their ability to fulfill the ABCCC role. In fact, kill boxes represent a compromise, in terms of fire support coordination measures, between what the ground forces need to support an agile and fluid scheme of maneuver and what the Air Force can provide in real time. While kill boxes can be useful emergency or back-up fire support coordination measures, routine reliance on them acknowledges the continuing difficulty the Air Force has integrating into a rapidly moving joint maneuver force and with providing proactive real-time command and control of airborne the-

ater attack assets. The problems experienced were by no means a result of poor performance on the part of AWACS or JSTARS but rather a reflection of their disparate primary missions with respect to that of the ABCCC. JSTARS is predominantly an ISR platform, and when conflicts arose between its primary function and secondary functions—in this case coordinating CAS—the primary role won out. In the permissive air environment of Iraq, AWACS had only to deconflict airspace, not track air threats. However, had there been an air threat, it too would have had to prioritize its primary mission over assisting with CAS. In addition to not having a real battlefield C² capability, neither aircraft had an ideal communications relay capability to support rapidly changing situations on the ground.

Defining the Problem

In his later years Pablo Picasso was not allowed to roam an art gallery unattended, for he had previously been discovered in the act of trying to improve on one of his old masterpieces.

— Unknown

Although much of the discussion in the aftermath of Afghanistan and Iraq has focused on problems with CAS, those problems are actually a symptom of a much larger issue—command and control—and what was really missing was the on-scene eyes and inherent flexibility of command and control that the ABCCC brought to the fight. In a College of Aerospace Doctrine, Research, and Education report, Robyn Read uses the operations in Afghanistan to illustrate the shortfalls of CAS in a “non-linear attack mode” within the context of “small wars.” Although much of his discussion deals primarily with the shortcomings of CAS operations, these shortcomings are a symptom of a larger problem: the inability of airpower, within the current doctrinal precepts and C² architecture, to integrate effectively within an agile, fast-moving, nonlinear, joint force scheme of maneuver. In any event, one would certainly have to agree with his assertion that:

air battle command and control were critical elements for CAS in the past but fell out of favor and into relative disuse for a variety of institutional reasons. In a sort of “back to the future” logic, we need to dig into the CAS problem and reenergize the “old” parts that worked and update those technologies and doctrine that are insufficient or inadequately tailored to this mission.

in the Afghanistan theater, there were instances of preplanned strike aircraft flying through the formation of aircraft attempting to support ground forces



Test flight of X-45A unmanned combat aerial vehicle over Edwards Air Force Base

Defense Advanced Research Projects Agency



Ground crew moving NKC-135 equipped with infrared signature technology

While technology has provided the military with dramatically improved warfighting capabilities, fully realizing and exploiting these capabilities requires that future forces become more inherently joint. They must be *born* joint. They must be network-centric and capable of seamlessly integrating to form a combined-arms, dominant-maneuver force that thinks and acts as one. Future operations will be characterized by light, mobile, networked forces moving rapidly and simultaneously from several different axes in a widely distributed theater of operations; lethal attacks on selectively engaged targets with high probability of success; fewer casualties and less collateral damage; and a better-informed force able to prosecute war at higher levels of effectiveness and lower levels of violence. With the technologies available today, as well as those on the near horizon, the net-centric, dominant-maneuver forces envisioned in *Joint Vision 2020* are within reach. These technologies

will enable the military to act with greater speed, agility, and a more measured and precise lethality; however, they will also dramatically complicate battlespace command and control.

The fundamental challenges facing the command and control of a net-centric, dominant-maneuver force are related to two broad areas: communications technology and C² doctrine or philosophy. First, a net-centric force would require a fast, reliable network that is secure and accessible to all participants in the battlespace. Second, the C² architecture and procedures used by these net-centric forces must be rapidly responsive to changes and fleeting opportunities within the battlespace. Ultimately, to obtain and sustain information superiority, and to achieve dominant maneuver, the myriad activities and communications taking place within the modern battlespace must be constantly integrated and acted on in real time.



E-8C JSTARS aircraft arrives at Robins Air Force Base

U.S. Air Force

future operations will be characterized by light, mobile, networked forces moving rapidly and simultaneously from several different axes

A good deal of effort is being directed toward the technological challenges of net-centric warfare, such as the DOD Global Information Grid (GIG), the Air Force C² Constellation, and the Army's digital battlefield concept. The GIG is a globally interconnected end-to-end set of information capabilities, associated processes, and personnel for collecting, processing, storing, disseminating, and managing information on demand to warfighters, policymakers, and support personnel. The C² Constellation is a network of systems that will tie into the GIG and create a battlespace information and data sharing network. The Army program is intended to network forces in the field and push information and C² responsibilities down to the brigade and lower levels to create a more dynamic and agile maneuver and assault capability.

In terms of C² philosophy, the Army is moving toward greater information sharing and autonomy at the operational and tactical levels. The Army interpretation of *power to the edge* includes not only making necessary data and information accessible at the brigade and lower levels but also providing greater autonomy for field commanders. The Air Force, on the other hand, views power to the edge as more of a technical, infor-

mation-sharing issue, such as data transfer capability from sensor to shooter, or even sensor to weapon, using machine-to-machine communications while retaining and executing C² functions from a central, geographically separated CAOC, perhaps even from the continental United States. At the strategic level and for real-time command and control of a Global Strike Task Force, this approach makes tremendous sense. At the theater operational and tactical levels, however, it is impractical. Although the CAOC can maintain general situational awareness through a globally networked C²ISR architecture, it cannot communicate directly with battlespace participants, nor can it direct theater aircraft that will be acting as an integral element of a fluid and agile dominant maneuver force—moving and operating in complete concert with ground forces.

Expeditionary Airborne Command and Control

Commanders who do not empower the staff to act on their behalf will become prisoners in their own headquarters, out of touch with reality and limited in their ability to influence events.

—Marine Corps Doctrine Publication 6

Since the Air Force will usually fight as part of a joint combined arms team, it should reexamine the concept of forward, decentralized airborne command and control and investigate the pos-

net-centric forces that rely on smooth and continuous push-pull information sharing cannot afford to be disconnected by an asymmetric computer network attack

sibilities of an Expeditionary Airborne Battlespace Command and Control Center (EABCCC). While it is essential that the Air Force exploit technology to save money and resources and reduce its forward footprint, the footprint cannot be entirely eliminated. As Robyn Read suggested, the Air

Force should reenergize the ABCCC concept. It should abandon the elements that are no longer relevant, but it shouldn't "throw

the baby out with the bath water." It must address the challenges of speed of command within a nonlinear, fast-paced modern battlespace. It should update the technology and doctrine that are inadequate for the modern battlespace and develop new interoperable technologies and C² doctrine that will better integrate airpower within a combined arms, dominant-maneuver force at the tactical level.

In addition to providing a forward senior air command presence, an EABCCC may also require a self-contained "roll-off" communications capability (capsule) to serve as a secure and stable means to tie into the GIG. Today, commercial carriers provide 95 percent of all transmission services and infrastructure for the GIG. Unfortunately, they tend to view network security as business, which is not always the same as security for military operations. Net-centric forces that rely on smooth and continuous push-pull information sharing cannot afford to be disconnected by an asymmetric computer network attack on some link in the grid. Having their own mobile hub could provide greater isolation and ensure forward commanders have uninterrupted, secure connectivity with their forces as well as reliable reach-back to rear area headquarters elements and associated joint collaborative planning and communications resources. A mobile capsule could act as the hub of a battlespace-wide area network.

Once the capsule has been offloaded, the EABCCC aircraft could then act as the airborne beyond-line-of-sight trunk completing the battlespace-wide area network and would need the capability to fuse data from theater and national ISR assets, as well as ground force-developed information, to develop and promulgate a common relevant battlespace picture to all participants to include blue and red force tracking. In this capacity, an EABCCC would be a critical component of a commander's ability to maintain

constant battlespace awareness and to exploit fleeting opportunities through the rapid application of airpower.

Remaining Questions

Whoever can make and implement his decisions consistently faster gains a tremendous, often decisive advantage. Decision making thus becomes a time-competitive process, and timeliness of decisions becomes essential to generating tempo.

—Fleet Marine Force Manual 1

The problems experienced in recent operations, which were at least in part attributable to the absence of an ABCCC, were overcome in many instances by ingenuity and, in some cases, luck. Nevertheless, the consensus among the services is that future operations will require some sort of ABCCC capability. Should an EABCCC include a forward air operations control team to provide tactical and operational level C², or should it just be an airborne line-of-sight communications relay and beyond-line-of-sight gateway? Should it include a mobile capsule to serve as a battlespace-wide area network trunk and hub for reliable GIG connectivity? Should the Air Force move a senior command element forward to lead joint maneuver forces in conjunction with the forward senior ground commander? These are just some questions that should be addressed in coming years. Which of these concepts or technologies will prevail remains to be seen.

Despite their apparent differences, there is one sustaining idea within the Army and Air Force programs and philosophy of decentralized C²—the need for a reliable gateway to link the various elements of the network via line-of-sight communications and to act as the bridge and wideband beyond-line-of-sight trunk to the GIG. By separating the doctrinal differences of C² from the technical, the Department of Defense can move forward to find the solutions necessary to support a transformed warfighting philosophy. Through joint experimentation, it can employ a "try it before you buy it" strategy to explore not only potential technology solutions, but doctrinal employment solutions as well. One thing seems certain: as the military transforms to a lighter, more mobile expeditionary force, the need for a more agile and responsive theater air C² structure will increase.

JFQ

Chinese guided missile destroyer *Shenzhen* departing Apra Harbor, Guam, 2003



U.S. Navy (Nathanael T. Miller)

Chinese and American Network Warfare

By TIMOTHY L. THOMAS

China published a fourth version of its white paper on national defense in December 2002.¹ The document received positive comments from U.S. analysts for its greater sophistication than previous versions and mild criticism for its continued lack of detail. Subjects addressed included China's security situation, defense policy, armed forces, international security cooperation, and arms control and disarmament. But there was a noticeable lack of attention to *information warfare* (IW) and *information operations* (IO), subjects to which the congressionally mandated DOD study, "The Military Power of the People's Republic of China," paid

particular attention in 2002.² In addition, China's 2004 white paper failed to address IW but focused on the revolution in military affairs and the topic of informationalization, which was mentioned more than 20 times.

This 2002 white paper, however, did note that information technologies (IT) have helped stretch the battlefield into "multidimensional space, which includes the land, sea, air, outer space, and electron." The last term, in U.S. documents, usually refers to the information sphere. The form of war, the paper added, is becoming information oriented. High technology was listed as an acquisition priority, and 20,000 kilometers of fiber optic cable was laid in western China, while in October 2000 the General Staff organized a computer networking and electronic countermeasure exercise

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around Beijing. Finally, the paper noted that in 2001, many People's Liberation Army (PLA) studies and exercises explored the features and patterns of an integrated network-electronic warfare (INEW) concept. Thus, while not specifically highlighting IW or IO, information-related topics were mentioned.

INEW is worthy of further note. Earlier in 2002, in the journal *China Military Science*, Major General Dai Qingmin, head of the 4th Department of the General Staff, explained the concept, which he had first mentioned in the August 2000 issue of that journal. Parts of Dai's 2002 article contradicted the white paper. For example, he stated

many People's Liberation Army studies and exercises explored an integrated network-electronic warfare concept

that the concept placed more emphasis on active offense, whereas the paper emphasized a tradi-

tional active defense focus. Dai equated INEW with IO, which the white paper did not, noting that it "serves as information operations theory with Chinese characteristics." It is strange that the 2002 Pentagon report on China did not mention this concept, a theory that appears to be a half cousin to the wildly popular Pentagon transformation concept of *network-centric warfare* (NCW).

This article compares General Dai's INEW concept with the U.S. network-centric warfare concept and highlights their strengths and weaknesses. Many issues arise. For example, both concepts evade the fog and friction of war, assuming perfect information and ignoring those problems at their own peril. Further, both are bathed in their own cultural environments. The United States used a business metaphor when discussing NCW. Dai, on the other hand, noted that INEW refers to an overall concept, method, and strategy for guiding IO, not a set of hardware and software or a single system, and puts "the wings of network warfare on traditional electronic warfare." Clearly, moving from kinetic to network-based warfare will be an interesting transformation as different nations look at new developments in their own ways.

Integrated Network-Electronic Warfare

Dai's 2002 article, "On Integrating Network Warfare and Electronic Warfare," noted several topics of interest:

- IO contradictions
- IO centers of gravity
- network weaknesses
- importance of IT training

- achieving information superiority
- definitions of information war and other terms, all with Chinese characteristics.³

Dai argues that information warfare is composed of six "forms": operational security, military deception, psychological war, electronic war (EW), computer network war, and physical destruction. He made only one further reference to psychological operations in the article and never again mentioned operational security, military deception, and physical destruction. Electronic warfare and computer network warfare thus captured most of his attention.

INEW, according to Dai, refers to a series of combat operations that use the integration of electronic warfare and computer network warfare measures to disrupt the normal operation of enemy battlefield information systems while protecting one's own, with the objective of seizing information superiority—similar to the U.S. definition of IO. While network war disrupts processing and use of information, EW disrupts acquisition and forwarding of information. The core of computer network warfare is to "disrupt the layers in which information is processed, with the objective of seizing and maintaining control of network space." EW is targeted at networked information systems and informationalized weapons in order to increase combat effectiveness. INEW is essential for the system-versus-system confrontation on the informationalized battlefield.

Dai did not use the term *network centric*, although there seem to be similarities between his and American concepts. For example, a subtitle on the cover of a U.S. publication, *Network Centric Warfare*, states that the concept is for "developing and leveraging information superiority." The INEW objective, according to Dai, is not to develop and leverage but simply to seize information superiority.

INEW emphasizes integrating combat operations by merging command, forces, objectives, and actions. Command integration is its unified planning, organization, coordination, and control. Forces integration is its use in a complementary manner. Objective integration is its simultaneous use against enemy command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR), while action integration is its coordination to produce combined power. Dai listed the characteristics of INEW as its comprehensive nature, its integrated methods and expansive nature ("battlespace"), and the integrated nature of its "effectiveness."



Launching AsiaSat-6 communication satellite aboard Chinese-made Long March 3B rocket from Xichang, April 12, 2005

AP/Wide World Photo (Lu Gang Xinhua)

Forces integration implies the synthesis of platforms with networks.

The concept has a comprehensive effect on the enemy when it destroys C⁴ISR, according to Dai, thereby constraining decisionmaking and strategic planning. C⁴ISR systems are integrators

information operations revolve around destroying enemy systems and protecting friendly ones

and force multipliers, the focal point of IO. Dai did not address what would happen if INEW only damaged or disrupted systems,

but one can imagine that the effects would be severe if not disabling. Integrated INEW methods can be developed into a unified plan and organization for action, and the expansive nature of battlespace (Dai implies an informationalized bat-

tlefield replete with information-based systems) allows for noncontact and nonlinear operations as well as full-depth integrated attacks. Finally, the main targets are enemy military, political, economic, and social information systems, making the potential effectiveness greater than any traditional combat operation form.

Information operations revolve around destroying enemy systems and protecting friendly ones. Acquiring and forwarding information relies on electronic warfare, while processing and using the information relies on computer networks. INEW provides the means to participate in the system-versus-system confrontation and for attaining information superiority since systems are centers of gravity for combat forces. People and weapons become insignificant when not structured within a system. This concept appears similar to the U.S. idea of systems integration except for its emphasis on ideology and philosophy. However, nowhere does Dai entertain fog and friction in the information age; he presents his argument as if there were no such problems.

The Chinese see the main combat contradiction as being between starting and stopping the flow of information in both the electromagnetic sphere and the space occupied by networks. An example of a successful operation would be disrupting information processing and obtaining control over network space, thereby disrupting the enemy knowledge system and preventing commanders from obtaining information required to make decisions. The struggle for information superiority is vital since it is a precondition for seizing sea, air, and space superiority.

When discussing China's "two transformations," Dai again emphasized the active offense. He noted that the first transformation means changing from just EW to several forms and methods, such as INEW. The second transformation is to emphasize both defense and offense, with the "priority being the development of offensive information operations equipment." Again, this goal directly contradicts the emphasis in the white paper on the active defense. It is not clear whether the Chinese deliberately downplayed offensive operations in the information age or it was a rebuff to Dai's article. With regard to strategy, Dai noted that China must make breakthroughs at weak points, seize the commanding high ground, leap out of dead ends, coordinate development, and grasp key junctures.

Finally, Dai noted that implementing INEW required an "information warfare personnel de-

velopment plan.” Information operations command personnel who understand technology and can manage as well as staff personnel and trainers are needed to teach and carry out ideological work. Combat personnel are needed to study, research, train, and fight. Finally, it is necessary to develop competencies for merging networks and electronics. Academies must develop specialized courses, deepen reforms, and send large numbers of multitalented IO personnel to units.

Putting the INEW plan into action will require the use of theoretical achievements and modeling the battlefield deployment and other situational aspects of an enemy force. Perhaps this is being accomplished via computer network brigades or reserve IW units serving as opposition forces against the PLA. In China, theory guides training, and rules and regulations are produced from evaluating the training.

Most likely, Dai’s article was condensed from his earlier work. One critique of that work stated that the concept of INEW demonstrated that

traditional strategic theories are being rethought, new strategies mapped out, and new confrontation strategies advanced

China no longer only learns from foreign militaries but has developed innovative theories with special Chinese military features.

Further, the critique reiterated (as did Dai’s 2002 article) that systems represent the center of gravity of combat forces and that systems integration uses information as a control mechanism to form a combat capability greater than the sum of its parts. To American IO theorists, however, the Chinese approach does not appear to have as many special “Chinese characteristics” as it purports. INEW sounds similar to American theory of a few years ago, when system-of-systems research was more fashionable.

In fact, not only Chinese but also some U.S. commanders highly regard electronic warfare, even at the expense of computer network attack. For example, General Hal Hornburg, USAF, Chief of Air Combat Command, noted that IO should be separated into three areas: manipulation of public perception, computer network attack, and electronic warfare. Only the latter should be assigned to the warfighter.⁴

In the 2000 article Dai stated that the means of integrated application of information fighting will initially be the integrated application of networks and electronics and that the key to gaining the initiative in IO lies in the establishment of an

“active offensive.” Dai also noted that an IO is a series of operations with an information environment as the basic battlefield condition, with military information and an information system as the direct operational targets, and with EW and a computer network war as the principal forms.⁵

Dai further noted that information operations are both confrontations focusing on forces and arms and, more importantly, trials of strength focusing on knowledge and strategies, meaning the emphasis should be on strategies. As technology has reinforced human initiative, it has also highlighted the role played by a confrontation of strategies. Now traditional strategic theories are being rethought, new strategies mapped out, and new confrontation strategies advanced.

Network-Centric Warfare

In 1998, Vice Admiral Arthur Cebrowski, USN (Ret.), the director for space, information warfare, and command and control (N-6), and John Garstka, the scientific and technical advisor for the directorate for C⁴ systems on the Joint Staff (J-6), wrote an article focused on business adaptations to the information age:⁶

- The power of network-centric computing comes from information-intensive interactions between large numbers of heterogeneous computational nodes in the network.

- Competitive advantages come from the co-involvement of organizations and processes to exploit information technology, employing network-centric operational architectures consisting of a high-powered information grid, a sensor grid, and a transaction grid.

- The key to market dominance lies in making strategic choices appropriate to changing ecosystems.

The authors then noted that network-centric operations offered the same dynamics to the military. Strategically, that meant understanding all the elements of battlespace and battle time; operationally, it meant mirroring business ecosystem linkages among units and the operating environment; tactically, it meant speed of operations; and structurally, it meant that network-centric warfare required sensor and transaction grids and an information grid supported by command and control processes needing automation for speed. Network-centric warfare reportedly enabled a shift from attrition warfare. Speed enabled a force to have more battlespace awareness, mass effects instead of forces, and foreclose enemy courses of action. It also offset disadvantages in numbers, technology, or position and was capable of locking out alternative enemy strategies and locking in success.

This list is significantly different from Dai's, with its focus on contradictions, ideology, and centers of gravity. This is not surprising since different cultures will interpret the interaction of systems in different ways. Of concern, however, is once again the notable absence of focus and discussion on the fog and friction of technology in a real-time battlespace. The U.S. concept appears to rely on speed to overcome all obstacles. The concept seems to focus on "the content, quality, and timeliness of information moving between nodes on the network" and dismisses misinformation or deception. Loren Thompson, chief operating officer of the Lexington Institute, commented about overreliance on business strategies while critiquing a 2002 article by Admiral Cebrowski on NCW:

Let me conclude by answering Cebrowski's question as to why commercial development cycles are so much shorter than military ones. The reason is that it's harder to get to geocentric orbit than the grocery store, that no one is shooting at the Coca Cola Company, and that private-sector executives don't rewrite their business plans every time a consultant comes up with a new idea.⁷

There also appear to be built-in contradictions in the concept. For example, the authors note that NCW strength is designed to "offset a disadvantage in numbers, technology, or position." Further, "We must change how we train, organize, and allocate resources if the United States decides to fight on an NCW rather than a platform-centric basis."⁸ Yet the authors twice note that a sensor or engagement grid must be coupled in time to shooters, and the DOD report to Congress on NCW stated, "Battlefield entities (platforms, units, sensors, shooters) must be designed 'net ready.'"⁹ This reliance on interoperability is not given the place it deserves by U.S. theorists. This interoperability resembles the integration process the Chinese stress.

Cebrowski and Garstka underscored that NCW made the whole greater than the sum of its parts, which the Chinese INEW concept also noted, with the latter perhaps mimicking the American authors. In contrast to the Chinese, Cebrowski and Garstka used the term *system* sparingly; however, systems remain important to the U.S. concept.

David Alberts, John Garstka, and Frederick Stein wrote *Network Centric Warfare* in 1999. The

book defines NCW as: an information superiority-enabled concept of operations that generates increased combat power by networking sensors, decisionmakers, and shooters to achieve shared awareness, increased speed of command, higher tempo of operations, greater lethality, increased survivability, and a degree of self-synchronization.¹⁰ The authors imply integration of platforms and networks by including sensors and shooters in their definition. Again, however, fog and friction are ignored.

In October 2002, Cebrowski wrote that any weapons system must be on the net to remain viable—the concept of a net-ready platform. If such interoperability is not available, the program is subject to cancellation. Risk is managed by increasing the breadth of capabilities to cover gaps.¹¹ Can simply increasing capabilities reduce fog and friction? Don't surprise or disruption mean anything for theory? Cebrowski also noted that aircraft and other joint capabilities in Afghanistan were empowered by high-speed NCW principles. However, problems remained, such as minimal information filtering and decision aids for field commanders.

The DOD report to Congress about NCW stressed many of these points.¹² It noted that interoperability must not be abandoned ("a critical mass of connectivity and interoperability is necessary to both encourage and support new ways of doing business") and that impediments to the program must be overcome. However, the report does assert that "NCW is to warfare what e-business is to business" and "no single platform or sensor is the heart of the system." The first statement again overemphasizes the business-military comparison, and the latter implies that platforms remain vital to the NCW concept. We are not moving from platform to NCW, but from platform to an integrated or interoperable form of platforms and nets.

Chinese IW expert Wang Baocun, writing in *China Military Science*, discussed the U.S. concept of network-centric warfare from a Chinese perspective. He did not compare NCW with INEW, although he noted that China must study the theoretical and practical aspects of other countries' efforts to develop an information-based military in order for China to do the same. He further stated that China must develop a comprehensive electronic information system and that such systems should be integrated.¹³ To that degree, Wang appears to echo Dai.

reliance on interoperability is not given the place it deserves by U.S. theorists

Comparing NCW and INEW

The two explanations above represent the basic views of Chinese and U.S. specialists on network-related concepts. Clearly these are ideas for the present and immediate future and will form the basis of both countries' transformations. However, the terms should be examined against other paradigms as well. Admiral Cebrowski is a proponent of alternate or even multiple concepts. He stressed that "one best way" should not be pursued, as there may not be one architecture or standard. Rather, competing concepts should be debated. And interestingly enough, the view from a "bottom-up" perspective is different from the view at the top. Those at the bottom have other points for the authors to consider.

First, it is unfortunate that the authors who proposed these concepts did not venture into detailed definitions, for this lack has confused readers. For example, Cebrowski and Garstka used the terms *network-centric computing*, *network-centric operations*, and *network-centric war* in their seminal article without defining them. Readers were left with the impression that they are interchangeable sound bites for an idea. A citation at the end regarding NCW came closest to a definition, noting that it is "applicable to all levels of warfare and contributes to the coalescence of strategy, operations, and tactics. NCW is transparent to mission, force size and composition, and geography." This description was updated in *Network Centric Warfare*, by Alberts, Garstka, and Stein, which Cebrowski reviewed. Their definition is better but still needs specification, such as an explanation of what a network "war" means. Would *confrontation* or *struggle* work better, for example? Do networks really war with one another?

The terminology problem is important because if we are attempting to sell a concept, we need a thorough understanding of what we are selling. The authors appeared to be describing warfare enabled by speed of awareness and shared knowledge to bring effects to bear on targets in a timely and accurate manner. Thus, NCW is an enabler much like other developments in the mechanized age, albeit a quantum leap, to act as a combat facilitator, especially of battlefield awareness. Communications have always acted as enablers, facilitators, and coordinators of battlespace awareness, just not to the same degree as sensors and satellites. Terms such as *network-assisted platform operations*, *network-coordinating engagement operations*, or simply *network-centric operations* appear as appropriate as network-centric warfare. The



AP/Wide World Photo (Greg Baker)

China Netcom technicians connect lines in Beijing

INEW concept suffers from the same imprecision. In many ways it sounds like an updated version of NCW except for its EW and stratagem links.

Second, many NCW authors describe a movement away from platforms to networks in their discussion of theory, then use an integrated or interoperable model of platforms and networks to describe their concept, which again shows lack of precision. Further discussion of the move from kinetic to combined kinetic, electronic, and network-based warfare would have assisted understanding. NCW does not occur in isolation. If it did, no one could use it because it would not control or be connected to anything; it would just be a grouping of sensors and nodes joined to a network that produces information. Rather, the concept implies that sensors are part of systems integrated into platforms. Weapons, weapons systems, and platforms are plugged into the sensor, information, and transaction grids that comprise NCW at the moment, and they will be with us for some time. Platforms launch weapons and have nodes where network information is integrated into the targeting and protection mechanisms of the platform. Predators are platforms that use networks.



Space Control Center in Beijing monitoring return of China's first astronaut, October 16, 2003

The INEW concept used the word *integrated* while NCW theorists used *interoperable* for KC-135 aerial refuelers that possess routers, antennas, and other equipment so the aircraft can transmit battlespace information among units.

Third, the NWC discussion suggests that the concept alone is sufficient to make a nation great and modern. The American metaphor is that if it works for business, it will work for the military. The difference is that in the military, people plan on destroying the networks through high-tech weapons, making the systems useless. Or they try to deceive sensors and satellites, which does

the American metaphor is that if it works for business, it will work for the military

not happen often in business because it runs on information in a more perfect form. The military does not possess perfect information to the degree the market does; therefore, economic superiority may not translate into military superiority. Most important, there is no discussion of what might happen if such a system meets a like system or if there is even partial disruption. Kosovo, Somalia, and Bosnia were not confrontations between modern systems, but rather of modern against antiquated systems. So there is little consideration of the impact of the fog and friction of war on NCW and INEW. And there

remain problems of available bandwidth, mission priorities and access to networked platforms, and the number of combat systems that must be coordinated—over 400 by some accounts.

Fourth, the network-centric concept is technology-focused, while INEW possesses a strong stratagem element. This difference is important. It is how INEW plans to “defeat the superior with the inferior.” The Chinese have noted that Asian analysts think in terms of stratagems and Western planners in terms of technology. Western strategists should be aware of this perspective.

Alfred Kaufman, a study director at the U.S. Institute for Defense Analyses, agrees that technology has too prominent a place in our military thinking, so much so that it dictates military strategy. He wrote that NCW theory has resulted in “the virtual collapse of the intellectual structure that was erected to control the development of Western military technology.” He believes that the Pentagon hopes that commercial innovation will bring to war and to national security the same benefits it brings to commercial enterprises. In his view, NCW is flawed because it:

- overestimates man’s capacity to deal with contradictory information
- ignores the true nature of the enemy and drives him to asymmetric strategies
- ignores the dynamic nature of combat and bureaucratizes war
- assumes that military victory is an end in itself.¹⁴

Fifth, consideration is given to the human in the loop, yet one wonders if a proper parallel should be drawn between NCW/INEW and human network attacks (HNA). NCW and INEW discuss the importance of training and educating personnel to conduct themselves as well as to run a network-oriented staff. U.S. theory now includes discussions of effects-based operations to demonstrate how NCW can be used to affect humans and objectives in a sequenced manner. Addressing the human as a network might be the next logical thinking. HNA refers to the ability of weapons, including nonlethals, to shut down the operating systems of people, who have their electric circuitry in the form of neurons. Properly targeted, this type of attack can make it difficult for humans to enter the decisionmaking cycle to assist in processing and selecting targets, the fail-safe aspect to NCW and INEW.

Sixth, the United States needs to study foreign IO and NCW related concepts if it is to understand how to work with or against the cyber age systems of other countries. It is clear

that China studies Pentagon thinking. At Chinese book stores there are hundreds of U.S. books translated from English, especially in the IO area. No such bounty on Chinese thinking can be found in American book stores.

Finally and most importantly, Dai noted that INEW is an offensive strategy based on acquiring both defensive and offensive information operations equipment, “with the priority being the development of offensive information operations equipment.” Further, it is “important to take the initiative and effectively destroy the enemy’s electronic information systems.”¹⁵ The focus on the active offense is lacking in NCW discussions, as is the Chinese focus on applying strategies to offset inferiorities in technology and equipment. The latter focus is really on the decisionmaker’s mind, with strategies being the means and perception management the ends.

The good news is that the initial discussion of NCW is over, and the concept has received feedback from both private and public sources. This has provided substance to Admiral Cebrowski’s foresight that more than one idea should be pursued. China is lacking in that area. The INEW topic has not been publicly critiqued. Perhaps the dialectic of point and counterpoint works better in Western culture based on its willingness to confront ideas with counters or better ideas. In many ways, China merely mirrors what happens in the West in the network-centric arena, but the West must be acutely aware of the Chinese nuances and mirror imaging.

U.S. decisionmakers, many with business backgrounds, must not apply their business experience to the military arena. The concept worked well, but in an environment totally divorced from the battlefield. China, on the other hand, will continue to load its INEW concept with Chinese characteristics, or so they say. Their metaphor will be shaped by the words of famous strategists and consider the use of deception and surprise while the United States focuses on speed of response and efficiency. One important distinction in the Chinese approach, however, is that INEW would be used to attack economic, political, societal, and military networks.

Does U.S. strategy risk overdependence on speed and prowess at the expense of other factors, while China tries to defeat the superior with the inferior, using good but not outstanding technology combined with stratagems? Both concepts lack ways to block failure in an age of continued

fog and friction. We are uncertain what happens if our risk-taking fails. No one wants to talk about that. And, as the conflict in Iraq extends and diverts funding from the transformation effort, we may be closer than we think to confronting the risks discussed here. **JFQ**

NOTES

¹ *China’s National Defense in 2002*, white paper (Beijing: Information Office of the State Council of the People’s Republic of China, December 2002), available at <www.aseansec.org/ARF/ARF-DWP/China-2002.doc>.

² See *Annual Report on the Military Power of the People’s Republic of China* (Washington, DC: Department of Defense, July 2002).

³ Dai Qingmin, “On Integrating Network Warfare and Electronic Warfare,” *Zhongguo Junshi Kexue (China Military Science)* (February 2002), 112–117, as translated and downloaded by the Foreign Broadcast Information Service (FBIS) Web site.

⁴ David Fulghum, “USAF Redefining Boundaries of Computer Attack,” *Aviation Week and Space Technology* 158, no. 9 (March 3, 2003), 33.

⁵ “Introduction to Integrated Network-Electronic Warfare,” *Jiefangjun Bao* (February 26, 2002), 6, accessed at <<https://www.fbis.gov/>>.

⁶ Arthur K. Cebrowski and John J. Garstka, “Network-Centric Warfare: Its Origin and Future,” *U.S. Naval Institute Proceedings* 124, no. 1 (January 1998), 28–35.

⁷ Loren Thompson, “Dot-Com Mania,” *Defense News*, October 28–November 3, 2002, 12.

⁸ Cebrowski and Garstka.

⁹ Art Money, *Report on Network Centric Warfare: Sense of the Report*, March 2001, accessed at <http://www.dodccrp.org/NCW/NCW_report/report/ncww_cover.html>.

¹⁰ David S. Alberts, John J. Garstka, and Frederick P. Stein, *Network Centric Warfare* (Washington, DC: National Defense University Press, 1999), 2.

¹¹ Arthur K. Cebrowski, “New Rules, New Era: Pentagon Must Embrace Information Age,” *Defense News*, October 21–27, 2002, 28.

¹² *Annual Report*.

¹³ Wang Baocun, “The Future Warfare for Which the U.S. Military Is Making Preparations: Network-Centric Warfare,” *Zhongguo Junshi Kexue (China Military Science)* (October 2002), 133–143, as translated and downloaded by FBIS.

¹⁴ Alfred Kaufman, “Caught in the Network,” *Armed Forces Journal* (February 2005), 20–22.

¹⁵ Dai Qingmin.



Top NGOs testify before House Subcommittee on Military Quality of Life and Veterans' Affairs, February 2004

Transforming the “Retention Sector”

By MEREDITH LEYVA

The U.S. Armed Forces will likely face a retention problem in 2005. Not only will this impede America’s ability to execute foreign policy, but also the Pentagon will require massive budget outlays to recruit and train replacements at a time when some argue that it should be doubling personnel strength.

The wars against terrorism and in Iraq are not the specific causes of the retention problem.

Rather, it stems from the military’s shortcomings in transitioning to an all-volunteer force and the continuing treatment of wartime personnel as draftees. The key to keeping troops is recognizing that they are professionals with personal commitments who are concerned with the care their families receive.

What Does *Not* Affect Retention

Many argued that the Department of Defense (DOD) was facing a junior officer retention problem before September 11. In attempting to address key retention factors, policymakers

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debated whether to increase military pay, which 28 percent of separating servicemembers indicated as the primary reason for leaving.¹

Research by the RAND Corporation confirms that “if a wide pay gap is allowed to develop, recruiting and retention problems will follow.”² The 2004 Defense Authorization Bill brought military pay much closer to civilian pay. Because RAND found that pay growth over a career decreases

quantitative data and anecdotal evidence show a strong connection between spouses and retention

for military professionals compared to civilians, policymakers increased senior enlisted pay at higher rates. These efforts alone are not likely to solve the problem, however, because current servicemembers also cited pay and benefits as the top reasons for staying. Clearly, pay is a factor in retention, but perhaps in a different way than commonly assumed.

A sense of purpose, credit for accomplishments, promotion opportunities, and respect are ranked as equally or more important than pay. On quality of life surveys, a majority of service personnel consistently indicate high satisfaction with these factors but moderate dissatisfaction with the pace of promotions, unit morale, and a perception of zero tolerance for mistakes.³ Overall, however, these factors do not appear to harm retention.

Current level of deployments, live combat, training, and relocation are also frequently cited for poor retention. However, servicemembers indicate that deployments are part of the job; only 6 percent of separating members said deployments were their primary reason for leaving.⁴ Eighty percent of active-duty personnel felt very satisfied, satisfied, or neutral toward deployments and other duties that took them away from home.⁵ RAND studies found that “rather than decreasing reenlistment, deployment generally served to increase it or leave it unchanged.”⁶ Servicemembers look forward to using their skills, and informal surveys indicate that spouses understand and generally support their partners’ passion for their jobs and have incorporated deployments into their lives.

Similarly, fear of live combat may not be a substantial factor in retention. Servicemembers appreciate receiving the associated honors and awards and perceive opportunities for faster promotions. Perhaps more important, combat in Afghanistan and Iraq has created a sense of purpose among service personnel and their spouses, given their strong support for the mission to fight terrorism.

Finally, relocation is probably not a significant factor in retention; service personnel report 51 percent satisfaction, with 32 percent “neither satisfied nor dissatisfied” with the frequency of relocation.⁷

Real Factors in Retention

While pay, deployments, and combat alone are not major retention factors, they are linked to the real reason for separating. Analysis of quantitative data and anecdotal evidence show a strong connection between spouses and retention. Although the majority of servicemembers indicated a willingness to stay in the military as long as 20 years, most of them do not. By contrast, nearly 33 percent of servicemembers with companions or spouses indicated that their significant other wanted them to leave, while 15 percent said their significant other had no opinion.⁸ In other words, nearly 50 percent of spouses and companions either dislike or are ambivalent about the military lifestyle. Only one RAND study shows a direct connection: If spouses have “very unfavorable” attitudes toward military life, then 63 percent of *nonmobilized* Reservists said they would separate from their service.⁹

Thus, although servicemembers cite pay and deployments as their reasons for separating, spouse dissatisfaction may be the real factor. Spouses supply an array of logistic and personal support services that allow servicemembers to do their jobs. They provide meals, care for children, manage finances, and maintain careers that often pay more than the servicemember receives. When personnel deploy, spouses must assume the role of single parents, perform tasks their partners once did, and make family decisions alone.

If a spouse is frustrated with any aspect of the military lifestyle, the servicemember feels the impact both logistically and emotionally. For example, disruption of a spouse’s career because of relocation or deployment hurts financially. A spouse’s casual comments about a civilian neighbor’s higher pay may lead a servicemember to conclude that civilian life would be better for the family. This may explain personnel citing low pay rather than lack of family support as a primary reason for separating.

This complex dynamic may also explain the seemingly contradictory data regarding the impact of deployments on reenlistment. RAND studies found that a standard deployment actually increased the likelihood of reenlistment. But “an additional tour of duty atop the first—such as

another three months away from home—reduces the likelihood of reenlistment, especially in the Army and Marine Corps. The negative effect of the extra tour is strongest when it involves hostilities.”¹⁰ The issue is both the length of the tour and the uncertainty of the servicemember’s return, which may reflect the spouse’s need for predictability. Spouses accept deployments because

access to some basic services is essentially denied to spouses because of bureaucratic rules and attitudes

they support their servicemembers’ careers, but when additional tours are ordered, family life becomes

unstable and the spouse and servicemember may feel as though their loyalty is being abused.

A direct survey of Army wives confirms their opinions. While 64 percent of wives felt a 3- to 6-month deployment posed no problem, and 43 percent were unconcerned about a 7-month absence, the number reversed dramatically when the deployment increased; 48 percent felt a deployment of more than 1 year posed a serious or very serious problem, while 58 percent felt the same about a mission of undetermined length.¹¹

Insufficient research has been conducted to substantiate the link between spouse satisfaction and retention and to determine spouses’ needs. The lack of data has partly to do with the employer-employee relationship and the mutual need for some distance between the military establishment and families. Moreover, some military leaders perceive spouses as impediments to that relationship, and the high divorce rate discourages them from involvement in families’ lives. This approach should be reconsidered, not because spouses deserve special treatment, but because DOD must retain its best people.

Who Spouses Are and What They Want

Two common stereotypes of military spouses are as World War II-era wives pining away at home and as “trouble-making trailer trash.” Demographic data presents a very different image. Ninety-four percent of military spouses are women, and the remaining 6 percent are primarily older, prior-service husbands who need less assistance than a 23-year-old woman new to military life. Nearly 85 percent of military wives work outside the home. They are better educated than the average American, with only 5 percent of junior enlisted wives failing to finish high school and 67 percent working toward or having a post-secondary degree.

Given these characteristics, wives obviously need support during disruptions to their careers and home life caused by the military. Equally important, they need some degree of predictability within reason of military logistics and security. They want to return to the firmer homecoming dates of past deployments, so they can establish some stability in their professional and family lives. The tempo of deployments more than tripled in some services before September 11 and has increased with missions to Afghanistan and Iraq. Ongoing deployments to the Middle East and the DOD transformation plans for last-minute battlegroup formations could further reduce predictability and correspondingly heighten spousal desire for separation.

Inadequacy of Support Services

Current support services include various official, semiofficial, and unofficial organizations. The fact that unofficial organizations are more likely to handle the more complex problems reflects both the employer’s fear of entanglement in family life and the failure to recognize a direct correlation between spouses and retention.

Access to some of the most basic services provided by official military support for families, such as relocation and housing, is essentially denied to spouses because of bureaucratic rules and attitudes. For example, spouses may not receive services and counseling from most relocation and housing offices without a unique power of attorney from their servicemembers specifically authorizing it. Traffic Management Office (TMO) officials have explained that some spouses have tricked them into relocating household goods to a different place than indicated on the orders, enabling the spouse to leave her husband at the military’s expense. The TMO approach is to deal directly with the servicemember, regardless of whether he is currently deployed or occupied at work.

Another example is the fact that the military will not ship a second vehicle during a relocation within the United States. Without a car, a spouse might not be able to work. Military families must either relocate using two cars or pay to ship a spouse’s car to a new location. Thus, this policy can cause tremendous financial and emotional strain.

The secondary source of official support is the family support center (FSC), which provides counselors on relocation logistics, financial management, domestic violence, and career assistance for spouses. A RAND analysis of the 1992 Quality of

1st Combat Camera Squadron (D. Myles Cullen)

General Myers swears in Soldiers at reenlistment ceremony at Camp Victory, Iraq, March 2005

Life Survey reveals that FSC programs for spouse career assistance, spouse and child abuse, and housing were rated well below satisfactory—even though they are perhaps the most important functions of FSCs for spouses.¹² Additionally, only 23 percent of survey participants had used the centers in the last 2 years, and the majority were overseas. A reason for the lack of use is found in the 2001 Morale and Quality of Life Study, which includes a policy goal of responding to changing family demographics:

The family support system has not kept pace with the changing family structure. Nor has it kept pace with the higher aspirations and expectations of an increasingly better educated workforce and their families. Critical enhancements include childcare; opportunities for military spouses to find employment and programs to develop careers and enhance education; education for military children; and family support networks.¹³

A 1997 survey of junior enlisted spouses concluded that:

Very few spouses used any EAP [employment assistance program] service. Accordingly, very few spouses found their jobs through the EAP. . . . There is also a need to determine why almost one third of those who did use the EAP were dissatisfied or very dissatisfied with the program.¹⁴

RAND analysis indicates that DOD founded the FSCs believing that family morale and retention are strongly linked.¹⁵ However, the report criticizes DOD for failing to confirm that link, track progress, and set goals. The FSC system is divided into service “silos” that do not share best practices, and a survey indicates that families fear being seen at an FSC lest they be labeled as troubled.

DOD has not invested sufficiently in FSCs since their establishment. Offices typically are

open from 8:00 a.m. to 4:00 p.m., hours when most spouses work. Additionally, some centers are reluctant to coordinate actively with semiofficial or unofficial support organizations, namely out of privacy concerns, even though coordination could provide more effective services. Also, a lack of funding impedes services. Because many counselors do not have telephones or voice mail, families must try repeatedly to reach them. RAND points out that personnel programs are a non-wage benefit equivalent to just \$700 per Soldier.

The services and the Pentagon have attempted to provide information and services on

the Internet, most recently with the launch of Military OneSource. This site is significantly better than the service sites such as Navy LifeLines, in part because a person can always be reached on its around-the-clock hotline, but families still cannot conduct business or receive counseling services over the Internet.

Nonprofit organizations are another form of official support in the sense that they often act as an arm of the FSCs. Army Emergency Relief and the Air Force Aid Society both receive Federal funds, while the Navy-Marine Corps Relief Society is fully funded by donations. These organizations often provide excellent financial counseling and relief services, but they are hampered by restrictive policies and procedures of the military agencies with whom they work. For example, they cannot extend office hours to help working wives because base accounting and personnel offices, which provide key information, typically close at 4:00 p.m. or earlier. Other nonprofit organizations such as the United Services Organization and Armed Forces YMCA often do not market their programs to wives sufficiently.

The Morale, Welfare, and Recreation (MWR) office conducts recreational activities and events to support family morale. However, it has been pressed into profit generation, so events and services are underutilized because families cannot afford them. The funds go toward supporting family programs such as counseling. DOD schools and the Exceptional Family Member Program are generally well regarded but are no better than what would be expected in a civilian community.

Semiofficial Support Organizations

Leading the semiofficial support organizations are the family support groups (FSGs) and family readiness groups (FRGs). They are a major support source for spouses during deployments and relocation but are only as good as the volunteers who lead them. FSGs used to be led by the wives of commanding officers, but now junior wives are increasingly taking over even if they lack experience.

The issues of infrastructure, continuity, and institutional memory are major problems facing semiofficial organizations because of high turnover among volunteers. For example, one elementary school serving the junior enlisted population at Camp Pendleton had no Parent-Teacher Association because the past-year association officers all relocated simultaneously. FSCs and commands are often unwilling to get involved because of

Loadmaster oversees spouse orientation flight of C-17 at Charleston Air Force Base



1st Combat Camera Squadron (Matthew Hennen)



U.S. Navy (Johnny Eberaj)

Spouses Club members and their families sort messages to troops

fear of entanglement and failure to recognize the importance of family morale on retention. FSCs may support semiofficial organizations by sharing office space, but volunteers overall have little interaction and coordination with the FSCs. Perhaps most important, there is no central guide to best practices for support group volunteers.

Official and semiofficial organizations' failure to meet the needs of military families has prompted the increase in unofficial organizations, including large Internet-based communities and local meeting groups. Unofficial groups address spouses' need to be respected

and not patronized, and to receive the unofficial "scoop" on topics the military establishment is unable or unwilling to address—including marital problems, financial difficulties, and living conditions in base housing—and do so with convenient meeting times and communication platforms.

Military family support agencies cannot recognize or cooperate with unofficial groups unless the groups apply for recognition on base, which is often not worth the effort of time-pressed vol-

unteers. Thus, the agencies do almost no coordination with unofficial groups, even though a majority of wives turn to them for support.

Perhaps more important, the increase in unofficial organizations has reduced cohesion in the military community. For example, many wives relocate but refuse to meet other local military families because they prefer to chat online with wives elsewhere. This trend undermines the emotional and logistic support military families need in times of crisis.

Staving Off a Retention Problem with Transformation

DOD must apply the principles of transformation to the "retention sector" and rethink its approach toward spouses, recognizing that their satisfaction is vital to retention. This is a purely business decision. DOD should protect its investment in quality personnel and mitigate the cost of recruiting and training replacements by addressing the less costly needs of spouses.

The department should adopt wives as "personal support command centers" (PSCCs) and change the minds and attitudes of officers, senior enlisted, and civil servants. This campaign must

family support groups and family readiness groups are only as good as the volunteers who lead them



Soldier returning from Operation Iraqi Freedom greeted by family at homecoming ceremony in Plymouth, New Hampshire, March 2005

157th Air Refueling Wing (Dawn Friniss)

be led by senior Pentagon officials and, beyond the initial launch of the concept, be incorporated into nearly every discussion topic.

With a mandate from the top, both commands and key agencies should be required to review and revise their operations to ensure that spouses' needs

commands and family support agencies must make their operations more accessible

are given appropriate consideration. First, commands should bring predictability to deployments where possible. Defense planners must weigh the benefit of their new concepts for battlegroups that deploy almost randomly against new concepts of predictable "human maintenance" cycles that allow members genuine recuperation time.

Under the PSCC concept, commands and agencies must view spouses as partners in providing logistic support to uniformed personnel. Spouses should receive predeployment briefings alongside their servicemembers to prepare for per-

sonal logistic and financial contingencies. Briefings should be held during nonworking hours, and childcare should be available. Similarly, relocation and housing offices should view spouses as the primary contacts during the relocation process, thereby easing the burden on service personnel (and their commands). Bureaucratic obstacles such as power of attorney should be removed.

DOD must also get serious about providing and adequately funding genuine support services for spouses. With a small investment in spouses' careers, DOD not only improves their morale but also increases members' income at minimal expense to taxpayers. Opportunities include hiring preferences for spouses in government jobs, incentives for defense contractors to hire military spouses, G.I. Bill portability, and access to military courses for spouses.

Network Centric

Commands and family support agencies must make their operations more accessible.

Office hours and business approaches should be convenient to working spouses, and most business should be conducted over the phone or Internet. DOD Web sites should not be designed along service silos as lists of links to outside information; instead, families should receive genuine counseling and transact family business over one consolidated site. Job searches and financial management may be better handled by a central network than by individual FSCs. A network-centric approach would also allow relocating spouses to fully access services at the new base, meaning they could find housing, child care, and jobs before packing their bags.

The consolidation of family support into a Pentagon-level joint command, possibly along with privatization at base offices, should be considered. FSCs can more easily recruit staff as well as do a better job of sharing best practices across the services. Staff members must build relationships with semiofficial and unofficial organizations even if it means spending several nights a week at FSC and spouse club meetings. Partly for this reason, it makes sense for FSCs to hire active-duty wives who are already involved in their community and understand their peers. An FSC should provide space, resources, and continuity for semiofficial support organizations instead of competing for attention. In that capacity, FSCs can also help direct and coordinate local civilian support for military families.

Further, consideration should be given to merging FSCs and MWR organizations across services. Both organizations would benefit from leadership and representation at the Pentagon level, better tracking and methodological processes, economies of scale, and enhanced negotiating power in dealing with corporate sponsorships.

The launch of the PSCC concept should initiate critical research on the link between spouses and retention and ways to track the effectiveness of family programs. As these programs are developed or revamped, methods must be developed to identify and share best practices and link them to retention and morale—the ultimate measure of return on investment.

The keys to retention are to recognize that servicemembers are not draftees and to treat them as professionals with families and personal commitments. A relatively small investment in spouses could prevent a massive expenditure on bonuses to stave off a retention crisis, followed by an expensive campaign to recruit and

train replacements. These transformation-based recommendations are only some of many excellent possibilities. Few require extra budget dollars, but all require an attitude adjustment toward spouses and an overarching strategy for genuinely addressing their needs. The military must be comfortable dealing with spouses if it wishes to retain experienced, professional servicemembers and complete its mission.

JFQ

NOTES

¹ Norman J. Rabkin, "Preliminary Results of DOD's 1999 Survey of Active Duty Members," testimony before the Subcommittee on Military Personnel, Committee on Armed Services, House of Representatives (March 28, 2000), 7.

² "Is There a Gap Between Military and Civilian Pay?" (Santa Monica, CA: The RAND Corporation, August 18, 2000).

³ Defense Manpower Data Center, "July 2002 Status of Forces Survey of Active-Duty Members," Report 2002-021 (July 2002), 58-74, 94-96.

⁴ Rabkin, 7.

⁵ "July 2002 Status of Forces Survey," 118-121.

⁶ "Perstempo: Does It Help or Hinder Reenlistment?" Research Brief RB-7532 (Santa Monica, CA: The RAND Corporation, 1999).

⁷ "July 2002 Status of Forces Survey," 116.

⁸ *Ibid.*, 42-44, 56.

⁹ Sheila Nataraj Kirby and Scott Naftel, "The Effect of Mobilization on Retention of Enlisted Reservists after ODS/S," Report MR-943-OSD (Santa Monica, CA: The RAND Corporation, 1998), 29.

¹⁰ James Hosek and Mark Totten, "Serving Away from Home: How Deployments Influence Reenlistment" (Santa Monica, CA: The RAND Corporation, 2002).

¹¹ Morris Peterson, Army Personnel Survey Office, U.S. Army Research Institute for the Behavioral and Social Sciences, "Survey of Army Families IV: Final Quick Summary" (January 2002), question 24.

¹² Richard Buddin, "Building a Personnel Support Agenda," Report MR-916-OSD (Santa Monica, CA: The RAND Corporation, 1998), 50-52.

¹³ The RAND Corporation, "Defense Morale and Quality of Life Study" (Santa Monica, CA: The RAND Corporation, June 2001), 6-7.

¹⁴ Rita Bureika et al., "Effective Strategies to Assist Spouses of Junior Enlisted Members with Employment: Analysis of the 1997 Survey of Spouses of Enlisted Personnel," Defense Manpower Data Center (June 2000), 167.

¹⁵ Buddin, 7.

Air defense platoon leader checking
Patriot launcher coverage on range
during *Joint Red Flag 2005*



Joint Professionals Here Today, Here to Stay

By MICHAEL A. COSS

The Goldwater-Nichols Department of Defense Reorganization Act of 1986 revamped joint officer management policies to improve the quality of officers serving on joint staffs, the advice given to the Secretary of Defense, and the effectiveness of military operations. Joint officer management was one of the most contentious parts of that seminal legislation, but it established the educational, training, and operational basis for developing joint warfighting professionals who are adept at

leveraging the capabilities of the entire force to accomplish missions and tasks across the spectrum of conflict. Indeed, the professional skills that emerged are largely responsible for recent military successes and portend continued excellence and vitality within the joint profession.

Troops who fought together during *Iraqi Freedom* are now training together to further enhance their joint capabilities at the point of the spear. The services are modularizing their forces, making them more dependent on the capabilities of the other services to create operational effects that directly contribute to achieving objectives. Also, combatant commands are reviewing strategic war plans, and the Joint Staff is revamping weapons

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procurement processes to improve strategic capabilities. Joint operations are here to stay, and while the joint officer management system and joint organizations are not perfect, they do not require the major changes some have argued for.

The Joint Profession

It has taken nearly a generation to grow a cadre of joint officers and a body of joint knowledge, but managing this within a new joint warfare profession as described by Don Snider would undermine the progress made thus far. Snider is correct in identifying symptoms of the glacial pace of change, but his solutions are questionable. He calls for legislation to create a new joint warfare profession, a new joint doctrine and education command, and a new joint personnel command.¹

This article argues that we already have a joint profession and the processes to develop and manage the body of joint knowledge. It argues further that we do not need another joint bureaucracy to manage the personnel system. Rather, we need to stay the course and continue to diffuse jointness broadly and to the lowest levels possible. Only in this manner can we develop the largest, most competent set of joint professionals to wage modern war. From there we can develop and manage the associated knowledge and jurisdictions of the profession. Future conflicts will increasingly be characterized by decentralized operations, where interdependent joint capabilities and associated forces provide key advantages.

A good definition for *joint professionals* would be those who are schooled in and practice the unique and expert competencies of joint warfare, and respond to its calling with moral service to the nation.² Joint warfare must also have “full authority over its own internal jurisdictions for the creation and adaptation of the profession’s expert knowledge, and for the development and utilization of joint professionals.”³

Current processes achieve this. An explicit process develops joint doctrine that provides and adapts the body of expert knowledge for this profession, and joint officer management policies and statutes provide for the development and utilization of the joint professionals themselves. And while these processes can be improved, they certainly meet the definitional characteristics required for a joint profession.

Status of the Joint Profession

Contemporary analysis of Operations *Enduring Freedom* and *Iraqi Freedom* suggests we are closer to realizing the joint warfight than ever before. Congressional testimony by Secretary of Defense Donald Rumsfeld and former Commander, U.S. Central Command, General Tommy Franks, USA, attributed operational success to the unprecedented jointness demonstrated by the entire force. At the tactical level, Soldiers and Airmen interoperated much better than in previous conflicts, and General Franks developed an operational plan that relied on pushing jointness to increasingly lower levels. Additionally, recent testimony by both Commander, U.S. Joint Forces Command (JFCOM), who was in charge of collecting lessons learned, and Army War College historians and other analysts who conducted extensive research in theater also attributed the operational success to the unprecedented level of jointness exhibited during the operations.

Conflicts require commanders who are skilled in their profession, are capable of commanding and controlling their organizations and formations, and can exploit new technological capabilities. During *Iraqi Freedom*, and increasingly since passage of the 1986 Goldwater-Nichols Act, success has depended on commanders who had joint expertise, commanded joint organizations, and had access to interoperable joint capabilities. In fact, modern warfare will continue to require a robust body of expert warfighters who are capable of using interoperable technologies networked across the joint force to achieve optimal solutions that apply all of the joint arms.

Providing these expert warfighters requires the means to develop and manage the internal jurisdictions of the profession. These include the body of expert knowledge and the experts themselves, but joint processes already capture the former by codifying the innovations with broad and enduring application into joint doctrine. And other joint processes, including the biannual review of the Unified Command Plan, implement changes to joint organizations and missions to better meet our global responsibilities.

In a similar effort, JFCOM is reviewing the operations in Afghanistan and Iraq to explore doctrine and organizational changes, and parallel efforts are under way to strengthen the command's role as the joint doctrine center for the entire force. The joint force is actively managing and adapting its internal jurisdictions over this body of expert knowledge.

while the joint officer management system and joint organizations are not perfect, they do not require the major changes some have argued for

Joint processes also provide adequate means to develop and manage the joint warfighting experts. These include education and training standards, joint assignment criteria, and quality controls that provide joint force commanders high caliber officers. Given these facts, a total re-vamping of the joint profession does not appear necessary as it was just prior to the passage of the Goldwater-Nichols Act.

Emerging Joint Culture

The joint force has moved beyond the point where congressional action forced it to assign quality officers to joint billets. As a profession, the force has begun to manifest jointness in very principled ways. Joint culture shows how the attitudes, values, and beliefs of the joint profession have evolved to mirror the evolution of joint warfare.

Regional combatant commands almost invariably develop fully integrated plans using the capabilities of each service

There have traditionally been four cultures—products of four services that tended to fight separately. As technology advanced, it became prudent and often necessary to develop doctrine to deconflict the battlespace among the services by, for instance, establishing a fire support coordination line to separate air and ground fires from ground forces.

In the 1980s, jointness started becoming a means to a more effective end. The AirLand Battle doctrine was progressive because it recognized the interdependent relationships air and land power had in defeating Soviet forces on the plains of Europe.

Likewise, today's Army officers recognize their dependence on Air Force and Navy assets to provide more effective fires and conduct operational maneuver from strategic distances. Developing further trust is critical because these interdependencies will remain relevant given recent operations and emerging joint concepts. Conversely, Air Force and Navy operational fires, particularly aircraft, can be more effective when Army forces flush targets from restrictive and urban terrain or force them to mass, as demonstrated during recent conflicts.

As the authors intended, war planning has also become more joint since the Goldwater-Nichols Act. Regional combatant commands, which are primarily responsible for developing and managing such plans, almost invariably develop fully integrated plans using the capabilities of each service. This interdependence continues

to make warfare more joint as it reshapes the attitudes, values, and beliefs of our profession.

Service identities remain strong and at the center of our capabilities, but they have been assuming a joint perspective to meet new warfighting requirements. Indeed, service cultures are adapting to the whole joint force.

The intent of the Goldwater-Nichols Act was to leverage the capabilities of the individual services to more effectively meet the requirements of the joint force as a whole. The operational challenge now is to take this to the level of joint interdependency, where service capabilities are combined to maximize their total capacity, reinforcing their effects while minimizing their relative vulnerabilities.

The key provisions of the act established clear authorities for joint commanders and legislated a specific process to develop and manage joint expertise within the officer corps. It clarified these authorities by placing the combatant commanders directly under the Secretary of Defense and requiring the services to assign all their combat forces to them. It established means to develop and manage joint expertise by legislating educational standards for the joint force, requirements for joint utilization tours, and specific standards to control the quality of joint officers. After nearly two decades, these factors have developed a joint profession, and we should examine them individually before recommending further improvements.

Organizations

The Goldwater-Nichols Act placed new emphasis on joint organizations, empowered their commanders, and resourced them with quality officers from each service. This has contributed to the emergence of the joint profession. The emphasis on joint organizations recognized the necessity of employing integrated force packages. Lessons from the Vietnam War demonstrated that the Department of Defense (DOD) was not properly organized to achieve the level of interoperability required.

Placing the combatant commands directly below the Secretary in the chain of command and giving them authority to reorganize and command their forces have largely resolved this issue. Combatant commanders and subordinate joint task force (JTF) commanders have exercised this authority in their assigned missions, demonstrating the important contribution this reorganization offers. These joint organizations provide



USS Nassau (Brian McFadden)

Army Apache lifting off USS Nassau during joint shipboard weapons and ordnance training, February 2005

the structure in which quality officers from each service practice the craft of joint warfighting.

New joint processes were another outgrowth of the Goldwater-Nichols Act. The legislation sought to provide the Chairman of the Joint Chiefs of Staff and combatant commanders a stronger voice in determining requirements. The Joint Requirements Oversight Council (JROC), Military Education Coordinating Committee, and integrated priority lists are examples of joint processes codified after the act was passed. While these processes are not flawless, they help require the services to advance their interests within the joint context.

This trend continues with the publication of *Joint Operations Concepts*, which provides a vision of future joint warfare and a conceptual framework from which future capability needs will be determined. Similarly, the Joint Capabilities Integration and Development System (JCIDS),

the Goldwater-Nichols Act sought to provide the Chairman and combatant commanders a stronger voice in determining requirements

which replaces the requirements generation system, utilizes joint concepts, validated by experimentation, to derive and assess critical capabilities from a joint and operational perspective and then determine capability gaps, shortfalls, and redundancies.

Both *Joint Operations Concepts* and JCIDS further strengthen the Chairman's and combatant commanders' influence in developing joint capabilities. Each provides a means of grading the services in meeting joint capability needs and encourages them to develop "born-joint" solutions. They further the development of joint culture and provide additional means for joint professionals to practice their craft.

Education and Training

The education and training of joint officers provide the foundation for enhancing these organizations and processes. The Goldwater-Nichols Act established joint officer management policies and joint professional military education programs that required subsequent employment in joint-coded billets. To establish and maintain quality across service programs, it also required the Secretary to revise the curriculum of each school periodically "to strengthen the focus on joint matters and on preparing officers for joint duty assignments." Such refinements have essentially established an education process for the joint force, including general and flag officers.

First, service staff colleges expose selected officers to the fundamentals of jointness prior to joint assignments. Students learn about joint



20th Communications Squadron (Veronica Fullbrook)

Pre-mission briefing on operational and tactical effectiveness through joint integrated training

organizations and processes and how to meet the strategic and operational requirements of combatant commands. Additionally, Joint Forces Staff College (National Defense University at Norfolk, Virginia) provides officers more detailed education while they are assigned or en route to joint billets. It provides in-depth exposure to the processes and procedures they will need to function in combatant command headquarters.

Next, the senior service colleges and the National Defense University's National War College and Industrial College of the Armed Forces teach the strategic art of developing and practicing national security strategy and policy and of commanding joint organizations. Finally, general and flag officers receive further instruction on how to plan and employ forces in joint and combined operations in a variety of courses and continuing educational programs.

This training helps prepare officers to serve in joint billets, but actually serving is the primary means for developing the appreciation and expertise for employing the joint force. Before detailing the benefits of this on-the-job-training, how well does the joint curriculum prepare officers for joint assignments?

Instruction at the captain/major and lieutenant/lieutenant commander level provides the basics of national military capabilities and command structure, joint doctrine, joint and multinational forces at the operational level, joint planning and execution processes, and information

operations. It also introduces national security and military strategy in developing theater strategies, theater engagement and campaign planning with joint and multinational and interagency organizations, the Joint Strategic Planning System, the Joint Operations Planning and Execution System, and operational-level battlespace systems integration through deliberate and crisis planning.

These subjects are addressed more fully at the senior service colleges and the National Defense University, where military leaders prepare for joint service at the highest levels. These venues educate leaders on national security responsibilities in joint, multinational, and interagency settings—what is now called integrated operations—through teaching, research, and outreach.

Finally, the general/flag officer instruction teaches national security strategy and the joint operational art. The first overall joint flag course is known as Capstone, an intensive 6-week course examining national security decisionmaking, military strategy, joint/combined doctrine, interoperability, and allied-nation issues. The JFCOM role as the joint force trainer and integrator has led the command to host a portion of the Capstone training so all rising flag officers receive more specific instruction on how to operate as JTF commanders. It also conducts refresher training for all selected three-star commanders consistent with its view that the business of flag officers is commanding joint formations.

Such training is necessary but not sufficient. It teaches the basic structures, organizations, and statutes on which the joint system is founded but cannot deliver the in-depth warfighting knowledge joint commanders need. That comes only after an officer is well versed in the skills of his service and rises to a level where he applies those skills in a joint context. A fundamental strength of our system is that the services provide the joint community with officers who are adept at their service core competencies prior to developing joint competencies.

The services teach the basic skills the joint force requires. It is akin to offensive blocking and defensive tackling in football where the groups must master their fundamentals, play as a team, and depend on each other to interoperate and win. A quarterback or coach must be skilled in the fundamentals of the game yet need not be an expert in every facet—just in knowing how the parts interoperate.

The joint force is similar. The services are adept at providing skilled offensive and defensive

players, and from those we select the most qualified to coach our formations. The services remain at the center of the process for developing joint professionals as they retain control and promote their best officers.

Due to the Goldwater-Nichols quality standards for officers in joint billets, service competency has become a prerequisite to the joint transition. These standards provide joint commanders the quality officers from each service, and as they serve in joint billets and train and fight within a joint context, they develop the expertise to fight the joint force. This on-the-job training—practical joint experience—is key to developing the expert knowledge and jurisdiction of the joint professional.

Joint Assignments

There is no substitute for experiential learning, especially in the joint warfighting profession, which relies on officers bonding by serving in joint organizations charged with accomplishing real-world missions. Joint professionals are expected to cast aside service prejudices. In the process, they learn more about their sister services than is possible in the classroom.

Officers in joint assignments typically serve on three types of staffs: the Office of the Secretary of Defense or Joint Staff in Washington, combatant commander staffs across the globe, or defense agency staffs. Joint task forces are a subset of the second category and are established to accomplish specific missions.

Each of these staffs, however, develops joint officers by enabling them to work with the other services to accomplish military missions, which gives them the expertise to produce and manage joint doctrine, perform joint assignments, and work in other joint jurisdictions.

Additional joint expertise comes from the services' training programs as well as from the Chairman's Joint Training and Exercise Program. Such exercises occur at combat training and flight centers, while others are conducted by JFCOM and other combatant commands. During many of these drills, the services practice their core competencies in the context of joint warfare. These venues increasingly apply combined and joint arms in accomplishing missions on the battlefield.

Quality Controls

The quality standards in the Goldwater-Nichols Act require that officers serving in joint

billets be promoted at rates equal to or higher than those on service staffs. Furthermore, the act established Congress as the watchdog for monitoring service compliance by requiring annual promotion reports. Although the services continue to miss select portions of the quotas, this problem is generally on the margins, and these joint staffs largely continue to be populated by each of the services' brightest officers. This is due to the assignment process itself, incentives to serve in joint billets, and the growing importance of joint warfare.

The services remain at the center of the assignment process, and since they run their own promotion boards, those they select for advancement are generally the most qualified in their own core competencies. Because the Goldwater-Nichols Act stipulated the promotion rate, assignment detailers are constrained to nominate officers of at least comparable quality to both service and joint assignments. But congressional oversight has caused the services to become risk-averse where jointness is concerned, so the joint staffs routinely receive the higher quality.

Next, Goldwater-Nichols has worked because it incentivizes officers to serve in joint billets. The reasons are threefold. First, officers compete for joint assignments because they bring more status than assignments on service staffs. Second, most joint assignments have an operational flavor that is generally preferred over service staff assignments. Finally, such assignments are required to achieve general or flag rank.

Another reason quality has gravitated to joint staffs is that fighting jointly has become more important, and a service often receives missions in proportion to its participation in planning and execution. A service provides its better officers to joint staffs because it is most able to protect and advance its institutional interests in that environment. Essentially, the services compete so some of their brightest officers have the opportunity to perform in this increasingly important environment. In turn, those officers help the service compete for premier missions.

This profession recognizes that fighting jointly is the only effective way to win in 21st-century warfare. There is an active effort to develop and internalize the joint skills needed, and the military must preserve its quality management system. Preserving the system ensures that joint force commanders will continue to receive only the most qualified officers, who

the services teach the basic skills the joint force requires



Army paratroopers jump from Air Force C-17 during Joint Forcible Entry Exercise 2005

1st Combat Camera Squadron (Scott F. Reed)

can then contribute to the growing body of knowledge concerning modern warfare.

Improvements Needed

Given the joint context in which future wars will be decided, the wisest course is to continue managing joint knowledge at the broadest level while diffusing jointness to the lowest level necessary. This provides the widest dissemination of knowledge and prepares the overall force more fully for joint warfare. It also allows for quicker experimentation, validation, and dissemination of emerging ideas to enhance the body of joint knowledge. Finally, it offers the widest base to develop and select joint experts for staff and command positions. Two changes would dramatically help accomplish this.

First, we must better leverage the joint lessons learned (JLL) from previous exercises and operations by establishing a Joint Doctrine and Capabilities Center that links training and

education to joint experimentation and analysis to help inform and shape the development of future joint capabilities. This will ensure that we maintain and properly promulgate the body of expert knowledge our joint profession requires.

Second, we must create more standing joint task forces to confront growing demand. This will better meet combatant command requirements and allow officers to fashion greater capacities for employing all joint instruments while preserving service core competencies. These changes will maintain the joint profession and create conditions where jointness truly becomes the means to more effective military operations.

Joint Doctrine and Capabilities Center

The first step to establishing more effective processes for incorporating JLL and doctrine is to make JFCOM the standing repository for linking service and joint lessons learned. Further, to properly translate such lessons into doctrine and capability requirements, JFCOM must continue to transform into the Joint Doctrine and Capabilities Center for the joint force. This will improve the development and promulgation of joint doctrine, requirements, and capabilities by allowing the joint force provider to validate them, especially when compared to the complex systems we currently use.

With this authority, JFCOM would formulate, staff, and approve the joint doctrine, requirements, and capabilities the joint force needs. Placing the service component command elements involved in these areas directly under JFCOM would greatly facilitate this.

Air Combat Command and Fleet Forces Command already serve as the JFCOM Air Force and Navy component commands, and they also help develop these services' doctrine and tactical fighter and ship requirements. These commands could be expanded to look more holistically at global requirements to resource the entire air and naval forces while retaining their force provider roles. The Army Training and Doctrine Command (TRADOC) and the Marine Corps Combat Development Command develop Army and Marine Corps doctrine and requirements, and the components of these commands that perform this mission in a joint context could be transferred to JFCOM to establish joint requirements for land and littoral forces.

For the Army, this would require a fundamental reorganization of both TRADOC and Forces Command, but that may be long

overdue. The other services have developed agile doctrine and requirements shops within their JFCOM component commands that also serve as force providers, and the Army and Marine Corps should as well.

JFCOM provides the most likely place to integrate these functions for the joint force. It is already the joint force provider, integrator, and trainer and serves as the executive agent for joint experimentation. Additionally, the Secretary has used it to gather the lessons learned from recent conflicts—a testament to the importance he places on gathering a joint perspective of future requirements. JFCOM could blend the lessons learned into doctrine and a vision of future capabilities while still allowing the services to compete in both defining and fielding the solution sets.

The solution sets would still need to be reviewed and validated by JROC prior to service acquisition. That would help ensure proper synchronization with other service and joint interoperability requirements. To level the playing field, JFCOM should have a formal seat at JROC to ensure that joint capabilities get equal billing.

The advantages of this system lie in creating standing and dedicated analysts to manage each capability area and having a more impartial joint forum to advance the solution sets. These forums could establish the joint standards each solution set must meet, a step missing from the separate service approaches, and these could be programmed and then procured within the current planning, programming, budgeting, and execution processes already in place.

JFCOM provides a level of impartiality in developing joint doctrine and requirements since it is a joint headquarters. The time has come to permanently assign it the mission of developing the joint doctrine and capabilities the joint force needs.

Standing Joint Headquarters

Recent operations have shown that the U.S. Armed Forces are still not organized to fully prosecute joint operations. The four-star combatant command headquarters was established as the joint organization that executes enduring missions assigned to unified commanders. For more time-sensitive missions, combatant commanders have the authority to create joint task forces; however, manning them has been ad hoc and strains the services that must provide the personnel. As an example, DOD

had some 35 standing JTFs in 2004. In *Enduring Freedom* and *Iraqi Freedom* alone, U.S. Central Command was augmented with over 3,000 additional billets it deemed necessary. Judging by the progress, these JTFs appear more permanent than temporary, yet they are still filled in an ad hoc manner.

The time has come for the joint force to be permanently organized at levels lower than the combatant command headquarters. As a start, each of the services' three-star headquarters should be reorganized into joint headquarters. That would establish a repository of deployable joint headquarters capable of meeting the growing demand for such elements without diverting officers from other valid requirements. It would preclude the need to form the JTFs in an ad hoc manner and foster the type of joint capabilities envisioned by the Goldwater-Nichols Act.

Jointness truly is the means to an end—successful military operations. Goldwater-Nichols moved the force dramatically forward by providing the organizational structure and joint officer management system, but it is now time to create a better process for developing and managing joint capabilities and doctrine and for prosecuting joint missions. We do not need to rewrite the Goldwater-Nichols Act to do this. Rather we must codify the lessons of ongoing operations by empowering JFCOM as the Joint Doctrine and Capabilities Center for the joint force and by establishing standing joint task force headquarters from the existing service component headquarters in each geographic and functional combatant command. These efforts will further enhance joint culture, improve joint warfighting, and strengthen the joint profession. **JFQ**

NOTES

¹ For a description and argument for a new joint profession, see Don M. Snider, "Jointness, Defense Transformation, and the Need for a New Joint Warfare Profession," *Parameters* (Autumn 2003), 17–30.

² *Ibid.*, 19.

³ Samuel P. Huntington, *The Soldier and the State* (Cambridge: Harvard University Press, 1957); and Don M. Snider et al., eds., *The Future of the Army Profession* (Boston: McGraw-Hill, 2002), 6–9, 15, 24–32.

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RECALL



Following naval bombardment, Coast Guard landing barges carrying first wave of U.S. troops toward Luzon beaches, January 1945

U.S. Coast Guard

Joint Operations in the Southwest Pacific, 1943–1945

By KEVIN C. HOLZIMMER

In the last strategically significant amphibious landing in the Southwest Pacific Area (SWPA) during World War II, the Armed Forces landed 175,000 men—organized into I and XIV Corps—on a 20-mile stretch of beach on the Philippine island of Luzon. The operation capped a 2-year campaign that spanned thousands of miles of ocean and included 73 amphibious assaults. While difficult, all of these landings and subsequent actions succeeded. Indeed, U.S. joint

operations in SWPA—involving Army, Navy, and air assets—contributed significantly to Japan’s defeat.

The few historians who have treated joint operations in SWPA—most prefer the Marine Corps in the Central Pacific—fall into two schools. The larger and more traditional school argues that these operations succeeded because the area had an overall commander, General Douglas MacArthur, USA, who unified the services. The smaller and more recent school pins

success on General Walter Krueger, USA, who not only helped develop joint operations doctrine in the interwar era but also executed it as commander of U.S. Sixth Army. However, neither explanation is sufficient by itself. This article examines joint operations prior to World War II and offers an explanation for the success of joint operations in SWPA despite the lack of joint doctrine and command.

Reserved and Fastidious versus the Frontier Type

The Army and Navy first seriously considered joint operations in the wake of the Spanish-American War. The campaign against Santiago de Cuba, in particular, starkly showed the two services that planning and executing joint operations required substantial investment. Army and Navy commanders were subordinate to their own chains of command instead of unifying under a joint campaign commander. With no way to develop or coordinate a single plan, the services conceived their campaigns independently. With the Spanish squadron bottled up in Santiago Bay, for

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example, Rear Admiral William Sampson of the North Atlantic Squadron—described as a reserved and fastidious technician—suggested that the Army, under Major General William Shafter, take out the fortifications guarding the mouth of the bay so his ships could engage the Spanish fleet. Overweight, often profane, and called the “frontier type” by his biographer, Paul Carlson, Shafter wanted his V Corps to focus on capturing Santiago itself.

These divergent views and personalities led to poor coordination and likely prolonged the campaign. A short time later, even after the Spanish fleet had been sunk or grounded while attempting to escape, Sampson refused another request from the V Corps commander to bombard Santiago de Cuba and its fortifications on the grounds that the Army had not yet cleared the entrance of the bay so his ships could safely pass.

Assessing the two commanders’ roles in the ineffective joint operations, Carlson concluded that:

[Shafter and Sampson] *could not cooperate. Too often Shafter thought in terms of a frontier command where he alone held authority and did not, could not, share responsibility for success or failure of an expedition. Conditioned by such narrow thinking and piqued by the difficulties with Sampson, Shafter refused to recognize the equal role the Navy shared in the war. His position wrecked chances for a smooth campaign, but Shafter was not alone at*

the Army and Navy failed to articulate a doctrine for establishing unified command structures in joint operations between the Spanish-American War and World War II

*fault. Sampson, too, possessed a short temper as well as a desire to claim the major honors for success in war.*¹

Just as the joint military operation lacked an overall coherent strategy, the landing operations reflected a lack of prewar consideration. Ships

were loaded in haphazard fashion, assembled from a wide variety of sources, and approached the landing sites without a standard operating procedure. Chaos marked the actual landing as the Army lacked adequate command and control procedures and enough boats. As William Atwater suggested:

*In sharp contrast to the relatively efficient Navy/Marine Corps landing at Guantánamo, the Army and Navy in a slipshod operation barely managed to put ashore an expeditionary force at Daiquiri, about 15 miles east of Santiago. The entire amphibious phase of this expedition was marked by inefficiency, inexperience, and simple incompetence.*²

Two themes concerning joint operations emerged from the war with Spain. The first surrounds the tactical issue of procedures that govern loading, transporting, and landing troops on hostile shores. The second and more contentious theme involves command. As Shafter’s and Sampson’s divergent plans illustrate, deciding who commands joint operations is paramount. Throughout the first half of the 20th century, the Army and Navy settled the first issue but not the second. They failed to articulate a doctrine for establishing unified command structures in joint operations between the Spanish-American War and World War II and beyond.

Nevertheless, largely owing to joint operations problems in the war with Spain, the services did address the issue, specifically at the Army and Naval War Colleges and the Joint Army and Navy Board (created in 1903 and usually called the Joint Board). The Armed Forces published documents that addressed joint operations throughout the early 20th century. While many dealt with the tactical issue of landing procedures and made great strides in formalizing ways for the Army and Navy to reach and

then assault beaches, none adequately addressed who would command the joint force. In fact, while the War and Navy Departments tried to create a common doctrine for joint command, the proposed solutions often caused more confusion.

Cheerful Cooperation

The years up to 1941 fall into three periods of thinking about joint command. The first was introduced by a 1905 Army and Naval War College study, *Rules for Navy Convoy*. Revised in 1917, the inquiry suggested that command arrangements in a joint operation should not rely on a single joint commander, but on cooperation, which Atwater described as “a form of command whereby neither . . . commander would be placed in an inferior position or be placed under the command of the other. Command issues would be settled by agreement and compromise . . . rather than by issuance of an order.”³ While pains were taken to define separate Army and Navy functions to minimize friction, the War and Navy Departments never tackled exactly how this cooperation would work under the stress of war. Instead they left command to the whims of individuals who were in actual command of their respective service components. An officer wrote in 1910, “Above all else is the importance of a hearty and cheerful cooperation between the two services in all matters pertaining to these operations.”⁴

The issue of command was further clouded, if relying on cheerfulness did not sufficiently cloud it, when *Joint Army and Navy Action in Coast Defense (JANA)* of 1920 replaced the principle of cooperation with that of paramount interest, which gave command to either an Army or Navy officer, based on which service “function and requirements are, at the time, of the greater importance.” In this second period, the joint commander had the authority to designate missions for both services while the subordinate commander did not yield actual command of his



General Douglas MacArthur, Commander, Southwest Pacific, surveying beachhead on Leyte Island, 1944

in Change Number 2 to *Joint Action of the Army and Navy* (1935) in 1938. The return to cooperation left the Armed Forces without a coherent doctrine of joint command on the eve of World War II. As Atwater pointed out, the adoption was a “tragic choice” that caused confusion not only for commanders at Pearl Harbor who faced the Japanese attack on December 7, 1941, but also for leaders on the operational level who had to create and execute plans that would help translate tactical military victories into strategic wins.

Moving against and landing troops on enemy-held beaches emerged as the only bright point in joint operations through the first half of the 20th century. Both the Army and Navy worked the issue through extensive joint maneuvers and such publications as *An Overseas Expedition* (1923) and *Joint Overseas Expeditions* (1933).⁵ Despite the success of amphibious landings, thorny issues of joint command were never settled beyond vague notions of cooperation.

Just as service leaders faced their tasks without a coherent and usable joint command doctrine, the internal command arrangements in SWPA did not foster an institutional or organizational structure suitable for joint operations. While historians often assert that MacArthur was the de facto operational joint commander, the specific command arrangements suggest otherwise. The Joint Chiefs of Staff (JCS)—with the approval of President Franklin Roosevelt—limited MacArthur’s ability to command troops assigned to him when SWPA was created in March 1942. MacArthur was ineligible to directly command any national force, unlike Admiral Chester Nimitz.

Furthermore, MacArthur never attempted to act as a joint commander despite JCS restrictions. Nor did he appoint one, although he had the authority. Instead, the SWPA commander’s standard way of conducting an opera-

own forces. Obviously that would only work with a common conception of the circumstances making one’s service functions and requirements of “greater importance.” Neither edition of *JANA* defined the parameters of “function and requirements.” As Atwater concluded, “The problem in utilizing this form of coordination is

landing troops on enemy-held beaches emerged as the only bright point in joint operations through the first half of the 20th century

how to define the circumstances under which it would apply and then assigning command to a particular service. What ‘paramount interest’ meant in a practical sense was that each specific

case would have to be dealt with on its own merits.” As the Santiago campaign made clear, two strong-willed individuals leading their own service components may have radically different notions.

The third period in the evolution of joint command came after the failure of a joint Army-Navy exercise in 1938. As a result, Admiral William Leahy, Chief of Naval Operations, suggested in the late 1930s that the services should replace the unworkable system of paramount interest. He rejected the principle of unity of

command except through Presidential mandate and instead advocated the old concept of cooperation. General Malin Craig, Chief of Staff of the Army, agreed, and it was made official

U.S. Coast Guard

tion was to provide a broad directive, stating both objectives and the forces available. It was then up to his lieutenants of all services to breathe life into his strategic plan. It was up to them to bury interservice rivalry. And it was up to them to plan, integrate, and execute the operation. In short, operations for all practical purposes fell under the challenging principle of cooperation rather than unity of command.

An Attitude without Service Bias

In light of the limitations that worked against joint operations—lack of joint operational doctrine and MacArthur's command structure—it is useful to consider how SWPA staffs planned joint operations before examining why they succeeded.

Although MacArthur was not the operational commander and refused to appoint one, he sought to establish a command system that was often a throwback to the principle of cooperation. Subordinate organizations included three service commands: Allied Land Forces, Allied Naval Forces, and Allied Air Forces. Complicating this organization was that in early 1943, MacArthur designated his major Army formation, Sixth Army under General Walter Krueger, as Alamo Force, thereby keeping his ground forces independent of Allied Land Forces, led by Australian General Sir Thomas Blamey. The leaders of the Army, naval, and air units were to coordinate their planning in the absence of a joint task force commander. MacArthur's own instructions to his lieutenants betray the lack of doctrine or serious consideration of the demands of joint operations. His component commanders were to rely on "personal relationships" to plan and execute their missions. His headquarters had "developed an attitude... without service bias," a notion many Navy, Marine, and Army Air Corps personnel eventually found unlikely.

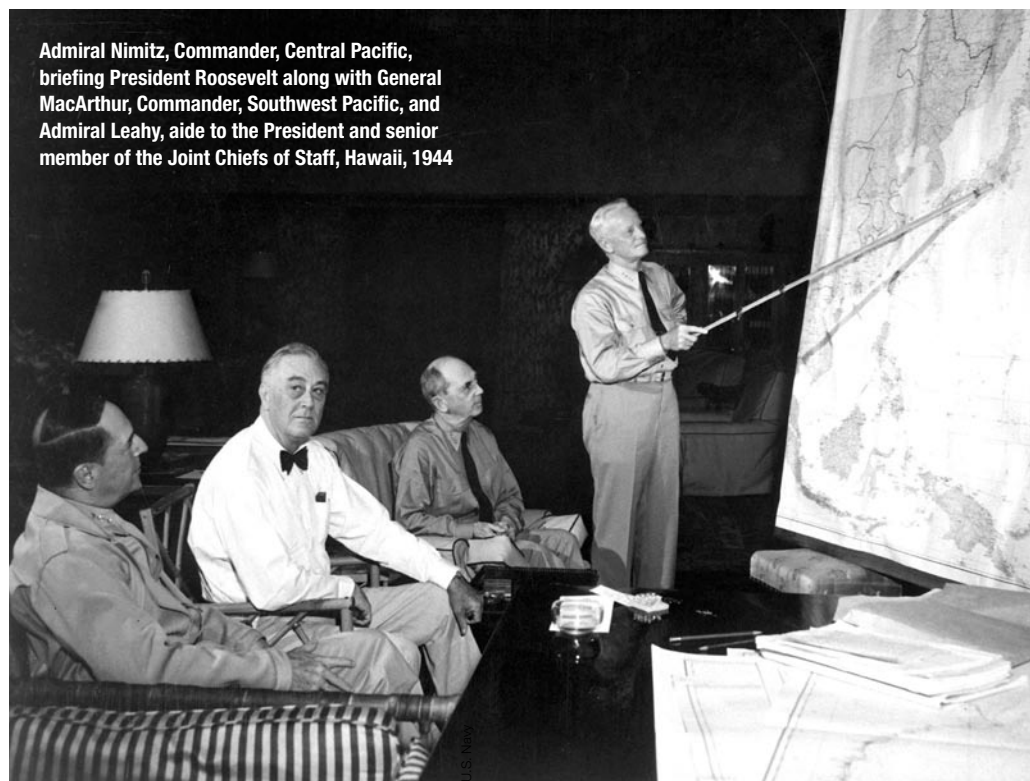
In practice, MacArthur designated Krueger to coordinate planning for the ground, naval, and air forces. As the of-

ficial Army historian put it, "Krueger's authority to coordinate planning gave him a preeminent position; he was first among equals."⁶ Ironically, on arriving in early 1943, Krueger argued against MacArthur's command arrangement and urged the SWPA commander to adopt the principle of unity of command. Throughout the interwar era, Krueger was one of the few officers who thought carefully about joint operations. As early as 1925, he concluded that unity of command must be adopted instead of the principles of mutual cooperation or paramount interest. Now working in a joint environment, Krueger found MacArthur's arrangement awkward at best and dangerous at worst. Nevertheless, MacArthur would not budge. From 1943 until the end of the war, when the bulk of offensive operations took place in SWPA, the services would have to cooperate despite differences in culture and perspective. Krueger reflected in 1947 that "our command arrangements in [SWPA] left a good deal to be desired. . . . There is no doubt in my mind that split command, especially in a crisis, is fatal.

To be sure, we had excellent cooperation—but we were lucky."⁷

Acting as coordinator, Krueger had to make the system work, lucky or not. After receiving MacArthur's broad directives—again usually covering objectives, mission, and forces—the principal commanders would offer any objections, which could be handled by letter, radio, or conference. Overall, however, the directives were accepted without much disagreement.

Krueger would next assemble a joint planning group (JPG) within Sixth Army to work on the particular operation. Usually headed by Krueger's component operations staff officer, the group included members from the naval and air forces and met at Sixth Army headquarters. Krueger only intervened if the members could not solve their disagreements, which were usually interservice. Then he would consult his air and naval counterparts. As Krueger recalled, "It is remarkable that we always managed to adjust existing differences, and it was this and the spirit of cooperation displayed by ground, naval, and air forces that made



Admiral Nimitz, Commander, Central Pacific, briefing President Roosevelt along with General MacArthur, Commander, Southwest Pacific, and Admiral Leahy, aide to the President and senior member of the Joint Chiefs of Staff, Hawaii, 1944

Troops watching U.S. and Japanese planes fighting while preparing to land on Leyte Island, October 1944



U.S. Coast Guard

it possible for us to operate as an Army-Navy-air forces team.”⁸

Once JPG finalized its plan, it needed approval from the ground, naval, and air commanders, usually at a commanders’ conference. Although Krueger suggested that “all spade work had as a rule been done by the joint planners [by conference time],”⁹ there was often considerable haggling over issues that needed the attention of the commanders. Whether by telephone, radio, letter, or conference, divisive issues invariably got hammered out.

Improving Coordination

By examining an operation, we may obtain a clearer picture of the joint planning process in SWPA. The Hollandia campaign (*Reckless*) merits consideration because it was conducted as the planning process began to mature.

As the official Army historian pointed out, “Indeed, the planning for Hollandia provides an excellent case study for most amphibious undertakings in the Southwest Pacific.”¹⁰

While command in SWPA cannot be described as organizationally or structurally unified, other factors made the exercise difficult on the operational level not only for Hollandia, but also for other operations. Vice Admiral Daniel Barbey, commander of Seventh Amphibious Force, recalled the locations of the headquarters of the various commanders during *Reckless* planning:

General MacArthur was in Brisbane, Australia. Admiral Nimitz was in Pearl Harbor. General Krueger, the commander of the Sixth Army . . . was at Finschhafen [Papua New Guinea]. General [Robert

*Eichelberger, who would command the ground forces, was at Goodenough Island, three hundred miles to the eastward. My flagship was anchored at Buna, about midway between the two places. Air Force headquarters was at Brisbane, and the headquarters of those bits of the Australian Navy that would operate under my command was at Melbourne. The various units of the Central Pacific Force that were involved were scattered from the Hawaiian Islands to the Solomons.*¹¹

MacArthur’s headquarters was over 1,500 miles from Sixth Army’s. “Joint planning,” Barbey concluded, “posed more than the usual problems because of the great distances.”¹²

Formal planning for *Reckless* began March 5, 1944, after the receipt of the general headquarters (GHQ) SWPA order, but actual planning began in the

wake of the Admiralty Islands success. According to Krueger, a series of conferences took place to refine the plan his JPG created. The meetings included the obligatory commanders' conference consisting of Major General Stephen Chamberlain, G-3, GHQ SWPA; Major General Ennis Whitehead, commander, Fifth Air Force; and Major General James Frink, commander, U.S. Service of Supply, along with Krueger and Barbey. Several days later, a task force commanders' conference was held at Sixth Army headquarters at Finschhafen, at-

whether by telephone, radio, letter, or conference, divisive issues invariably got hammered out

tended by Lieutenant General Robert Eichelberger, commander, I Corps, who led one task force, and Brigadier General Jens Doe, who led another. The commanders discussed the timing of D-day and H-hour, securing air superiority, shipping schedules, deception measures, naval support, command arrangements, and intelligence reports. More conferences followed, including one in Brisbane at GHQ SWPA and another involving Alamo Force and Seventh Amphibious Fleet. The last took place April 12 between the staffs of Krueger and Barbey on the headquarters ship of the fleet and apparently finalized shipping issues for the over-water movement of personnel, equipment, and supplies. The frank tone described in accounts of the meetings showed that if a joint atmosphere did not permeate GHQ SWPA, it existed at headquarters Sixth Army.

While these conferences were important, they do not tell the whole story. The journal of Sixth Army headquarters shows a steady stream of commanders of all services coming and going throughout the planning of *Reckless*, demonstrating a less formal yet intensive joint planning process than Krueger suggests. Distances between headquarters notwithstanding, these visits indicate the degree to which

Army, Navy, and air leaders worked to forge a joint operational planning team.

There were problems. Navy commanders felt overshadowed by the Army in the planning process. During the Hollandia operation, Barbey suggested that the Army use a different landing beach than Krueger's staff offered and believed the Army was rejecting Navy advice. Krueger responded that Barbey was the one placing naval over military interests and offered a lengthy critique of Barbey's proposal. The Sixth Army commander reminded Barbey that while the beaches the admiral proposed would be better for the Navy, they would place the ground forces of *Reckless* "in a pocket from which they may find it extremely

difficult and time-consuming to extricate themselves in order to attain their objective." Nevertheless, Krueger admitted that the alternate site might indeed be better after "further study and reconnaissance." In the end, the Sixth Army site was used and proved the right choice. Having rejected Barbey's suggestion, Krueger told him, "While I am not unmindful of the naval difficulties you present, such as the necessity of minesweeping, I urge that you give serious consideration to the disadvantages to the ground forces when the naval viewpoint is given undue weight in the selection of landing beaches."¹³

Such frank exchanges occurred not only in planning, but also as operations were ongoing. During the land campaign against the Japanese on Leyte, for example, planes of Fifth U.S. Air Force, commanded by Lieutenant General George Kenney, strafed American troops. In a fit of anger, Krueger fired a radio message to Kenney blaming Fifth Air Force for deliberately attacking his men. Kenney reacted defensively. After a heated conversation with Krueger's chief of staff, he talked with Krueger personally. During this conversation, Krueger not only apologized for the accusations but also agreed to work with Kenney on improving coordination between their services.

The joint planning process for Hollandia, along with the Leyte incident, demonstrated that while the Navy sometimes felt shunned by the Army and there was interservice bickering over serious issues, overall planning took place in a joint environment on the operational level largely due to Walter Krueger, who was responsible for planning. But beyond that, what enabled effective joint planning and execution remains unclear. One might argue that, unlike during the Spanish-American War, the personalities were more conducive to a joint environment so the principle of cooperation worked. But that thesis does not recognize that SWPA commanders could be as uncooperative as their counterparts 50 years before. Krueger was criticized as being stubborn and difficult to work with. Kenney was outspoken and confident to the point of arrogance. Barbey was known as self-serving and pushy.

Military Managers and the Applicatory Method

Neither personalities nor concepts of command arrangements in joint operations changed significantly after the Spanish-American War and therefore cannot account for the joint success in SWPA. However, both the way senior commanders viewed their profession and the manner in which high-ranking officers worked together did fundamentally change. What separates Sampson and Shafter from Krueger, Barbey, Kenney, and Rear Admiral Thomas Kinkaid in terms of organizing and executing joint operations is the rise in the early and middle 20th century of what Morris Janowitz characterizes as the managerial style of military leadership. Janowitz utilizes heroic and managerial styles to explain the modern professional officer corps:

The history of the modern military establishment can be described as a struggle between heroic leaders, who embody traditionalism and glory, and military "managers," who are concerned with the scientific and rational conduct of war.

*This distinction is fundamental. The military manager reflects the scientific and pragmatic dimensions of warmaking; he is the professional with effective links to civilian society.*¹⁴

What stands out is characterization of the military manager as “concerned with the scientific and rational conduct of war” and “pragmatic

senior commanders were competent in staff work, as was manifested through the planning and execution of joint operations

dimensions of warmaking.” Also of note in Janowitz’s thinking is the division of managerial style leaders into “skill groups,” one being the staff officer—“essentially a specialist in coordination.” While not all senior commanders in SWPA could be classified as solely staff officers, they were competent in staff work, as was manifested through the planning and execution of joint operations.

To be an effective staff officer, one must cultivate the ability to communicate and work with others. Explains Janowitz:

*Interpersonal skill is of the essence for those who must operate in the ever-changing environment of the higher levels of military administration. . . . The results reveal that, for officers from all three services, the higher the administrative level, the greater the emphasis on interpersonal skill. . . . The conference technique is not a foreign importation, but an inevitable aspect of modern managerial techniques.*¹⁵

The conferences and the overall dialogue between SWPA commanders betray the high degree of coordination and communication, especially compared to the Spanish-American War.

While several institutions and factors played a role in developing the managerial style, one stands out with regard to joint operations in SWPA: education, derived specifically from the Army and Naval War Colleges. Educa-

tion—receiving information about a subject—does not mean the same thing as managerial style here. Shafter and Sampson, Civil War veterans, were well aware of the joint operations in that war. That knowledge did not translate into a joint working environment. An increased emphasis on the larger dimensions of strategy and operations at the war colleges contributed to the managerial style. However, the collective approach to learning and planning in professional military education (PME) no doubt helped turn

officers from heroic to managerial leaders, particularly in its emphasis on the cooperative nature of managerial leaders. From their days at intermediate and senior service schools, these officers worked in groups and seminars, analyzing readings and lectures, planning and executing war games, and participating in problem-solving exercises. Many activities involved joint considerations, and all were part of the applicatory method of instruction adopted by both war colleges in the early 20th century. That method proved to be the most important mechanism of PME in creating managerial officers and was vital to joint operations in the absence of joint doctrine and command arrangements.

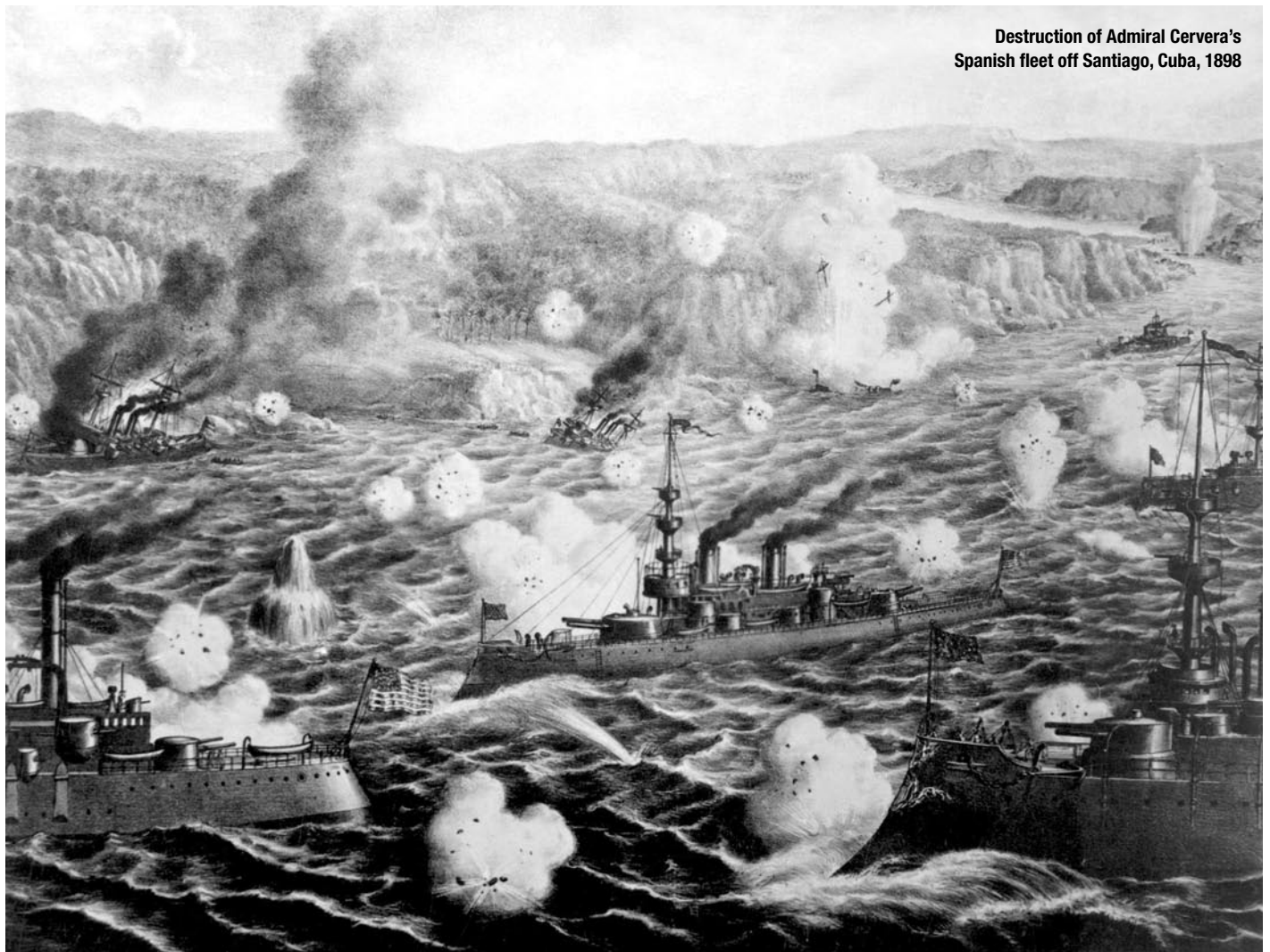
Modified from the German applicatory method, the American version was an approach to solving military problems. Both the Army and Naval War Colleges adopted the same basic educational methodology in 1903 and 1909, respectively. The first phase—the heart of the method—was the estimate of the situation, described by the Naval War College faculty as a “logical process of thought, which, applied to a concrete strategical or tactical problem, enables one to arrive at a definite strategical or tactical decision.” The early list that comprised the estimate incorporated four considerations: the mission; enemy force strength, disposition, and intentions; friendly force strength, disposition, and available courses of action; and the decision.

The second phase of the applicatory method was to translate the decision into clear orders for subordinates. The third phase translated “the mental processes into action” for “carrying out on the field or in the game the tactical or strategical dispositions made in the order.” In other words, the final phase evaluated the estimate of the situation and the orders to subordinates through wargaming.

While the colleges adopted the method in the early 20th century, both schools had the goal of creating a truly corporate atmosphere from the beginning. Admiral Stephen Luce, first president of the Naval War College, remarked that in his institution, “Officers meet together to discuss questions pertaining to higher branches of their profession.”¹⁶ Similarly, the Army War College stressed that “solutions to problems were found by a group, not by the individual.”¹⁷

In a lecture at the Naval War College in 1914, for example, Captain William Sims, who became president in 1917, expanded on Luce’s vision, emphasizing that the conference method of learning was central: “The War College is an organized body of naval officers who are trying to arrive at the truth concerning the best methods of conducting war. . . . The basis of its methods of research is discussion. This discussion is free and frank. . . . The War College is a team.” Contrasting the traditional method of command in which “the old man” made a decision on his own—a characteristic of the heroic leader—the “organized-team” concept promoted an atmosphere in which ideas were raised, discussed, and passed to the commander, who made the final decision based in part on his staff’s work. Concluded Sims, “The conference method develops a real team spirit, and this makes everything else comparatively easy. The officers feel that to them alone—to their team—is due the credit.”¹⁸

The Army War College likewise fostered teamwork as an essential feature of modern warfare. Extolling the



U.S. Marine Corps, lithograph published by Kurz & Allison, 1898

virtues of joint effort for the General Staff as Sims did for the Navy, Major George C. Marshall lectured the college in 1922 about what makes a general staff officer, a position for which the college prepared students. He suggested that the Army needed the spirit of “perfect cooperation” and “a sympathetic understanding with the other elements of the Army. . . . The success of the War Department General Staff, however, is believed to depend primarily on the diligent efforts of its membership to promote a spirit of cooperation and, most important of all, to develop and maintain a sympathetic attitude of understanding with the services and line of the Army.” A successful commander is “aware of the vital importance of maintaining a spirit of good will and

generous understanding among the officers of the command. He realizes the battle cannot be won without an harmonious, united effort.”¹⁹ An Army leader had to listen, understand, and work with his colleagues, skills that were taught and practiced by students both in Washington and Newport.

Although both Sims and Marshall emphasized the need to work with one’s own service, they taught a way of working within groups, including interservice groups. Within this framework of the applicatory system, students and faculty alike explored the possibilities and systemic shortcomings of joint operations within the War and Navy Departments. Krueger—who instructed at both colleges during the interwar period—taught that should

the two services not formalize the issues of command in joint operations, they “must have a common, definite understanding of their respective functions in national defense and of the best method for attaining coordination in operations. . . . They must speak the same language.”²⁰ This ability came in large part from PME offering a formal setting in which to analyze, discuss, and provide solutions via the applicatory method. Reflecting on joint operations in SWPA, Krueger told the Armed Forces Staff College in 1947, “Many problems arising during the operations themselves, due to conflicting demands that seemed incapable of adjustment, required much time, energy, and patience for solution . . . clearly [indicating] the vital necessity of close

and sympathetic understanding . . . of the powers, limitations, and requirements of the other services.”²¹

With applicatory instruction in advanced PME, it was no longer expected that leaders such as Shafter would by themselves formulate battle plans based on their own experience and expertise in complex joint operations. No longer was the individualistic and heroic leader the ideal. Instead, officers collectively analyzed issues from a broader vantage point, seeking inputs from sister-service counterparts. With the rise of the managerial style—introduced in part via PME—the commanders of SWPA defaulted to skills they acquired at the war colleges. Within a cooperative framework, they first analyzed the problem before planning and finally executing, perhaps not even recognizing that the frontier individualism of

the old Army epitomized by Shafter had passed. The managerial style of leadership that allowed cooperation to work at all is what explains the success of joint operations in SWPA.

Being military managers allowed SWPA leaders to function on the operational level without a unified command structure or a history of joint doctrine. While the personal characteristics of Krueger, Kinkaid, and Kenney resembled those of Shafter and Sampson, their ability to settle personal and professional differences during both planning and operations by conference, letter, radio, and telephone demonstrated the degree to which the managerial style had overtaken the senior military leadership. Facing the complexity of joint operations in the absence of a unified task force commander, the Army, Navy, and air commanders resorted to the techniques of analyzing problems and decisionmaking they employed in the war colleges in the interwar period. The managerial style thus played its biggest role in SWPA in how the service commanders thought and solved problems. It was not doctrine, knowledge, or organization that played the decisive factor, but rather a mental outlook. **JFQ**

NOTES

¹ Paul H. Carlson, “Pecos Bill”: *A Military Biography of William R. Shafter* (College Station: Texas A&M University Press, 1989), 172.
² William Felix Atwater, “United States Army and Navy Development of Joint Landing Operations 1898–1942” (Ph.D. dissertation, Duke University, 1986, UMI order no. 8718403), 8.
³ *Ibid.*, 22.
⁴ Wyatt I. Selkirk, “The Co-Operation of Land and Sea Forces,” *Journal of the Military Service Institution of the United States* (March–April 1910), 324.
⁵ General Service Schools and Naval War College, *An Overseas Expedition: A Joint Army and Navy Problem* (Fort Leavenworth: General Service Schools Press, 1923); *War Department and Navy Department, Joint Overseas Expeditions* (Washington, DC: Government Printing Office, 1929, re. 1933).

⁶ John Miller, Jr., “Cartwheel: The Reduction of Rabaul,” *United States Army in World War II: The War in the Pacific* (Washington, DC: Office of the Chief of Military History, 1959), 26.

⁷ Walter Krueger, letter to Oscar W. Griswold, February 14, 1947, Krueger Papers, box 11, U.S. Military Academy, West Point, NY.

⁸ Walter Krueger, *From Down Under to Nippon: The Story of Sixth Army in World War II* (Washington, DC: Combat Forces Press, 1953), 136–37.

⁹ *Ibid.*, 137.

¹⁰ Robert R. Smith, “The Approach to the Philippines,” *United States Army in World War II: The War in the Pacific* (Washington, DC: Government Printing Office, 1979), 13–52.

¹¹ Daniel E. Barbey, *MacArthur’s Amphibious Navy: Seventh Amphibious Force Operations, 1943–1945* (Annapolis: U.S. Naval Institute Press, 1969), 159–160.

¹² *Ibid.*, 159.

¹³ Walter Krueger, letter to Daniel E. Barbey, March 26, 1944, Krueger Papers, box 7, U.S. Military Academy, West Point, NY.

¹⁴ Morris Janowitz, *The Professional Soldier: A Social and Political Portrait* (New York: The Free Press, 1971), 21.

¹⁵ *Ibid.*, 70–71.

¹⁶ Stephen B. Luce, address to Naval War College, 1896, Naval War College Archives, Record Group 1.

¹⁷ Harry P. Ball, *Of Responsible Command: A History of the U.S. Army War College* (Carlisle Barracks, PA: The Alumni Association of the U.S. Army War College, 1983), 194.

¹⁸ William S. Sims, “Naval War College Principles and Methods Applied Afloat,” *U.S. Naval Institute Proceedings* 41, no. 2 (March–April 1915), 386, 401.

¹⁹ George C. Marshall, “The Development of the General Staff,” lecture, Army War College, September 19, 1922, in *The Papers of George Catlett Marshall*, volume 1, *The Soldierly Spirit*, ed. Larry I. Bland (Baltimore: The Johns Hopkins University Press, 1981), 216–217.

²⁰ Walter Krueger, “Command: The Military Command System,” lecture, Naval War College, 1930–1931, 23, Krueger Papers, box 16, U.S. Military Academy, West Point, NY.

²¹ Walter Krueger, “Command Responsibilities in a Joint Operation,” lecture, Armed Forces Staff College, April 18, 1947, 3–4, Krueger Papers, box 12, U.S. Military Academy, West Point, NY.

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A Book Review

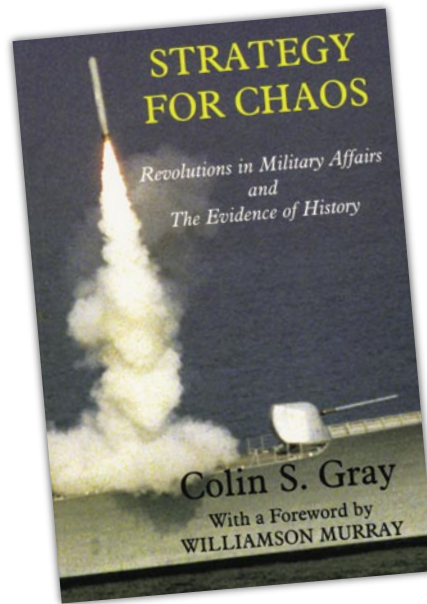
By BARRY WATTS

Strategy for Chaos: Revolutions in Military Affairs and the Evidence of History

by Colin S. Gray
London: Frank Cass, 2002
310 pp. \$33.95
[ISBN: 0-714-65186-9]

Strategy for Chaos by Colin S. Gray is an uneven work of good intentions. Its goal is to use the concepts of revolutions in military affairs (RMAs) and nonlinearity to improve understanding of war and strategy by balancing pure theory and the singularities of military history. Gray observes that social scientists have been prone to force square pegs of military history into round holes of theory regardless of the resulting distortions. Conversely, military historians have been chary of even modest generalizations from the historical record on the grounds that events are unique both in themselves and in context. *Strategy for Chaos* attempts to avoid erring in either direction by elucidating the “nature, structure, and dynamics” of both war and strategy while respecting history by reviewing the RMAs of the Napoleonic period, World War I, and the Cold War nuclear era.

There is much that is sensible, praiseworthy, and even true in the resulting book. Gray argues, for example, that insofar as strategy and war are fundamentally about use of organized violence between opposing polities to achieve their conflicting ends, their natures have never changed, nor are they likely to regardless of how “revolutionary” alterations in warfighting may prove to be. Conversely, he insists that the character of war and strategy is “ever changing” in response to changes in society, economics, technology, and politics.



Gray’s first point was made repeatedly by Carl von Clausewitz, perhaps most memorably when he observed that war can have its own means or “grammar,” but not its own ends or “logic.” Gray’s second point is more obvious to those who have lived through the emergence of nuclear weapons and airliners being flown into buildings than it may have been to Clausewitz. Both theoretical claims have broad empirical support and, taken together, offer a needed corrective to much of the conceptual and verbal excesses in the RMA and nonlinearity-of-war literature. Gray is right to condemn incautious assertions—even by American Secretaries of Defense—that precision munitions or cyberspace weapons are altering the *nature* of war or strategy.

Nevertheless, the book is not entirely successful in laying out either theory or evidence. Because certain misconceptions have become so widespread in RMA debates, this review attempts to clarify two key points: the central implication of nonlinear dynamics for war and strategy, and the historical origins of the RMA hypothesis in the Department of Defense (DOD).

Gray’s deepest concern about nonlinearity and strategy is their seeming incompatibility. If war is chaotic, how can purposeful strategy be possible? Gray’s

solution is to argue that “the proposition that it is the nature of war to be chaotic [is] an insightful fallacy.... A misreading of Clausewitz on the importance of friction, chance, risk, and uncertainty in war, combined with an appreciation of the chaotic conditions of actual combat, has encouraged a newly orthodox view that chaos rules in war and, in reality, over strategy.” This orthodoxy, he concludes, is mistaken.

The main argument behind these conclusions is in Gray’s fourth chapter. Given the confusion between *nonlinear* and *complex-adaptive* systems evident in phrases such as “chaos-complexity-nonlinearity theory,” Gray’s reasoning is not easy to follow. For example, he appears unaware that the dynamical systems of physics, whether linear or nonlinear, process information strictly through mechanical iteration, whereas complex-adaptive systems such as humans and stock markets look for regularities or patterns that can be condensed into schemata describing aspects of reality and then act on those schemata, a radically different way of processing information. Moreover, he concedes that “strategy is nonlinear in that strategic consequences, or effectiveness, can show radical discontinuities.” Such discontinuities clearly suggest a loss of universal predictability in strategy, which is a key feature of nonlinear systems. Yet Gray also insists that “much of strategic behavior is linear” and subject to “sensible prediction,” and therefore purposeful predictive strategy can confound chaos. In summarizing his assessment of three historical RMAs—Napoleonic France, imperial Germany, and the Soviet Union in the nuclear era—he argues that all three were “massively overmatched by their enemies,” which is to say that “the bigger battalions” eventually won all three contests. Ignored, however, are cases such as the American failure in Vietnam and the Spanish conquest of the Incas in which the bigger battalions lost.

The larger question in *Strategy for Chaos* is whether the absence of

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universal predictability for combat outcomes renders strategy moot. This reviewer's answer is a resounding no. If combat outcomes were computationally reducible in the way the movements of the planets around the sun are, then appropriately programmed computers could replace strategists. War's nonlinearities are what make strategy an art, demanding rare levels of discernment and judgment (Clausewitz's *coup d'oeil*). Rather than rejecting nonlinearity in strategy, Gray the strategist ought to embrace it. But like 18th- and 19th-century physicists such as Pierre Simon de Laplace, he feels compelled to insist that strategy is for the most part predictable, when in truth predictability can vanish in the next moment with devastating strategic consequences.

Turning to the origins of RMA discussions in DOD, Gray asserts that "various official and commercial patrons . . . in the 1990s undoubtedly were motivated largely by parochial—albeit legitimate—concerns of U.S. defence policy and even simply by business opportunity." Given his acknowledgement of Andrew Marshall's role in pushing him to declare where he stands on the RMA debate, this denigrating characterization of how and why the debate emerged does not reflect the facts as this reviewer understands them. After Marshall became the Director of Net Assessment in 1973, he saw the need to develop plausible Soviet assessments of the nuclear competition with the United States and the military balance in Europe. While that effort took over a decade to mature, it became the single most important body of research he pursued from 1973 to the end of the Cold War. Besides a substantial impact on the major assessments Marshall's office produced during the 1980s, this research also provided insight into Soviet thinking about past and future military-technical revolutions (MTRs).

Reflection on Soviet theorizing together with ongoing technical advances in guided weapons, sensors, and automated control systems led Marshall, through the late-1980s Commission

on Long-Term Integrated Strategy, to conclude that changes in the conduct of war lay ahead. Further, based on historical research into the period 1918–1939, he suspected that these changes, when integrated with new operational concepts and organizational arrangements, would be as significant for war's *conduct* as was the rise of *blitzkrieg*, strategic bombardment, and carrier aviation during the interwar period. Marshall's subsequent decision to undertake an MTR assessment for the Secretary of Defense, far from being either parochial or casual, was made for the eminently serious purpose of alerting senior DOD decisionmakers to prospective changes in the conduct of war. Moreover, Marshall substituted the term *revolution in military affairs* for MTR in July 1993 to emphasize the importance of operational concepts and organizational adaptations in turning technological advances into greater military effectiveness. *Strategy for Chaos* distorts the origins of the RMA debate by ignoring this early history.

Contrary to Gray's claim that the debate was merely about definitions, Marshall's choice of the term *hypothesis* to refer to the possibility of far-reaching changes in war signified that the reality and character of the conjectured revolution were matters of fact. Gray's argument that RMAs are moot unless they can directly produce victory is itself predicated on a definitional sleight of hand, namely conflating *strategic* and *military* effectiveness.

Williamson Murray's assessment that *Strategy for Chaos* "has framed debate about RMAs for the foreseeable future" seems overblown. First, the changes in American military practice from 1991 to 2003, of which growing reliance on guided weapons is but the tip of the iceberg, are too substantial to be dismissed on such grounds as the weakness of Arab opponents. Gray may be correct in arguing that the military's growing use of guided weapons does not equate to an order-of-magnitude increase in strategic effectiveness, but there seems little doubt that such increases in military effectiveness have occurred.

Second, there are historical cases in which increases in military effectiveness did drive the strategic outcome. Again, the conquest of Amerindian civilizations in the early 1500s is high impossible to explain without acknowledging the roles of Spanish weaponry (including horses), tactical cohesion, and military culture. In the Andes, for example, Spanish *tactical* superiority crushed Incan forces time and again no matter how heroic, tenacious, skillfully led, or numerically superior they were.

Despite these objections, *Strategy for Chaos* will be of interest to those who follow the RMA debate. The book is an invaluable goad for thoughtful readers to think beyond the RMA bumper stickers and slogans Gray rightly condemns and to determine their own positions on the subject. **JFQ**

A Book Review

By JAKUB J. GRYGIEL

The Modern Prince: What Leaders Need to Know Now

by Carnes Lord
New Haven: Yale University Press, 2003
304 pp. \$26.00
[ISBN: 0-3001-0007-8]

For a variety of reasons, ranging from swinging academic trends to the democratic dislike of great men, the study of leadership is not a popular field in modern political science. Carnes Lord offers a valuable work that goes against the prevailing fashion and underscores the importance of leadership in modern politics. The author, a professor of strategy at the Naval War College in Newport, Rhode Island, brings to his work an impressive scholarship combined with extensive policy

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experience in the executive branch.

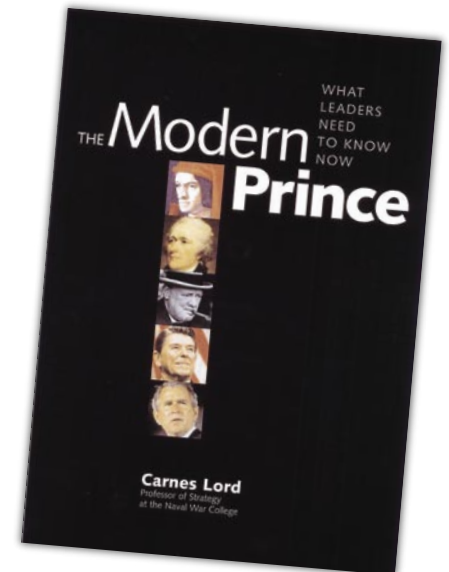
The Modern Prince is a highly readable book in which classical wisdom on leadership is incorporated with modern examples of leaders. The result is a work that analyzes such political theorists as Aristotle, Tocqueville, James Madison, John Jay, Alexander Hamilton, and Machiavelli—and illustrates its points using 20th-century leaders from Bill Clinton to Singapore's Lee Kuan Yew and France's Charles de Gaulle.

The methodology is analogous to that of the original *Prince*, written by Niccolò Machiavelli. Like Carnes Lord, the Florentine was a practitioner of politics, but also, and most famously, a writer and political theorist in 15th- and 16th-century Italy. The purpose of Machiavelli's *Prince* was to present, as he wrote in the dedication, "knowledge of the deeds of great men which I have acquired through a long experience of modern events and a constant study of the past." Lord does exactly that, updating both the "modern events" and the "past" to reflect current political life.

The subject of *The Modern Prince* is leadership. Lord begins by justifying the need for leadership in a democracy. There is a strong temptation to look at

history as an effect of impersonal forces, not individuals. Democracies, according to this view, are ruled by laws, not men, and consequently great leaders are not necessary for the well-functioning of the state. But, as Lord observes, the tendency in many modern democracies is the opposite: the executive power is becoming stronger, underscoring the importance of knowing what leaders are expected to do, what skills they need, and what their strategic priority should be. Moreover, democracies need leaders, especially in moments of crisis when "authoritative decisionmaking" capable of resolving dangerous disputes between different interests is indispensable for the survival of the polity. Finally, leaders are necessary because, in Lord's words, they are "a vital mechanism for bringing political knowledge to bear on the business of politics." This political knowledge is the key to understanding the meaning of leadership.

What then should the "modern prince" know? Lord shuffles through the areas of indispensable knowledge, from understanding strengths and weaknesses of democracies to the ability to manage elites in a society. On a fundamental level, great leadership



means a combination of what the ancients defined as *ars gerendi* and *ars administrandi*, which loosely translate to the art of leadership and the art of administration, strategy, tactics, vision, and management.

The leader—the prince—cannot limit his knowledge to one or the other because that would imply knowing how to administer politics without knowing the goal, or vice versa, knowing the objective but being ignorant of how to attain it. Because leaders must be adept at both vision and management, what they need,

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according to Lord, is common sense. Writing about strategy, which is one aspect of leadership, Lord argues that it “is a plan of action; it applies means or resources to achieve a certain end; and it presupposes an adversary. Understood in such terms, strategy is really an element of common sense, something that pervades much of daily life.” Leadership, therefore, is grounded in common sense. Specifically, it needs prudence, which is “the faculty we use in applying general principles to particular circumstance that require decision and action.”

The Aristotelian virtue of prudence is very different from what we moderns expect from policymakers. It is not expertise. Leaders should not, and cannot, be foreign policy, regional, social policy, or economic experts. Leadership is not mathematical knowledge and leaders are not technocrats. But they must possess a reasoned knowledge that allows them to choose among the various policy options that are presented to them. As an example, the President cannot be an expert in every field of policy under his control, but he needs sound judgment in the choice of his advisers. They are the experts; he is the leader. As Lord writes, leaders are “general contractors” of sorts:

[They] do not have detailed knowledge of all the crafts that are needed to build a house. What they must know, rather, is how to coordinate and integrate the activities of the specialized craftsmen who work for them. And, equally important, they must be capable of judging the final products of these craftsmen, in terms both of their intrinsic excellence and of their contribution to the success of the overall enterprise.

In fact, there is a danger in experts taking over the decisionmaking process. Experts, by the nature of their specialization, are more prone to see only the interests of their own field and are reluctant to make decisions on the basis of the “common good.” Lord gives the example of the scientific community being unable, and perhaps unwilling, to stop the “morally monstrous undertaking” of human cloning, in large

measure because of the belief in the need to continue scientific progress regardless of its social, human, and moral costs. It is in such cases that leadership—or prudential judgment—is most needed to preserve the common weal.

How does one acquire common sense or prudence? It appears deceptively easy, in large measure because it does not require struggling through degrees, academic theories, or books. In fact, prudent judgment cannot be attained, according to Lord, in a library or a school. It is not a technical expertise that can be studied as one studies architecture or economics. Prudence, or reasoned knowledge, is a rare talent, similar to another characteristic of leadership, charisma. And there is no easy formula to acquire prudence. Lord again cites Aristotle, who argued that prudence could be developed only through experience.

Carnes Lord concludes by examining the main challenges faced by democracies. This final chapter is a modern version of the last chapter of the *Prince*, which Machiavelli wrote as an “exhortation to liberate Italy from the barbarians.” In the 15th and 16th centuries, Italy was divided among several city-states, unable to offer a united front to the growing powers of Spain and France. Luckily, modern democracies are prospering and do not appear near collapse, but Lord cautions against complacency. In chapter 26, he exhorts us to “preserve democracy from the barbarians.” Democracies may appear stable, but like past regimes, they are also prone to collapse under external or internal pressures. The external threats are perhaps the most evident. Over the past few years, the “holy warriors of a radicalized Islam are . . . the obvious barbarians at the gates of the new Rome of Western liberalism.” But the threats to democracy come also from within, in the form of unassimilated minorities from immigration or decay of democratic ideals and practice. Lord is particularly critical of the rise of plebiscitary leadership, which leads to decisions based on public opinion polls

and the abdication of difficult decisions, especially in science and technology.

The Modern Prince makes ancient wisdom accessible and relevant to modern policymakers. It brings back to political science insights that have been lost amidst sterile academic theories. In many ways, the greatest praise for this book is the fact that it restores rather than innovates. **JFQ**

A Book Review

By RANDALL J. LARSEN

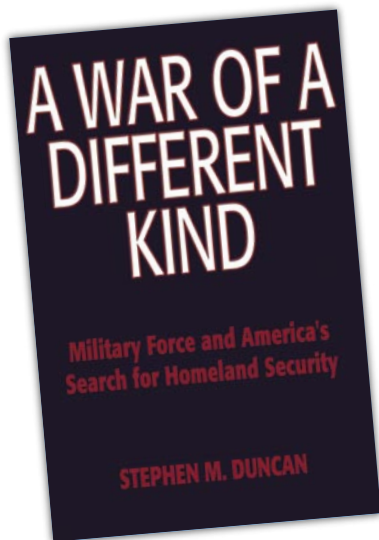
A War of a Different Kind: Military Force and America's Search for Homeland Security

by Stephen M. Duncan
Annapolis: Naval Institute Press, 2004
366 pp. \$29.95
[ISBN: 1-5911-4220-2]

In the preface to *A War of a Different Kind*, Stephen Duncan quotes an observation from Will and Ariel Durant: in 3,421 years of recorded history, there have only been 268 years free of war. Furthermore, Duncan states that since 1783 the United States has sent sizable military forces into harm's way every 20 years. In a world of rapid change, war is therefore a constant. However, warfare in the opening decades of the 21st century will be “a different kind of war.” Duncan's superb analysis of this new threat, new battlefield (both at home and abroad), and new challenges, requirements, and missions for the Armed Forces makes this a must-read for all military officers and for those interested in national and homeland security.

The book is readable, informative, and thought-provoking and is an invaluable reference tool. Many recent

Colonel Randall J. Larsen, USAF (Ret.), is CEO of Homeland Security Associates and was Director of the Institute for Homeland Security and Chairman of the Department of Military Strategy and Operations at the National War College.



works on this subject have been long on opinion but short on facts and analysis, but *A War of a Different Kind* combines well-documented facts and analysis with a minimum of opinion. The endnotes alone are of great value to the student of homeland security.

Duncan's analyses range from a perspective on strategic security ("conquering nations will threaten the U.S. less than failed nations"), to the

organizational challenges, planning, and coordinating defense "of a nation of 87,000 different and sometimes overlapping jurisdictions," to the technological revolution that makes the use of weapons of mass destruction by either small nations or even well-financed nonstate actors a certainty.

An overview of the "early years" (1993–2001) highlights the frustrations of those focused on the growing threat to the American homeland. Despite increasing numbers of attacks on diplomatic and military targets overseas and extensive intelligence analyses and high-level commission reports warning of attacks at home, the U.S. Government failed to take action much beyond cruise missile strikes aimed at empty buildings and tents in the desert. The General Accounting Office reported that no coherent counterterrorism strategy existed. Terrorism was treated as a crime. However, former Clinton administration officials have stated that neither the Congress nor the electorate would have supported significant military action

against al Qaeda or the Taliban in the 1990s. But that changed after 9/11. Terrorism transformed from a crime to a national security threat. Preemption became a topic of hot debate, and America once again looked to the Armed Forces for answers.

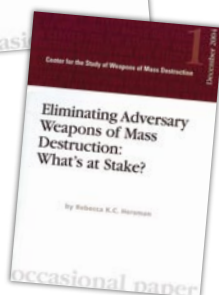
The military stepped forward, but according to Duncan, it was 40 percent smaller than in 1989 and had seen 37 separate deployments between 1991 and 1999. The events of 9/11 sent that military into hyperdrive. This overstressed force is a theme throughout the book. Of particular concern to Duncan are the demands on the National Guard and Reserve: "Army Reserve Soldiers have been deployed 10 times in the past 12 years. During the 75 years before that, the Army Reserve had been mobilized just 9 times." The problem of dual hatting is also highlighted. (A report from the John F. Kennedy School of Government at Harvard University highlighted the problem of triple hatting, as with firefighters who moonlight as ambulance drivers and also serve in the

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Guard or Reserve.) Governors and mayors depend on first responders and expect augmentation from the Department of Defense in major crises. Yet in the summer of 2001, 652 officers and civilian employees of the Los Angeles Police Department and 236 deputies from the Los Angeles County Sheriff's Department were members of the Reserve component. (A U.S. Northern Command exercise demonstrated this problem when the Nevada National Guard activated military police units to assist during a mock attack on Las Vegas that resulted in the activation of scores of Las Vegas police officers. This procedure is not additive and can be disruptive.) Some would say the Reserve component was well organized, trained, and equipped for the challenges and requirements of the Cold War, but Duncan concludes that major changes in the Reserve component are necessary for this war of a different kind.

As the requirements change, so do the rules. The chapter on *posse comitatus* and the following chapter on due process and rules of war are arguably the highlights of the book.

Duncan, a highly experienced lawyer and a former Assistant Secretary of Defense who once served as the Pentagon's senior drug war official, explores the myths and facts of *posse comitatus*. Few legal issues are more misunderstood by the military—including some very senior officers. For years, military leaders have used *posse comitatus* to avoid certain missions. While understandable in terms of operations tempo and cultural prohibitions, the fact is that Federal forces have been used in the past to enforce the law within the American homeland, and they could be called on again.

Terrorists operate outside the accepted rules of conflict, sometimes causing societies to change their rules regarding due process and war. Duncan provides insight, analysis, and comment on a subject that should be of great interest to all. The most interesting case concerned terrorists arrested on U.S. soil and tried in military courts. One suspect even claimed U.S. citizenship. All were convicted and sentenced to death. Appeals took the cases to the Supreme

Court, arguing that these individuals should be tried in Federal or state civilian courts. The Supreme Court upheld the military convictions. This case, known as *Ex Parte Quirin* from World War II, is of particular interest considering the ongoing controversy in the case of Jose Padilla, a U.S. citizen currently held in a military brig for his alleged conspiracy to use dirty bombs on homeland targets.

These two chapters on the legal aspects of the post-9/11 environment are worth the price of the book. They provide a legal analysis that has sufficient detail for lawyers yet is understandable to laymen.

This book also provides a superb overview of Federal actions since the attacks of 9/11. From the invasions of Afghanistan and Iraq to the bureaucratic and political battles on the home front, Duncan provides facts, analysis, and commentary on this critical period.

A War of a Different Kind provides a readable and informative history plus analysis of the war on terror. I recommend it to military officers and others interested in 21st-century national and homeland security. **JFQ**

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